Veiligheidsinformatieblad volgens 1907/2006/EG, Artikel 31; (EU) 2020/878

datum van de druk: 08.10.2022 Versienummer 90 Herziening van: 08.10.2022

RUBRIEK 1: Identificatie van de stof of het mengsel en van de vennootschap/ onderneming

· **1.1 Productidentificatie**
· **Handelsnaam: Jowat 401.10**
· **UFI:** MS9E-V122-K00P-9WJJ
· **1.2 Relevant geïdentificeerd gebruik van de stof of het mengsel en ontraden gebruik**
Geen verdere relevante informatie verkrijgbaar.
· **Toepassing van de stof / van de bereiding**
Oplosmiddel Reinigingsmiddel

· **Ontraden gebruik** Uitsluitend voor gebruik door professionele gebruiker.

· **1.3 Details betreffende de verstrekker van het veiligheidsinformatieblad**
· **Fabrikant/leverancier:**
Jowat SE
Ernst-Hilker-Str. 10 - 14; D - 32758 Detmold
Tel. +49 (0)5231 749 0
e-mail: info@jowat.de
www.jowat.de · **Blad met gegevens van de afdeling milieuzaken.** Afdeling milieuzaken Tel. +49 5231 749 -218 / -211 / -270 e-mail: umweltmanagement@jowat.de

· **Inlichtingengevende sector:**
Jowat Nederland B.V.
Ootmarsumseweg 283
7666 NB Fleringen Tel.:
+31 541 670629
E-Mail: info@jowat.nl · **1.4 Telefoonnummer voor noodgevallen:** InfraServ Hoechst - Gefahrenabwehrmeldezentrale
D - 65926 Frankfurt
Fon: +49 (0)69-305-6418

RUBRIEK 2: Identificatie van de gevaren

· **2.1 Indeling van de stof of het mengsel**
· **Indeling overeenkomstig Verordening (EG) nr. 1272/2008**

GHS02 vlam

Flam. Liq. 2 H225 Licht ontvlambare vloeistof en damp.

GHS08 gezondheidsgevaar

Asp. Tox. 1 H304 Kan dodelijk zijn als de stof bij inslikken in de luchtwegen terechtkomt.

GHS09 milieu

Aquatic Chronic 2 H411 Giftig voor in het water levende organismen, met langdurige gevolgen.

GHS07

Skin Irrit. 2 H315 Veroorzaakt huidirritatie.
Eye Irrit. 2 H319 Veroorzaakt ernstige oogirritatie.
STOT SE 3 H336 Kan slaperigheid of duizeligheid veroorzaken.

(Vervolg op blz. 2)

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· **2.2 Etiketteringselementen**

· **Etikettering overeenkomstig Verordening (EG) nr. 1272/2008**

Het product is geclassificeerd en geëtiketteerd volgens de CLP-verordening.

· **Gevarenpictogrammen**

GHS02 GHS07 GHS08 GHS09

· **Signaalwoord** Gevaar

· **Gevaaraanduidende componenten voor de etikettering:**
nafta (aardolie), met waterstof behandeld licht ethylacetaat

cyclohexaan
n-hexaan

· **Gevarenaanduidingen**

H Licht ontvlambare vloeistof en damp.
H Veroorzaakt huidirritatie.
H Veroorzaakt ernstige oogirritatie.
H Kan slaperigheid of duizeligheid veroorzaken. H304 Kan dodelijk zijn als de stof bij inslikken in de luchtwegen terechtkomt.
H Giftig voor in het water levende organismen, met langdurige gevolgen.

· **Veiligheidsaanbevelingen**

P Verwijderd houden van warmte, hete oppervlakken, vonken, open vuur en andere ontstekingsbronnen. Niet roken.
P301+P310 NA INSLIKKEN: onmiddellijk een ANTIGIFCENTRUM/arts raadplegen.
P331 GEEN braken opwekken.
P362+P364 Verontreinigde kleding uittrekken en wassen alvorens deze opnieuw te gebruiken.
P403+P233 Op een goed geventileerde plaats bewaren. In goed gesloten verpakking bewaren.
P501 Inhoud/verpakking afvoeren naar een goedgekeurde afvalverwijdering of recycling in overeenstemming met de nationale regelgeving.

· **Aanvullende gegevens:**
Produkt bevat: Precursoren voor explosieven die moeten worden gemeld. Aanbieden, binnenbrengen, bezit en gebruik volgens Verordening (EU) 2019/1148, Artikel 9.

· **2.3 Andere gevaren**

· **Resultaten van PBT- en zPzB-beoordeling**

· **PBT:** Niet bruikbaar.
· **zPzB:** Niet bruikbaar.

RUBRIEK 3: Samenstelling en informatie over de bestanddelen

· **3.2 Mengsels**

· **Beschrijving:** Reinigingsmiddel

· **Gevaarlijke inhoudstoffen:**		
	nafta (aardolie), met waterstof behandeld licht Bestaat uit: 110-54-3 n-hexaan (<5%) Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	35-<50%
CAS: 141-78-6 EINECS: 205-500-4 registratienummer: 01-2119475103-46	ethylacetaat Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	35-<50%
CAS: 67-64-1 EINECS: 200-662-2 registratienummer: 01-2119471330-49	aceton Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	10-<15%

(Vervolg op blz. 3)

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CAS: 110-82-7 EINECS: 203-806-2 registratienummer: 01-2119463273-41	cyclohexaan Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; STOT SE 3, H336	10-<15%
CAS: 110-54-3 EINECS: 203-777-6 registratienummer: 01-2119480412-44	n-hexaan Flam. Liq. 2, H225; Repr. 2, H361f; STOT RE 2, H373; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336 Specifieke concentratiegrens: STOT RE 2; H373: C ≥ 5 %	1-<2,5%

· **SVHC** Niet bruikbaar.
· **aanvullende gegevens:**
De woordelijke inhoud van de opgegeven aanwijzingen inzake de mogelijke gevaren is te vinden in hoofdstuk 16.
Bevat < 0,1 % benzeen (Noot P)

RUBRIEK 4: Eerstehulpmaatregelen

· **4.1 Beschrijving van de eerstehulpmaatregelen**
· **na huidcontact:** Onmiddellijk met water en zeep afwassen en goed naspoelen.
· **Na oogcontact:**
De ogen gedurende verscheidene minuten onder stromend water spoelen bij geopende ogen. Bij aanhoudende klachten een dokter raadplegen.
· **Na inslikken:** Bij klachten, een arts consulteren.
· **4.2 Belangrijkste acute en uitgestelde symptomen en effecten**
Geen verdere relevante informatie verkrijgbaar.
· **4.3 Vermelding van de vereiste onmiddellijke medische verzorging en speciale behandeling**
Geen verdere relevante informatie verkrijgbaar.

RUBRIEK 5: Brandbestrijdingsmaatregelen

· **5.1 Blusmiddelen**
· **Geschikte blusmiddelen:**
Schuim blusmiddel
CO_2, bluspoeder of waterstraal. Grotere brand met schuim dat tegen alcohol bestand is bestrijden.
· **blusmiddelen die uit veiligheidsoogpunt niet geschikt zijn:** Krachtige waterstraal.
· **5.2 Speciale gevaren die door de stof of het mengsel worden veroorzaakt** Koolmonoxyde (CO)
· **5.3 Advies voor brandweerlieden**
· **speciale beschermende kleding:**
Zuurstofapparaat dat niet afhankelijk is van de omgevingslucht.
Ontploffings- en brandgassen niet inademen.

RUBRIEK 6: Maatregelen bij het accidenteel vrijkomen van de stof of het mengsel

· **6.1 Persoonlijke voorzorgsmaatregelen, beschermingsmiddelen en noodprocedures**
Persoonlijke beschermingskleding dragen.
· **6.2 Milieuvoorzorgsmaatregelen:**
Mag niet in riolering of afvalwater afgevoerd worden. Indringen in afvalwater, riolering, putten of kelders verhinderen.
Bij indringen in afvalwater of riolering is de bevoegde instantie te waarschuwen. Uitbreiding van de brand verhinderen (b.v. door indammen of stopzetten van olieleveranties).
· **6.3 Insluitings- en reinigingsmethoden en -materiaal:**
Met vloeistofbindend materiaal (zand, bergmeel, zuurbinder, universele binder, zaagmeel) opnemen.
Besmet materiaal zoals afval volgens punt 13 verwijderen.
Voor voldoende ventilatie zorgen.
· **6.4 Verwijzing naar andere rubrieken**
Informatie inzake veilig gebruik - zie hoofdstuk 7.
Informatie inzake persoonlijke beschermingsuitrusting - zie hoofdstuk 8.
Informatie inzake berging - zie hoofdstuk 13.

(Vervolg op blz. 4)

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* RUBRIEK 7: Hantering en opslag

· **7.1 Voorzorgsmaatregelen voor het veilig hanteren van de stof of het mengsel**
Koel en droog opslaan in goed afgesloten vaten.
· **Informatie m.b.t. brand- en explosiegevaar:**
Maatregelen treffen tegen ontlading van statische elektriciteit.

· **7.2 Voorwaarden voor een veilige opslag, met inbegrip van incompatibele producten**
· **Opslag:**
· **Eisen met betrekking tot opslagruimte en tanks:**
Op een koele plaats bewaren.
Het binnendringen in de grond beslist vermijden.
· **Informatie m.b.t. gezamelijke opslag:** Niet noodzakelijk
· **Verdere inlichtingen over eisen m.b.t. de opslag:** Koel en droog bewaren in goed gesloten vaten.
· **Opslagklasse:** 3
· **7.3 Specifiek eindgebruik** Geen verdere relevante informatie verkrijgbaar.

RUBRIEK 8: Maatregelen ter beheersing van blootstelling/persoonlijke bescherming

· **8.1 Controleparameters**
· **Aanvullende gegevens m.b.t. de inrichting van technische installaties:**
Geen aanvullende gegevens. Zie 7.

· **Bestanddelen met grenswaarden die m.b.t. de arbeidsruimte in acht genomen moeten worden:**	
141-78-6 ethylacetaat	
WGW	Korte termijn waarde: 1468 mg/m³ Lange termijn waarde: 734 mg/m³
67-64-1 aceton	
WGW	Korte termijn waarde: 2420 mg/m³, 1000 ppm Lange termijn waarde: 1210 mg/m³, 500 ppm
110-82-7 cyclohexaan	
WGW	Korte termijn waarde: 1400 mg/m³, 400 ppm Lange termijn waarde: 700 mg/m³, 200 ppm
110-54-3 n-hexaan	
WGW	Korte termijn waarde: 144 mg/m³, 40 ppm Lange termijn waarde: 72 mg/m³, 20 ppm

· **Regelgeving** WGW: Grenswaarden gezondheidsschadelijke stoffen

· **afgeleide dosis zonder effect (DNEL's)**

· **Arbeider**		
nafta (aardolie), met waterstof behandeld licht		
Dermaal	DNEL w	1 mg/kg bw/day (long-term, systemic effects)
Inhalatief	DNEL w	5 mg/m3 (long-term, systemic effects)
141-78-6 ethylacetaat		
Dermaal	DNEL w	63 mg/kg bw/day (long-term, systemic effects)
Inhalatief	DNEL w	1 mg/m3 (acute, local effects) 1 mg/m3 (acute, systemic effects) 734 mg/m3 (long-term, local effects) 734 mg/m3 (long-term, systemic effects)
67-64-1 aceton		
Dermaal	DNEL w	186 mg/kg bw/day (long-term, systemic effects)
Inhalatief	DNEL w	2 mg/m3 (acute, systemic effects) 1 mg/m3 (long-term, systemic effects)

(Vervolg op blz. 5)

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110-82-7 cyclohexaan		
Dermaal	DNEL w	2.016 mg/kg bw/day (long-term, systemic effects)
Inhalatief	DNEL w	700 mg/m3 (acute, local effects) 700 mg/m3 (acute, systemic effects) 700 mg/m3 (long-term, local effects) 700 mg/m3 (long-term, systemic effects)
110-54-3 n-hexaan		
Dermaal	DNEL w	11 mg/kg bw/day (long-term, systemic effects)
Inhalatief	DNEL w	75 mg/m3 (long-term, systemic effects)

· **Verbruikers**		
nafta (aardolie), met waterstof behandeld licht		
Oraal	DNEL c	1.301 mg/kg bw/day (long-term, systemic effects)
Dermaal	DNEL c	1.377 mg/kg bw/day (long-term, systemic effects)
Inhalatief	DNEL c	1.131 mg/m3 (long-term, systemic effects)
141-78-6 ethylacetaat		
Oraal	DNEL c	4,5 mg/kg bw/day (long-term, systemic effects)
Dermaal	DNEL c	37 mg/kg bw/day (long-term, systemic effects)
Inhalatief	DNEL c	734 mg/m3 (acute, local effects)
		734 mg/m3 (acute, systemic effects)
		367 mg/m3 (long-term, local effects)
		367 mg/m3 (long-term, systemic effects)
67-64-1 aceton		
Oraal	DNEL c	62 mg/kg bw/day (long-term, systemic effects)
Dermaal	DNEL c	62 mg/kg bw/day (long-term, systemic effects)
Inhalatief	DNEL c	200 mg/m3 (long-term, systemic effects)
110-82-7 cyclohexaan		
Oraal	DNEL c	59,4 mg/kg bw/day (long-term, systemic effects)
Dermaal	DNEL c	1.186 mg/kg bw/day (long-term, systemic effects)
Inhalatief	DNEL c	412 mg/m3 (acute, local effects)
		412 mg/m3 (acute, systemic effects)
		206 mg/m3 (long-term, local effects)
		206 mg/m3 (long-term, systemic effects)
110-54-3 n-hexaan		
Oraal	DNEL c	4 mg/kg bw/day (long-term, systemic effects)
Dermaal	DNEL c	5,3 mg/kg bw/day (long-term, systemic effects)
Inhalatief	DNEL c	16 mg/m3 (long-term, systemic effects)

· **voorspelde concentratie zonder effect (PNEC's)**		
141-78-6 ethylacetaat		
Oraal	PNEC oral	0,2 mg/kg food (n.a.)
	PNEC water	0,26 mg/l (fresh water)
		1,65 mg/l (intermittent releases)
		0,026 mg/l (marine water)
		650 mg/l (STP)
	PNEC sediment	1,25 mg/kg (sediment, freshwater)
		0,125 mg/kg (sediment, marine water)
	PNEC soil	0,24 mg/kg (soil)

(Vervolg op blz. 6)

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(Vervolg op blz. 5)

67-64-1 aceton		
	PNEC water	10,6 mg/l (fresh water)
		21 mg/l (intermittent releases)
		1,06 mg/l (marine water)
		100 mg/l (STP)
	PNEC sediment	30,4 mg/kg (sediment, freshwater)
		3,04 mg/kg (sediment, marine water)
	PNEC soil	29,5 mg/kg (soil)
110-82-7 cyclohexaan		
	PNEC water	0,207 mg/l (fresh water)
		0,207 mg/l (intermittent releases)
		0,207 mg/l (marine water)
		3,24 mg/l (STP)
	PNEC sediment	3,627 mg/kg (sediment, freshwater)
		3,627 mg/kg (sediment, marine water)
	PNEC soil	2,99 mg/kg (soil)

· **Aanvullende gegevens:** Als basis dienden lijsten die bij deze opstelling geldig waren.

· **8.2 Maatregelen ter beheersing van blootstelling**

· **Aanvullende gegevens m.b.t. de inrichting van technische installaties:**
Geen aanvullende gegevens. Zie 7.

· **Voorzieningen ter persoonlijke bescherming:**

· **Algemene beschermings- en gezondheidsmaatregelen:**
De gebruikelijke voorzorgsmaatregelen bij de omgang met chemikaliën dienen in acht te worden genomen.
Verwijderd houden van eet- en drinkwaren en dierenvoeder.
Verontreinigde kleding onmiddellijk uittrekken.
Vóór de pauze en aan het einde van het werk handen wassen.
Gassen/dampen/aërosol niet inademen.
Aanraking met de ogen en de huid vermijden.
Niet eten of drinken tijdens gebruik.

· **Ademhalingsbescherming:** Filter voor kortstondig gebruik:

· **Handbescherming:** Niet-doorlatende handschoenen (EN 374).

· **Handschoenmateriaal**
Aanbevolen materiaaldikte : ≥ 0,7 mm
Handschoenen uit LLDPE.

· **Doordringingstijd van het handschoenmateriaal** Waarde voor de permeatie: Level ≤ 6

· **Voor een langdurig contact in toepassingen zonder verhoogd verwondingsgevaar (b.v. laboratorium) zijn handschoenen uit volgend materiaal geschikt:** Handschoenen uit LLDPE.

· **Voor een langdurig contact zijn handschoenen uit de volgende materialen geschikt:** Handschoenen uit LLDPE.

· **Voor een langdurig contact van maximaal 15 minuten zijn handschoenen uit de volgende materialen geschikt:** Butylrubber

· **Als bescherming tegen spatten zijn handschoenen uit de volgende materialen geschikt:** Chloropreenrubber

· **Niet geschikt zijn handschoenen uit de volgende materialen:**
Handschoenen uit leder
Handschoenen uit dikke stof

· **Oogbescherming:**
Bij overgieten gebruik van veiligheidsbril aan te bevelen.
Schutbril.

(Vervolg op blz. 7)

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(Vervolg op blz. 6)

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RUBRIEK 9: Fysische en chemische eigenschappen

· **9.1 Informatie over fysische en chemische basiseigenschappen**	
· **Algemene gegevens**	
· **Voorkomen:**	
· **Vorm:**	vloeibaar
· **Kleur:**	volgens de produktbeschrijving
· **Geur:**	karakteristiek
· **Geurdrempelwaarde:**	Niet bepaald.
· **pH-waarde:**	Niet bepaald.
· **Toestandsverandering**	
· **Smelt-/vriespunt:**	niet bepaald
· **Beginkookpunt en kooktraject:**	60 °C
· **Vlampunt:**	-25 °C
· **Ontvlambaarheid (vast, gas):**	Licht ontvlambaar.
· **Ontstekingstemperatuur:**	>200 °C
· **Ontledingstemperatuur:**	Niet bepaald.
· **Zelfontbrandingstemperatuur:**	Het produkt is niet zelf ontbrandend.
· **Ontploffingseigenschappen:**	Het produkt is niet explosief, maar de vorming van explosieve damp-/luchtmengsels is mogelijk.
· **Ontploffingsgrenzen:**	
· **onderste:**	1,1 Vol %
· **bovenste:**	11,5 Vol %
· **Stoomdruk bij 20 °C:**	110 hPa
· **Dichtheid bij 20 °C:**	0,76 g/cm³
· **Relatieve dichtheid**	Niet bepaald.
· **Dampdichtheid**	Niet bepaald.
· **Verdampingssnelheid**	Niet bepaald.
· **Oplosbaarheid in/mengbaarheid met:**	
· **Water:**	niet resp. gering mengbaar
· **Verdelingscoëfficiënt: n-octanol/water:**	Niet bepaald.
· **Viscositeit**	
· **dynamisch:**	Niet bepaald.
· **kinematisch:**	Niet bepaald.
· **Oplosmiddelgehalte:**	
· **Organisch oplosmiddel:**	100,0 %
· **9.2 Overige informatie**	
· **Vluchtige organische stoffen**	
· **EUROPESE UNIE**	100,00 %
· **Zwitserland**	100,00 %
· **Verenigde Staten van Amerika**	751,3 g/l / 6,27 lb/gal

RUBRIEK 10: Stabiliteit en reactiviteit

· **10.1 Reactiviteit** Geen verdere relevante informatie verkrijgbaar.
· **10.2 Chemische stabiliteit**
· **Thermische ontbinding / te vermijden omstandigheden:**
Geen ontleding bij gebruik volgens voorschrift.
· **10.4 Te vermijden omstandigheden** Geen verdere relevante informatie verkrijgbaar.
· **10.5 Chemisch op elkaar inwerkende materialen:** Geen verdere relevante informatie verkrijgbaar.
(Vervolg op blz. 8)

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(Vervolg op blz. 7)

· **10.6 Gevaarlijke ontledingsproducten:**
brandbare gassen/dampen
Koolmonoxyde en kooldioxyde

RUBRIEK 11: Toxicologische informatie

· **11.1 Informatie over toxicologische effecten**

· **Acute toxiciteit** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.

· **Indelingsrelevantie LD/LC50-waarden:**		
nafta (aardolie), met waterstof behandeld licht		
Oraal	LD50 oral	16.750 mg/kg (rat)
Dermaal	LD50 dermal	>8.000 mg/kg (rabbit)
Inhalatief	LC50 / 4 h	43,7 mg/l (rat)
141-78-6 ethylacetaat		
Oraal	LD50 oral	4.934 mg/kg (rabbit)
Dermaal	LD50 dermal	18.000 mg/kg (rabbit)
Inhalatief	LC50 / 4 h	56 mg/l (rat)
67-64-1 aceton		
Oraal	LD50 oral	3.592 mg/kg (rat)
Dermaal	LD50 dermal	15.688 mg/kg (rabbit)
Inhalatief	LC50 / 4 h	76 mg/l (rat)
110-82-7 cyclohexaan		
Oraal	LD50 oral	5.100 mg/kg (rat)
Inhalatief	LC50 / 4 h	>32,88 mg/l (rat)
110-54-3 n-hexaan		
Oraal	LD50 oral	28.710 mg/kg (rat)

· **Primaire aandoening:**
· **Huidcorrosie/-irritatie**
Veroorzaakt huidirritatie.
· **Ernstig oogletsel/oogirritatie**
Veroorzaakt ernstige oogirritatie.
· **Sensibilisatie van de luchtwegen/de huid**
Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
· **Aanvullende toxicologische informatie:**
· **CMR-effecten (kankerverwekkendheid, mutageniteit en giftigheid voor de voortplanting)**
· **Mutageniteit in geslachtscellen**
Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
· **Kankerverwekkendheid** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
· **Giftigheid voor de voortplanting** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
· **STOT bij eenmalige blootstelling**
Kan slaperigheid of duizeligheid veroorzaken.
· **STOT bij herhaalde blootstelling** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
· **Gevaar bij inademing** Kan dodelijk zijn als de stof bij inslikken in de luchtwegen terechtkomt.

RUBRIEK 12: Ecologische informatie

· **12.1 Toxiciteit**

· **Aquatische toxiciteit:**	
nafta (aardolie), met waterstof behandeld licht	
LC50 / 96 h	9,776 mg/l (oncorhynchus mykiss)

(Vervolg op blz. 9)

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(Vervolg op blz. 8)

LC50 / 48 h	10 mg/l (leuciscus idus)
EC50 / 48 h	17,06 mg/l (daphnia magna)
EC50 / 72 h	75,6 mg/l (desmodesmus subspicatus)
141-78-6 ethylacetaat	
LC50 / 96 h	431 mg/l (brachydanio rerio)
	230 mg/l (oncorhynchus mykiss)
	230 mg/l (pimephales promelas)
LC50 / 48 h	350 mg/l (leuciscus idus)
LC50	200 mg/l (rat)
EC50 / 48 h	3.300 mg/l (desmodesmus subspicatus)
	610 mg/l (daphnia magna)
EC50 / 24 h	724 mg/l (daphnia magna)
EC50	17,9 mg/l (desmodesmus subspicatus)
67-64-1 aceton	
LC50 / 96 h	5.540 mg/l (oncorhynchus mykiss)
LC50 / 48 h	7.500 mg/l (leuciscus idus)
EC50 / 48 h	8.800 mg/l (daphnia magna)
EC50 / 16 h	1.700 mg/l (Pseudomonas/Nitrosomonas/Nitrobacter)
NOEC	3.400 mg/l (desmodesmus subspicatus)
110-82-7 cyclohexaan	
LC50 / 96 h	4,53 mg/l (pimephales promelas)
EC50 / 48 h	0,9 mg/l (daphnia magna)
EC50 / 72 h	3,428 mg/l (desmodesmus subspicatus)
110-54-3 n-hexaan	
LC0	150-4.280 mg/l (leuciscus idus)
EC50 / 48 h (statisch)	45 mg/l (daphnia magna)
EC50 / 24 h	>50->1.000 mg/l (daphnia magna)

· **12.2 Persistentie en afbreekbaarheid** Geen verdere relevante informatie verkrijgbaar.
· **12.3 Bioaccumulatie** Geen verdere relevante informatie verkrijgbaar. · **12.4 Mobiliteit in de bodem** Geen verdere relevante informatie verkrijgbaar.
· **ecotoxische effecten:**
· **Opmerking:** Giftig voor vissen.

· **Gedrag in zuiveringsinstallatie:**	
141-78-6 ethylacetaat	
EC10 / 16 h	2.900 mg/l (pseudomonas putida)

· **Verdere ecologische informatie:**

· **CSB-waarde:**	
67-64-1 aceton	
CSB	2.210 mg/g (n.a.)

· **Algemene informatie:** Gevaar voor water klasse 2 (D) (Zelfclassificatie): gevaar voor water Niet lozen in grondwater, in oppervlaktewater of in riolering. Gevaar voor drinkwater zelfs bij uitlopen van geringe hoeveelheden in de ondergrond. In oppervlaktewater ook giftig voor vissen en plankton. Het produkt bevat stoffen die gevaarlijk voor het milieu zijn giftig voor in het water levende organismen · **12.5 Resultaten van PBT- en zPzB-beoordeling** · **PBT:** Niet bruikbaar.

· **zPzB:** Niet bruikbaar.

(Vervolg op blz. 10)

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· **12.6 Andere schadelijke effecten** Geen verdere relevante informatie verkrijgbaar.

RUBRIEK 13: Instructies voor verwijdering

· **13.1 Afvalverwerkingsmethoden**
· **Aanbeveling:**
Mag niet tesamen met huisvuil gestort worden of in de riolering komen. Aanleveren bij afnemers van zwartelijst-goederen of afgeven bij inzameldepot van gevaarlijke stoffen

· **Europese afvalcatalogus**	
07 02 04*	overige organische oplosmiddelen, wasvloeistoffen en moederlogen
15 01 10*	verpakking die resten van gevaarlijke stoffen bevat of daarmee is verontreinigd

· **Niet gereinigde verpakkingen:**
· **Aanbeveling:**
Verpakkingen die niet meer gereinigd kunnen worden, moeten zoals de stof zelf verwijderd worden
De verpakking dient volgens de verpakkingsverordening vernietigd worden
Verpakken met uitgeharde lijmresten kan worden gerecycled.
Verpakken met uitgeharde lijmresten kan als huishoudelijk afval worden behandeld.
Verpakkingen met niet-uitgeharde lijmresten moeten als gevaarlijk afval worden weggegooid.
· **Aanbevolen reinigingsmiddel:** Alcohol

RUBRIEK 14: Informatie met betrekking tot het vervoer

· **14.1 VN-nummer**
· **ADR, IMDG, IATA** UN1993

· **14.2 Juiste ladingnaam overeenkomstig de modelreglementen van de VN**
· **ADR** 1993 BRANDBARE VLOEISTOF, N.E.G. (HEXANEN), MILIEUGEVAARLIJK
1993 ENTZÜNDBARER FLÜSSIGER STOFF, N.A.G. (HEXANE), UMWELTGEFÄHRDEND
· **IMDG** FLAMMABLE LIQUID, N.O.S. (HEXANES, CYCLOHEXANE), MARINE POLLUTANT
· **IATA** FLAMMABLE LIQUID, N.O.S. (HEXANES)

· **14.3 Transportgevarenklasse(n)**

· **ADR**

· **klasse** 3 (F1) Brandbare vloeistoffen
· **Etiket** 3

· **IMDG**

· **Class** 3 Brandbare vloeistoffen
· **Label** 3

· **IATA**

· **Class** 3 Brandbare vloeistoffen

(Vervolg op blz. 11)

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· **Label**	3
· **14.4 Verpakkingsgroep:**	
· **ADR, IMDG, IATA**	II
· **14.5 Milieugevaren:**	Produkt bevat milieugevaarlijke stoffen: cyclohexaan
· **Marine pollutant:**	Ja Symbool (vis en boom)
· **Bijzondere kenmerking (ADR):**	Symbool (vis en boom)
· **14.6 Bijzondere voorzorgen voor de gebruiker**	Waarschuwing: Brandbare vloeistoffen
· **Gevaarsidentificatienummer (Kemler-getal):**	33
· **EMS-nummer:**	F-E,S-E
· **Stowage Category**	B
· **14.7 Vervoer in bulk overeenkomstig bijlage II bij Marpol en de IBC-code**	Niet bruikbaar.
· **Transport/verdere gegevens:**	
· **ADR**	
· **Beperkte hoeveelheden (LQ)**	1L
· **Uitgezonderde hoeveelheden (EQ)**	Code: E2 Grootste netto hoeveelheid per binnenverpakking: 30 ml Grootste netto hoeveelheid per buitenverpakking: 500 ml
· **Vervoerscategorie**	2
· **Tunnelbeperkingscode**	D/E
· **IMDG**	
· **Limited quantities (LQ)**	1L
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **VN "Model Regulation":**	UN 1993 BRANDBARE VLOEISTOF, N.E.G. (HEXANEN), 3, II, MILIEUGEVAARLIJK

RUBRIEK 15: Regelgeving

· **15.1 Specifieke veiligheids-, gezondheids- en milieureglementen en -wetgeving voor de stof of het mengsel**

Of de stof van toepassing is (CMR) kan in punt 3 van het veiligheidsblad gecontroleerd worden.

· **SZW-lijst van kankerverwekkende stoffen**

geen der bestanddelen staat op de lijst.

· **SZW-lijst van mutagene stoffen**

geen der bestanddelen staat op de lijst.

· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Vruchtbaarheid**

110-54-3	n-hexaan	2

· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Ontwikkeling**

geen der bestanddelen staat op de lijst.

· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Borstvoeding**

geen der bestanddelen staat op de lijst.

· **Lijst Zeer Zorgwekkende Stoffen (ZZS)**

geen der bestanddelen staat op de lijst.

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· **Lijst van Potentieel Zeer Zorgwekkende Stoffen**

geen der bestanddelen staat op de lijst.

· **Richtlijn 2012/18/EU** · **Gevaarlijke stoffen die met naam genoemd worden - BIJLAGE I** geen der bestanddelen staat op de lijst.

· **Seveso-categorie** E2 Gevaar voor het aquatisch milieu P5c ONTVLAMBARE VLOEISTOFFEN
· **Drempelwaarde (ton) voor toepassing van voorschriften voor lagedrempelinrichtingen** 200 t
· **Drempelwaarde (ton) voor toepassing van voorschriften voor hogedrempelinrichtingen** 500 t

· **VERORDENING (EU) 2019/1021 betreffende persistente organische verontreinigende stoffen (POP)**

geen der bestanddelen staat op de lijst.

· **LIJST VAN AUTORISATIEPLICHTIGE STOFFEN (BIJLAGE XIV)**

geen der bestanddelen staat op de lijst.

· **Verordening (EG) nr. 1907/2006 BIJLAGE XVII** Beperkingsvoorwaarden: 3, 57

· **Verordening (EU) Nr. 649/2012 (PIC)**

geen der bestanddelen staat op de lijst.

· **Richtlijn 2011/65/EU betreffende beperking van het gebruik van bepaalde gevaarlijke stoffen in elektrische en elektronische apparatuur - Bijlage II**

geen der bestanddelen staat op de lijst.

· **VERORDENING (EU) 2019/1148**

· **Bijlage I - PRECURSOREN VOOR EXPLOSIEVEN WAARVOOR EEN BEPERKING GELDT (Bovengrenswaarde ten behoeve van vergunningverlening op grond van artikel 5, lid 3)**

geen der bestanddelen staat op de lijst.

· **Bijlage II - PRECURSOREN VOOR EXPLOSIEVEN DIE MOETEN WORDEN GEMELD**

67-64-1	aceton	10-<15%

· **Verordening (EG) nr. 273/2004 inzake drugsprecursoren**

67-64-1	aceton	3

· **Verordening (EG) Nr. 111/2005 houdende voorschriften voor het toezicht op de handel tussen de Gemeenschap en derde landen in drugsprecursoren**

67-64-1	aceton	3	10-<15%

· **15.2 Chemischeveiligheidsbeoordeling:** Een chemische veiligheidsbeoordeling is uitgevoerd.

RUBRIEK 16: Overige informatie

De gegevens baseren zich op de huidige stand van onze kennis. Zij geven echter geen garantie van produkteigenschappen en bevestigen geen contractuele rechtsgeldigheid.
Hierbij gelden alle voor de industrie gebruikelije voorzorgsmaatregelen die betrekking hebben op de bescherming van de gezondheid en de veilige toepassing in het gebruik. De adviezen zijn in het kader van de voorgenomen toepassing te controleren, en waar nodig, op te volgen.

· **Relevante zinnen**
H225 Licht ontvlambare vloeistof en damp. H304 Kan dodelijk zijn als de stof bij inslikken in de luchtwegen terechtkomt.
H315 Veroorzaakt huidirritatie.
H319 Veroorzaakt ernstige oogirritatie.
H336 Kan slaperigheid of duizeligheid veroorzaken. H361f Wordt ervan verdacht de vruchtbaarheid te schaden.
H373 Kan schade aan organen veroorzaken bij langdurige of herhaalde blootstelling.
H400 Zeer giftig voor in het water levende organismen.
H410 Zeer giftig voor in het water levende organismen, met langdurige gevolgen.
H411 Giftig voor in het water levende organismen, met langdurige gevolgen.

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· **Afkortingen en acroniemen:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern vPvB:
very Persistent and very Bioaccumulative
Flam. Liq. 2: Ontvlambare vloeistoffen – Categorie 2
Skin Irrit. 2: Huidcorrosie/-irritatie – Categorie 2
Eye Irrit. 2: Ernstig oogletsel/oogirritatie – Categorie 2
Repr. 2: Voortplantingstoxiciteit – Categorie 2 STOT SE 3: Specifieke doelorgaantoxiciteit bij eenmalige blootstelling – Categorie 3
STOT RE 2: Specifieke doelorgaantoxiciteit bij herhaalde blootstelling – Categorie 2
Asp. Tox. 1: Aspiratiegevaar – Categorie 1
Aquatic Acute 1: Gevaar voor het aquatisch milieu - acuut aquatisch gevaar – Categorie 1
Aquatic Chronic 1: Gevaar voor het aquatisch milieu - aquatisch gevaar op lange termijn – Categorie 1
Aquatic Chronic 2: Gevaar voor het aquatisch milieu - aquatisch gevaar op lange termijn – Categorie 2

· *** Gegevens die ten opzichte van de voorgaande versie zijn veranderd**

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Bijlage: Blootstellingsscenario 1

· **Korte benaming van het blootstellingsscenario**
· **Gebruiksgebied** SU3 Industrieel gebruik: Gebruik van stoffen als zodanig of in preparaten in een industriële omgeving
· **Productcategorie**
PC9a Coatings en verven, verdunners, verfafbijtmiddelen
PC1 Kleefmiddelen, afdichtingsmiddelen
· **Procescategorie**
PROC1 Chemische productie of raffinage in een gesloten proces, waarbij blootstelling niet waarschijnlijk is of processen met vergelijkbare beperkingsomstandigheden.
PROC2 Chemische productie of raffinage in een gesloten, continu proces met incidentele beheerste blootstelling of processen met vergelijkbare beperkingsomstandigheden.
PROC3 Fabricage of formuleren in de chemische industrie in een gesloten discontinu proces met occasionele gecontroleerde blootstelling of processen met vergelijkbare beperkingsomstandigheden.
PROC4 Chemische productie met kans op blootstelling
PROC5 Mengen in discontinue processen
PROC8a Overbrengen van een stof of mengsel (vullen/leeg laten lopen in niet-gespecialiseerde voorzieningen
PROC8b Overbrengen van een stof of mengsel (vullen/leeg laten lopen in gespecialiseerde voorzieningen
PROC9 Overbrengen van een stof of mengsel naar kleine containers (gespecialiseerde vullijn, inclusief wegen)
PROC10 Met roller of kwast aanbrengen
PROC15 Gebruik als laboratoriumreagens
· **Categorie vrijmaking in het milieu**
ERC4 Gebruik van niet-reactief verwerkingshulpmiddel op industriële locatie (geen opname in of op voorwerp)
· **Opmerkingen** Niet voor privédoeleinden (huishoudens) gebruiken
· **Beschrijving van de blootstellingsscenario's rekening houdend met activiteiten/methodes**
Zie sectie 1 in de bijlage van de veiligheidsfiche.
· **Gebruiksvoorwaarden**
· **Duur en frequentie**
8 uur (volledige ploeg).
5 werkdagen/week.
· **Fysische parameters**
· **Fysische toestand** vloeibaar
· **Concentraties van de stoffen in het mengsel** De stof is een nevenbestanddeel.
· **Gebruikte hoeveelheid per tijdseenheid of activiteit** 6000 ton per jaar per vestigingsplaats
· **Overige toepassingsvoorwaarden**
· **Overige toepassingsvoorwaarden met invloed op de milieublootstelling**
Aantal emissiedagen in het jaar: 300
· **Overige toepassingsvoorwaarden die invloed hebben op de blootstelling van werknemers**
Aanraking met de huid en de ogen vermijden. Maatregelen treffen tegen elektrostatische oplading.

Verwijderd houden van ontstekingsbronnen - Niet roken.
· **Risicobeheermaatregelen**
· **Bescherming van de werknemers**
· **Technische voorzorgsmaatregelen** Voor goede ventilatie/afzuiging op de arbeidsplaatsen zorgen.
· **Persoonlijke voorzorgsmaatregelen** Aanraking met de ogen en de huid vermijden. Tijdens het werk de passende veiligheidshandschoenen en veiligheidsbril/gezichtsbescherming dragen
Op netheid en orde letten.

Gassen/dampen/aërosol niet inademen.
· **Maatregelen ter bescherming van de verbruiker** Voor voldoende identificatie zorgen.
· **Milieubeschermingsmaatregelen**
· **Water** Niet in het grondwater, in waterlopen of in de riolering terecht laten komen.

(Vervolg op blz. 15)

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(Vervolg op blz. 14)

· **Bodem** Contact met de bodem en/of het grondwater tijdens de toepassing vermijden.
· **Maatregelen voor de verwerking van afval** Aan een installatie voor de verbranding van speciaal afval toevoeren volgens de plaatselijke officiële voorschriften. Ervoor zorgen dat afval verzameld en apart gehouden wordt.

· **Methode voor de afvoer en verwerking van afval**
Mag niet tesamen met huisvuil gestort worden of in de riolering komen.
· **Aard van het afval** Gedeeltelijk leeggemaakte en niet-gereinigde verpakkingen
· **Blootstellingsprognose**
· **Verbruikers** Voor dit blootstellingsscenario niet relevant.
· **Richtlijnen voor nageschakelde gebruikers** Geen verdere relevante informatie verkrijgbaar.

(Vervolg op blz. 16)

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Bijlage: Blootstellingsscenario 2

· **Korte benaming van het blootstellingsscenario**
· **Gebruiksgebied** SU22 Professioneel gebruik: Publiek domein (administratie, onderwijs, amusement, dienstverlening, ambachtslieden)

· **Productcategorie**
PC1 Kleefmiddelen, afdichtingsmiddelen
PC9a Coatings en verven, verdunners, verfafbijtmiddelen
· **Procescategorie**
PROC1 Chemische productie of raffinage in een gesloten proces, waarbij blootstelling niet waarschijnlijk is of processen met vergelijkbare beperkingsomstandigheden.
PROC2 Chemische productie of raffinage in een gesloten, continu proces met incidentele beheerste blootstelling of processen met vergelijkbare beperkingsomstandigheden.
PROC8a Overbrengen van een stof of mengsel (vullen/leeg laten lopen in niet-gespecialiseerde voorzieningen
PROC8b Overbrengen van een stof of mengsel (vullen/leeg laten lopen in gespecialiseerde voorzieningen
· **Categorie vrijmaking in het milieu**
ERC8a wijdverbreid gebruik van niet-reactief verwerkingshulpmiddel (geen opname in of op voorwerp, binnen)
ERC8d wijdverbreid gebruik van niet-reactief verwerkingshulpmiddel (geen opname in of op voorwerp, buiten)
· **Opmerkingen** Niet voor privédoeleinden (huishoudens) gebruiken
· **Beschrijving van de blootstellingsscenario's rekening houdend met activiteiten/methodes**
Zie sectie 1 in de bijlage van de veiligheidsfiche.
· **Gebruiksvoorwaarden**
· **Duur en frequentie**
1- 4 h/d (PROC8a)
8 uur (volledige ploeg).
5 werkdagen/week.
· **Fysische parameters**
· **Fysische toestand** vloeibaar
· **Concentraties van de stoffen in het mengsel** De stof is een hoofdbestanddeel.
· **Overige toepassingsvoorwaarden**
· **Overige toepassingsvoorwaarden die invloed hebben op de blootstelling van werknemers**
Aanraking met de huid en de ogen vermijden. Maatregelen treffen tegen elektrostatische oplading.

Verwijderd houden van ontstekingsbronnen - Niet roken.
· **Risicobeheermaatregelen**
· **Bescherming van de werknemers**
· **Technische voorzorgsmaatregelen** Voor goede ventilatie/afzuiging op de arbeidsplaatsen zorgen.
· **Persoonlijke voorzorgsmaatregelen**
Aanraking met de ogen en de huid vermijden.
Tijdens het werk de passende veiligheidshandschoenen en veiligheidsbril/gezichtsbescherming dragen
Op netheid en orde letten.
Gassen/dampen/aërosol niet inademen.
· **Maatregelen ter bescherming van de verbruiker** Voor voldoende identificatie zorgen.
· **Milieubeschermingsmaatregelen**
· **Water** Niet in het grondwater, in waterlopen of in de riolering terecht laten komen.
· **Bodem** Contact met de bodem en/of het grondwater tijdens de toepassing vermijden.
· **Maatregelen voor de verwerking van afval**
Aan een installatie voor de verbranding van speciaal afval toevoeren volgens de plaatselijke officiële voorschriften.
Ervoor zorgen dat afval verzameld en apart gehouden wordt.
· **Methode voor de afvoer en verwerking van afval** Mag niet tesamen met huisvuil gestort worden of in de riolering komen. (Vervolg op blz. 17)

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· **Aard van het afval** Gedeeltelijk leeggemaakte en niet-gereinigde verpakkingen
· **Blootstellingsprognose**
· **Verbruikers** Voor dit blootstellingsscenario niet relevant.
· **Richtlijnen voor nageschakelde gebruikers** Geen verdere relevante informatie verkrijgbaar.

Safety Data Sheet in accordance with 1907/2006/EC, Article 31; (EU) 2020/878

Print date: 08.10.2022 Version number 90 Revision date: 08.10.2022

SECTION 1: Identification of the substance or mixture and of the company/undertaking

· **1.1 Product identifier**
· **Trade name: Jowat 401.10**
· **UFI:** MS9E-V122-K00P-9WJJ
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No additional relevant information available.
· **Use of the substance/mixture** Solvent
Cleaner

· **Uses advised against** For professional use only.

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Jowat SE
Ernst-Hilker-Str. 10–14; D-32758 Detmold
Tel. +49 (0)5231 749 0
Email: info@jowat.de
www.jowat.de · **Environmental Department data sheet.** Environmental Department Tel. +49 5231 749-218 / -211 / -270 Email: umweltmanagement@jowat.de

· **Information contact:** Jowat Nederland B.V.
Ootmarsumseweg 283
7666 NB Fleringen Tel.: +31 541 670629
Email: info@jowat.nl · **1.4 Emergency phone number:** InfraServ Hoechst - Emergency Response Control Center
D-65926 Frankfurt
Phone: +49 (0)69-305-6418

SECTION 2: Hazard identification

· **2.1 Classification of the substance or mixture**
· **Classification in accordance with Regulation (EC) No. 1272/2008**

GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

GHS08 Health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

GHS09 Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.

(Continued on page 2)

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· **2.2 Label Elements**

· **Labeling in accordance with Regulation (EC) No. 1272/2008**

The product is classified and labeled in accordance with the CLP Regulation.

· **Hazard Pictograms**

GHS02 GHS07 GHS08 GHS09

· **Signal word** Danger

· **Hazard-determining components for labeling:** naphtha (petroleum), hydrotreated light ethyl acetate

cyclohexane
n-hexane

· **Hazard statements**

H Highly flammable liquid and vapor.
H Causes skin irritation.
H Causes serious eye irritation.
H May cause drowsiness or dizziness. H304 May be fatal if swallowed and enters airways.
H Toxic to aquatic life with long-lasting effects.

· **Precautionary statements**

P Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331 Do NOT induce vomiting.
P362+P364 Remove contaminated clothing and wash it before reuse. P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container through an approved waste disposal or recycling facility in accordance with national regulations.

· **Additional information:**

Product contains: Reportable explosives precursors. Making available, introduction, possession, and use in accordance with Regulation (EU) 2019/1148, Article 9.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.
· **vPvB:** Not applicable.

SECTION 3: Composition/Information on Ingredients

· **3.2 Mixtures**

· **Description:** Cleaning agent

· **Hazardous ingredients:**		
	naphtha (petroleum), hydrotreated light Contains: 110-54-3 n-hexane (<5%) Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	35-<50%
CAS: 141-78-6 EINECS: 205-500-4 Registration No.: 01-2119475103-46	ethyl acetate Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	35-<50%
CAS: 67-64-1 EINECS: 200-662-2 Registration No.: 01-2119471330-49	acetone Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	10-<15%

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CAS: 110-82-7 EINECS: 203-806-2 Registration No.: 01-2119463273-41	cyclohexane Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; STOT SE 3, H336	10-<15%
CAS: 110-54-3 EINECS: 203-777-6 Registration No.: 01-2119480412-44	n-hexane Flam. Liq. 2, H225; Repr. 2, H361f; STOT RE 2, H373; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336 Specific concentration limit: STOT RE 2; H373: C ≥ 5 %	1-<2.5%

· **SVHC** Not applicable.
· **Additional information:**
The full wording of the listed hazard statements can be found in Section 16.

Contains < 0.1% benzene (Note P)

SECTION 4: First-aid measures

· **4.1 Description of first-aid measures**
· **After skin contact:** Wash immediately with soap and water, then rinse thoroughly.
· **After eye contact:**
Rinse eyes for several minutes under running water, keeping eyelids open. If symptoms persist, consult a doctor.
· **After swallowing:** If symptoms occur, consult a physician.
· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing media:** Foam
CO_2, dry chemical, or water spray. Fight larger fires with alcohol-resistant foam.
· **Extinguishing media not suitable for safety reasons:** High-pressure water jet.
· **5.2 Specific hazards arising from the substance or mixture** Carbon monoxide (CO)
· **5.3 Advice for firefighters**
· **Special protective equipment:**
Use a self-contained breathing apparatus (SCBA).
Do not inhale explosion or fire gases.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment, and emergency procedures**
Wear personal protective clothing.
· **6.2 Environmental precautions:**
Do not discharge into sewers or wastewater. Prevent entry into wastewater systems, sewers, pits, or basements.
If it enters wastewater or sewers, notify the responsible authority. Prevent the fire from spreading (e.g., by diking or stopping oil supplies).
· **6.3 Methods and materials for containment and cleanup:**
Absorb with liquid-binding material (sand, diatomaceous earth, acid binder, universal binder, sawdust). Dispose of contaminated material as waste in accordance with Section 13.
Ensure adequate ventilation.
· **6.4 Reference to other sections** For information on safe handling, see Section 7.
For information on personal protective equipment, see Section 8. For disposal information, see Section 13.

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* SECTION 7: Handling and storage

· **7.1 Precautions for safe handling of the substance or mixture**
Store in a cool, dry place in tightly sealed containers.

· **Information on fire and explosion hazards:**
Take precautions to prevent static electricity discharge.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements for storage areas and containers:**
Keep in a cool location.
Strictly prevent entry into soil.

· **Information on storage together:** Not required

· **Additional information on storage requirements:** Store in a cool, dry place in tightly closed containers.

· **Storage class:** 3

· **7.3 Specific end use** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **Additional information on the design of technical systems:**
No additional information. See Section 7.

· **Components with workplace exposure limits that must be observed:**	
141-78-6 ethyl acetate	
OEL	Short-term value: 1468 mg/m³ Long-term value: 734 mg/m³
67-64-1 acetone	
OEL	Short-term value: 2420 mg/m³, 1000 ppm Long-term value: 1210 mg/m³, 500 ppm
110-82-7 cyclohexane	
OEL	Short-term value: 1400 mg/m³, 400 ppm Long-term value: 700 mg/m³, 200 ppm
110-54-3 n-hexane	
OEL	Short-term value: 144 mg/m³, 40 ppm Long-term value: 72 mg/m³, 20 ppm

· **Regulations** WGW: Occupational exposure limits for hazardous substances

· **Derived no-effect dose (DNELs)**

· **Worker**		
naphtha (petroleum), hydrotreated light		
Dermal	DNEL w	1 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL w	1 mg/m3 (long-term, systemic effects)
141-78-6 ethyl acetate		
Dermal	DNEL w	63 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL w	1 mg/m3 (acute, local effects) 1 mg/m3 (acute, systemic effects) 734 mg/m3 (long-term, local effects) 734 mg/m3 (long-term, systemic effects)
67-64-1 acetone		
Dermal	DNEL w	186 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL w	2 mg/m3 (acute, systemic effects) 2 mg/m3 (long-term, systemic effects)

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110-82-7 cyclohexane		
Dermal	DNEL w	2.016 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL w	700 mg/m3 (acute, local effects) 700 mg/m3 (acute, systemic effects) 700 mg/m3 (long-term, local effects) 700 mg/m3 (long-term, systemic effects)
110-54-3 n-hexane		
Dermal	DNEL w	11 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL w	75 mg/m3 (long-term, systemic effects)

· **Consumers**		
naphtha (petroleum), hydrotreated light		
Oral	DNEL c	1.301 mg/kg bw/day (long-term, systemic effects)
Dermal	DNEL c	1.377 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL c	1.131 mg/m3 (long-term, systemic effects)
141-78-6 ethyl acetate		
Oral	DNEL c	4.5 mg/kg bw/day (long-term, systemic effects)
Dermal	DNEL c	37 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL c	734 mg/m3 (acute, local effects) 734 mg/m3 (acute, systemic effects) 367 mg/m3 (long-term, local effects) 367 mg/m3 (long-term, systemic effects)
67-64-1 acetone		
Oral	DNEL c	62 mg/kg bw/day (long-term, systemic effects)
Dermal	DNEL c	62 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL c	200 mg/m3 (long-term, systemic effects)
110-82-7 cyclohexane		
Oral	DNEL c	59.4 mg/kg bw/day (long-term, systemic effects)
Dermal	DNEL c	1.186 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL c	412 mg/m3 (acute, local effects) 412 mg/m3 (acute, systemic effects) 206 mg/m3 (long-term, local effects) 206 mg/m3 (long-term, systemic effects)
110-54-3 n-hexane		
Oral	DNEL c	4 mg/kg bw/day (long-term, systemic effects)
Dermal	DNEL c	5.3 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL c	16 mg/m3 (long-term, systemic effects)

· **predicted no-effect concentration (PNECs)**		
141-78-6 ethyl acetate		
Oral	PNEC oral	0.2 mg/kg food (n.a.)
	PNEC water	0.26 mg/l (fresh water)
		1.65 mg/l (intermittent releases)
		0.026 mg/l (marine water)
		650 mg/l (STP)
	PNEC sediment	1.25 mg/kg (sediment, freshwater)
		0.125 mg/kg (sediment, marine water)
	PNEC soil	0.24 mg/kg (soil)

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67-64-1 acetone		
	PNEC water	10.6 mg/L (freshwater)
		21 mg/L (intermittent releases)
		1.06 mg/L (marine water)
		100 mg/L (STP)
	PNEC sediment	30.4 mg/kg (sediment, freshwater)
		3.04 mg/kg (sediment, marine water)
	PNEC soil	29.5 mg/kg (soil)
110-82-7 Cyclohexane		
	PNEC water	0.207 mg/L (fresh water)
		0.207 mg/L (intermittent releases)
		0.207 mg/L (marine water)
		3.24 mg/L (STP)
	PNEC sediment	3.627 mg/kg (sediment, fresh water)
		3.627 mg/kg (sediment, marine water)
	PNEC soil	2.99 mg/kg (soil)

· **Additional information:** This document was based on the lists valid at the time it was prepared.

· **8.2 Exposure controls**

· **Additional details on the design of technical systems:**
No additional information. See Section 7.

· **Personal protective equipment (PPE):**

· **General protection and hygiene measures:**
Follow standard precautionary measures when handling chemicals.

Keep away from food, beverages, and animal feed.
Remove contaminated clothing immediately.
Wash hands before breaks and at the end of the workday.
Do not inhale gases/vapors/aerosols.
Avoid contact with eyes and skin.
Do not eat or drink while using this product.

· **Respiratory protection:** Filter for short-term use:

· **Hand protection:** Impermeable gloves (EN 374).

· **Glove material**
Recommended material thickness: ≥ 0.7 mm
LLDPE gloves.

· **Breakthrough time of the glove material** Permeation value: Level ≤ 6

· **For prolonged contact in applications without increased risk of injury (e.g., laboratory), gloves made of the following material are suitable:** LLDPE gloves.

· **For prolonged contact, gloves made of the following materials are suitable:** LLDPE gloves.

· **For prolonged contact of up to 15 minutes, gloves made of the following materials are suitable:** Butyl rubber

· **For splash protection, gloves made of the following materials are suitable:** Chloroprene rubber

· **Gloves made of the following materials are not suitable:**
Leather gloves
Heavy fabric gloves

· **Eye protection:**
When decanting, the use of safety glasses is recommended. Goggles.

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SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General information**	
· **Appearance:**	
· **Form:**	liquid
· **Color:**	as described in the product specification
· **Odor:**	characteristic
· **Odor threshold:**	Not determined.
· **pH value:**	Not determined.
· **Change in state**	
· **Melting point/freezing point:**	not determined
· **Initial boiling point and boiling range:**	60 °C
· **Flash point:**	-25 °C
· **Flammability (solid, gas):**	Highly flammable.
· **Auto-ignition temperature:**	>200 °C
· **Decomposition temperature:**	Not determined.
· **Self-ignition temperature:**	The product is not self-igniting.
· **Explosive properties:**	The product is not explosive; however, the formation of explosive vapor/air mixtures is possible.
· **Explosion limits:** · **lower:**	1.1 vol %
· **upper:**	11.5 vol %
· **Vapor pressure at 20 °C:**	110 hPa
· **Density at 20 °C:**	0.76 g/cm³
· **Relative density**	Not determined.
· **Vapor density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in/miscibility with:** · **Water:**	not or only slightly miscible
· **Partition coefficient: n-octanol/water:** Not determined.	
· **Viscosity**	
· **dynamic:**	Not determined.
· **kinematic:**	Not determined.
· **Solvent content:**	
· **Organic solvent:**	100.0 %
· **9.2 Other information**	
· **Volatile organic compounds (VOCs)**	
· **EUROPEAN UNION**	100.00 %
· **Switzerland**	100.00 %
· **United States of America**	751.3 g/l / 6.27 lb/gal

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to avoid:**
No decomposition when used as directed.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available. (Continued on page 8)

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· **10.6 Hazardous decomposition products:**
flammable gases/vapors
carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**

· **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**		
naphtha (petroleum), hydrotreated light		
Oral	LD50 oral	16,750 mg/kg (rat)
Dermal	LD50 dermal	>8,000 mg/kg (rabbit)
Inhalation	LC50 / 4 h	43.7 mg/L (rat)
141-78-6 ethyl acetate		
Oral	LD50 oral	4,934 mg/kg (rabbit)
Dermal	LD50 dermal	18,000 mg/kg (rabbit)
Inhalation	LC50 / 4 h	56 mg/L (rat)
67-64-1 acetone		
Oral	LD50 oral	3,592 mg/kg (rat)
Dermal	LD50 dermal	15,688 mg/kg (rabbit)
Inhalation	LC50 / 4 h	76 mg/L (rat)
110-82-7 cyclohexane		
Oral	LD50 oral	5,100 mg/kg (rat)
Inhalation	LC50 / 4 h	>32.88 mg/L (rat)
110-54-3 n-hexane		
Oral	LD50 oral	28,710 mg/kg (rat)

· **Primary condition:**
· **Skin corrosion/irritation**
Causes skin irritation.
· **Serious eye damage/eye irritation**
Causes serious eye irritation.

· **Respiratory/skin sensitization**
Based on available data, the classification criteria are not met.

· **Additional toxicological information:**
· **CMR effects (carcinogenicity, mutagenicity, and reproductive toxicity)**
· **Germ cell mutagenicity**
Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT — single exposure**
May cause drowsiness or dizziness.
· **STOT — repeated exposure** Based on available data, the classification criteria are not met.
· **Aspiration hazard** May be fatal if swallowed and enters the airways.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**	
naphtha (petroleum), hydrotreated light	
LC50 / 96 h	9.776 mg/L (Oncorhynchus mykiss)

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LC50 / 48 h	10 mg/L (Leuciscus idus)
EC50 / 48 h	17.06 mg/L (Daphnia magna)
EC50 / 72 h	75.6 mg/L (Desmodesmus subspicatus)
141-78-6 ethyl acetate	
LC50 / 96 h	431 mg/L (Brachydanio rerio)
	230 mg/L (Oncorhynchus mykiss)
	230 mg/L (Pimephales promelas)
LC50 / 48 h	350 mg/L (Leuciscus idus)
LC50	200 mg/L (rat)
EC50 / 48 h	3,300 mg/L (Desmodesmus subspicatus)
	610 mg/L (Daphnia magna)
EC50 / 24 h	724 mg/L (Daphnia magna)
EC50	17.9 mg/L (Desmodesmus subspicatus)
67-64-1 acetone	
LC50 / 96 h	5,540 mg/L (Oncorhynchus mykiss)
LC50 / 48 h	7,500 mg/L (Leuciscus idus)
EC50 / 48 h	8,800 mg/L (Daphnia magna)
EC50 / 16 h	1,700 mg/L (Pseudomonas/Nitrosomonas/Nitrobacter)
NOEC	3,400 mg/L (Desmodesmus subspicatus)
110-82-7 cyclohexane	
LC50 / 96 h	4.53 mg/L (Pimephales promelas)
EC50 / 48 h	0.9 mg/L (Daphnia magna)
EC50 / 72 h	3.428 mg/L (Desmodesmus subspicatus)
110-54-3 n-hexane	
LC0	150–4,280 mg/L (Leuciscus idus)
EC50 / 48 h (static)	45 mg/L (Daphnia magna)
EC50 / 24 h	>50–>1,000 mg/L (Daphnia magna)

· **12.2 Persistence and degradability** No further relevant information available. · **12.3 Bioaccumulative potential** No further relevant information available. · **12.4 Mobility in soil** No further relevant information available.

· **Ecotoxic effects:**

· **Note:** Toxic to fish.

· **Behavior in wastewater treatment plant:**	
141-78-6 ethyl acetate	
EC10 / 16 h	2,900 mg/L (Pseudomonas putida)

· **Additional ecological information:**

· **COD value:**	
67-64-1 acetone	
COD	2,210 mg/g (n.a.)

· **General information:** Water hazard class 2 (D) (self-classification): hazardous to water. Do not discharge into groundwater, surface water, or sewers. Danger to drinking water even if small amounts seep into the ground. In surface waters, also toxic to fish and plankton. This product contains substances that are hazardous to the environment and toxic to aquatic organisms · **12.5 Results of PBT and vPvB assessment** · **PBT:** Not applicable.

· **vPvB:** Not applicable.

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· **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation:**

Do not dispose of with household trash or allow to enter the sewer system. Deliver to approved recipients of restricted materials or take to a hazardous waste collection facility.

· **European Waste Catalogue**	
07 02 04*	other organic solvents, washing liquids, and mother liquors
15 01 10*	packaging that contains residues of hazardous substances or is contaminated with them

· **Uncleaned packaging:**

· **Recommendation:**

Packaging that can no longer be cleaned must be disposed of in the same way as the substance itself. The packaging must be destroyed in accordance with the packaging regulations.
Packaging with cured adhesive residue can be recycled.
Packaging with cured adhesive residue may be handled as household trash.
Packaging with uncured adhesive residue must be disposed of as hazardous waste.

· **Recommended cleaning agent:** Alcohol

SECTION 14: Transport information

· **14.1 UN number**

· **ADR, IMDG, IATA** UN1993

· **14.2 Proper shipping name according to the UN Model Regulations**

· **ADR** 1993 FLAMMABLE LIQUID, N.O.S. (HEXANES), ENVIRONMENTALLY HAZARDOUS

1993 FLAMMABLE LIQUID, N.O.S.
N.O.S. (HEXANE), ENVIRONMENTALLY HAZARDOUS

· **IMDG** FLAMMABLE LIQUID, N.O.S. (HEXANES, CYCLOHEXANE), MARINE POLLUTANT

· **IATA** FLAMMABLE LIQUID, N.O.S. (HEXANES)

· **14.3 Transport hazard class(es)**

· **ADR**

· **Class** 3 (F1) Flammable liquids
· **Label** 3

· **IMDG**

· **Class** 3 Flammable liquids
· **Label** 3

· **IATA**

· **Class** 3 Flammable liquids

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· **Label**	3
· **14.4 Packing group:**	
· **ADR, IMDG, IATA**	II
· **14.5 Environmental hazards:**	Product contains environmentally hazardous substances: cyclohexane
· **Marine pollutant:**	Yes
· **Special marking (ADR):**	Symbol (fish and tree) Symbol (fish and tree)
· **14.6 Special precautions for the user**	Warning: Flammable liquids
· **Hazard Identification Number (Kemler code):**	33
· **EMS number:**	F-E,S-E
· **Stowage Category**	B
· **14.7 Bulk transport in accordance with Annex II of MARPOL and the IBC Code**	Not applicable.
· **Transport / additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	1L
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **Transport category**	2
· **Tunnel restriction code**	D/E
· **IMDG**	
· **Limited quantities (LQ)**	1L
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner package: 30 mL Maximum net quantity per outer package: 500 mL
· **UN "Model Regulations":**	UN 1993 FLAMMABLE LIQUID, N.O.S. (HEXANES), 3, II, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

· **15.1 Safety, health, and environmental regulations/legislation specific to the substance or mixture**

Whether the substance is subject to CMR can be checked in Section 3 of the safety data sheet.

· **SZW list of carcinogenic substances**

None of the ingredients are listed.

· **SZW list of mutagenic substances**

None of the ingredients are listed.

· **NON-exhaustive list of reproductive toxicants – Fertility**

110-54-3	n-hexane	2

· **NON-exhaustive list of reproductive toxicants – Development**

None of the ingredients are listed.

· **NON-exhaustive list of reproductive toxicants – Breastfeeding**

None of the ingredients are listed.

· **List of Substances of Very High Concern (SVHC)**

None of the ingredients are listed.

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· **List of Potential Substances of Very High Concern**
None of the ingredients are listed.

· **Directive 2012/18/EU** · **Named hazardous substances – ANNEX I**
None of the ingredients are listed.

· **Seveso category** E2 Hazard to the aquatic environment P5c FLAMMABLE LIQUIDS
· **Threshold quantity (tons) for applying requirements for lower-tier establishments** 200 t
· **Threshold quantity (tons) for applying requirements for upper-tier establishments** 500 t

· **REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)**
None of the ingredients are listed.

· **LIST OF SUBSTANCES SUBJECT TO AUTHORIZATION (ANNEX XIV)**
None of the ingredients are listed.

· **Regulation (EC) No. 1907/2006 ANNEX XVII** Restriction conditions: 3, 57

· **Regulation (EU) No. 649/2012 (PIC)**
None of the ingredients are listed.

· **Directive 2011/65/EU on restricting the use of certain hazardous substances in electrical and electronic equipment - Annex II**
None of the ingredients are listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - EXPLOSIVES PRECURSORS SUBJECT TO RESTRICTIONS (Upper limit value for licensing pursuant to Article 5(3))**
None of the ingredients are listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**	
67-64-1 acetone	10-<15%

· **Regulation (EC) No. 273/2004 on drug precursors**	
67-64-1 acetone	3

· **Regulation (EC) No. 111/2005 laying down rules for monitoring trade in drug precursors between the Community and third countries**		
67-64-1 acetone	3	10-<15%

· **15.2 Chemical Safety Assessment:** A chemical safety assessment has been carried out.

SECTION 16: Other information

The information is based on the current state of our knowledge. However, it does not guarantee product properties and does not constitute contractual legal validity.
All standard industry precautionary measures relating to health protection and safe handling apply. The recommendations must be reviewed for the intended use and, where necessary, followed.

· **Relevant statements**
H225 Highly flammable liquid and vapor. H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness. H361f Suspected of damaging fertility.
H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.

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· **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Agreement concerning the International Carriage of Dangerous Goods by Road (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Dangerous Goods Code
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (a division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative, and Toxic
SVHC: Substances of Very High Concern vPvB:
very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Repr. 2: Reproductive toxicity – Category 2 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment – acute hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment – long-term hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment – long-term hazard – Category 2

· *** Information changed from the previous version**

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Appendix: Exposure Scenario 1

· **Short title of the exposure scenario**

· **Use sector** SU3 Industrial use: Use of substances as such or in preparations in an industrial setting

· **Product category**

PC9a Coatings and paints, thinners, paint strippers

PC1 Adhesives, sealants

· **Process category**

PROC1 Chemical manufacturing or refining in a closed process where exposure is unlikely, or processes with comparable containment conditions.

PROC2 Chemical manufacturing or refining in a closed, continuous process with occasional controlled exposure, or processes with comparable containment conditions.

PROC3 Manufacturing or formulation in the chemical industry in a closed batch process with occasional controlled exposure, or processes with comparable containment conditions.

PROC4 Chemical manufacturing with potential for exposure

PROC5 Mixing in batch processes

PROC8a Transfer of a substance or mixture (filling/emptying in non-specialized facilities

PROC8b Transfer of a substance or mixture (filling/emptying in specialized facilities

PROC9 Transfer of a substance or mixture into small containers (specialized filling line, including weighing)

PROC10 Application by roller or brush

PROC15 Use as a laboratory reagent

· **Environmental release category**

ERC4 Use of a non-reactive processing aid at an industrial site (no incorporation into or onto an article)

· **Notes** Not for private (household) use

· **Description of exposure scenarios, taking activities/methods into account** See Section 1 in the appendix to the safety data sheet.

· **Conditions of use**

· **Duration and frequency**

8 hours (full shift).

5 workdays/week.

· **Physical parameters**

· **Physical state** liquid

· **Concentrations of substances in the mixture** The substance is a minor component.

· **Amount used per unit of time or activity** 6,000 tons per year per site

· **Additional conditions of use**

· **Additional conditions affecting environmental exposure** Number of emission days per year: 300

· **Additional conditions affecting worker exposure** Avoid contact with skin and eyes. Take measures to prevent electrostatic charge buildup.

Keep away from ignition sources - No smoking.

· **Risk management measures**

· **Worker protection**

· **Engineering controls** Ensure adequate ventilation/local exhaust at workstations.

· **Personal precautions** Avoid contact with eyes and skin. Wear appropriate protective gloves and safety glasses/face protection during work. Maintain cleanliness and good housekeeping.

Do not breathe in gases/vapors/aerosols.

· **Measures to protect the consumer** Ensure adequate identification.

· **Environmental protection measures**

· **Water** Prevent entry into groundwater, waterways, or the sewer system.

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· **Soil** Avoid contact with soil and/or groundwater during application.
· **Waste treatment measures** Send to a special-waste incineration facility in accordance with local official regulations. Ensure waste is collected and kept separate.

· **Method of disposal and waste treatment**
Must not be disposed of with household trash or allowed to enter the sewer system.
· **Type of waste** Partially emptied, uncleaned containers
· **Exposure estimate**
· **Consumers** Not relevant for this exposure scenario.
· **Guidance for downstream users** No additional relevant information available.

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Appendix: Exposure Scenario 2

· **Short title of the exposure scenario**

· **Use sector** SU22 Professional use: Public domain (administration, education, entertainment, services, craftspeople)

· **Product category**

PC1 Adhesives, sealants

PC9a Coatings and paints, thinners, paint removers

· **Process category**

PROC1 Chemical manufacturing or refining in a closed process where exposure is unlikely, or processes with comparable containment conditions.

PROC2 Chemical manufacturing or refining in a closed, continuous process with occasional controlled exposure, or processes with comparable containment conditions.

PROC8a Transfer of a substance or mixture (filling/emptying in non-specialized facilities

PROC8b Transfer of a substance or mixture (filling/emptying in specialized facilities

· **Environmental release category**

ERC8a widespread use of non-reactive processing aid (no inclusion in or on an article, indoor)

ERC8d widespread use of non-reactive processing aid (no inclusion in or on an article, outdoor)

· **Notes** Not for private (household) use

· **Description of the exposure scenario(s), taking activities/methods into account** See Section 1 in the appendix to the safety data sheet.

· **Conditions of use**

· **Duration and frequency**

1–4 h/day (PROC8a)

8 hours (full shift).

5 workdays/week.

· **Physical parameters**

· **Physical state** liquid

· **Concentrations of substances in the mixture** The substance is a main component.

· **Other conditions of use**

· **Other conditions of use that affect worker exposure** Avoid contact with skin and eyes. Take measures to prevent electrostatic charge buildup.

Keep away from ignition sources - No smoking.

· **Risk management measures**

· **Worker protection**

· **Engineering controls** Ensure adequate ventilation/local exhaust at workstations.

· **Personal precautions**

Avoid contact with eyes and skin.

Wear suitable safety gloves and safety goggles/face protection while working.

Maintain cleanliness and good housekeeping.

Do not breathe in gases/vapors/aerosols.

· **Measures to protect consumers** Ensure adequate identification.

· **Environmental protection measures**

· **Water** Prevent release into groundwater, waterways, or sewers.

· **Soil** Avoid contact with soil and/or groundwater during application.

· **Waste treatment measures**

Send to a special-waste incineration facility in accordance with local official regulations.

Ensure waste is collected and kept separate.

· **Method for waste disposal and treatment** Must not be disposed of with household trash or discharged into the sewer system. (Continued on page 17)

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· **Waste type** Partially emptied, uncleaned packaging
· **Exposure forecast**
· **Consumers** Not relevant for this exposure scenario.
· **Guidance for downstream users** No further relevant information available.

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SECTION 1: Identification of the substance or mixture and of the company/undertaking

· **1.1 Product identifier**
· **Trade name: Jowat 401.10**
· **UFI:** MS9E-V122-K00P-9WJJ
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information is available.
· **Use of the substance / preparation** Solvent
Cleaning agent

· **Uses advised against** For use by professional users only.

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Jowat SE
Ernst-Hilker-Str. 10 - 14; D - 32758 Detmold
Tel. +49 (0)5231 749 0
Email: info@jowat.de
www.jowat.de · **Environmental Department Data Sheet.** Environmental Department Tel. +49 5231 749 -218 / -211 / -270 Email: umweltmanagement@jowat.de

· **Information Department:**
Jowat Nederland B.V.
Ootmarsumseweg 283
7666 NB Fleringen Tel.:
+31 541 670629
Email: info@jowat.nl · **1.4 Emergency Telephone Number:** InfraServ Hoechst - Emergency Response Reporting Center
D - 65926 Frankfurt
Phone: +49 (0)69-305-6418

SECTION 2: Hazard Identification

· **2.1 Classification of the substance or mixture**
· **Classification in accordance with Regulation (EC) No. 1272/2008**

GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

GHS08 Health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

GHS09 Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long-lasting effects.

GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.

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· **2.2 Label elements**

· **Labeling in accordance with Regulation (EC) No. 1272/2008**

The product is classified and labeled in accordance with the CLP Regulation.

· **Hazard pictograms**

GHS02 GHS07 GHS08 GHS09

· **Signal word** Danger

· **Hazard-determining components for labeling:** naphtha (petroleum), hydrotreated light ethyl acetate

cyclohexane
n-hexane

· **Hazard statements**

H Highly flammable liquid and vapor.
H Causes skin irritation.
H Causes serious eye irritation.
H May cause drowsiness or dizziness. H304 May be fatal if swallowed and enters airways.
H Toxic to aquatic life with long-lasting effects.

· **Precautionary statements**

P Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
P301+P310 IF SWALLOWED: Immediately contact a POISON CENTER/physician.
P331 Do NOT induce vomiting.
P362+P364 Remove contaminated clothing and wash it before reuse. P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container through an approved waste disposal or recycling facility in accordance with national regulations.

· **Additional information:**

Product contains: Reportable explosives precursors. Making available, introduction, possession, and use are governed by Regulation (EU) 2019/1148, Article 9.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.
· **vPvB:** Not applicable.

SECTION 3: Composition/Information on Ingredients

· **3.2 Mixtures**

· **Description:** Cleaning agent

· **Hazardous ingredients:**		
	naphtha (petroleum), hydrotreated light Contains: 110-54-3 n-hexane (<5%) Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	35-<50%
CAS: 141-78-6 EINECS: 205-500-4 Registration No.: 01-2119475103-46	ethyl acetate Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	35-<50%
CAS: 67-64-1 EINECS: 200-662-2 Registration No.: 01-2119471330-49	acetone Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	10-<15%

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CAS: 110-82-7 EINECS: 203-806-2 Registration No.: 01-2119463273-41	Cyclohexane Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; STOT SE 3, H336	10-<15%
CAS: 110-54-3 EINECS: 203-777-6 Registration No.: 01-2119480412-44	n-Hexane Flam. Liq. 2, H225; Repr. 2, H361f; STOT RE 2, H373; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336 Specific concentration limit: STOT RE 2; H373: C ≥ 5 %	1-<2,5%

· **SVHC** Not applicable.
· **Additional information:**
The full wording of the stated hazard statements is provided in Section 16.

Contains < 0.1% benzene (Note P)

SECTION 4: First-aid measures

· **4.1 Description of first-aid measures**
· **After skin contact:** Wash immediately with soap and water, then rinse thoroughly.
· **After eye contact:**
Rinse eyes under running water for several minutes, keeping the eyes open. If symptoms persist, please consult a physician.
· **After ingestion:** If symptoms occur, please consult a physician.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information is available.
· **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information is available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing media:**
Foam extinguishing agent
CO2, dry chemical, or water spray. For larger fires, use alcohol-resistant foam.
· **Extinguishing media not suitable for safety reasons:** High-pressure water jet.
· **5.2 Specific hazards arising from the substance or mixture** Carbon monoxide (CO)
· **5.3 Guidance for firefighters**
· **Special protective equipment:**
Use a breathing apparatus that is independent of ambient air.
Do not inhale explosion or fire gases.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment, and emergency procedures**
Wear appropriate personal protective clothing.
· **6.2 Environmental precautions:**
Do not discharge into sewers or wastewater. Prevent entry into wastewater systems, sewers, drains, or basements.
If the material enters wastewater or sewers, please notify the competent authority. Prevent the fire from spreading (e.g., by diking or stopping oil supplies).
· **6.3 Methods and materials for containment and cleanup:**
Absorb with liquid-binding material (sand, diatomaceous earth, acid binder, universal binder, sawdust). Dispose of contaminated material as waste in accordance with Section 13.
Ensure adequate ventilation.
· **6.4 Reference to other sections** For guidance on safe handling, please refer to Section 7.
For information on personal protective equipment, please refer to Section 8. For disposal information, please refer to Section 13.

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* SECTION 7: Handling and Storage

· **7.1 Precautions for safe handling of the substance or mixture**
Store in a cool, dry location in tightly closed containers.
· **Information regarding fire and explosion hazards:**
Take appropriate measures to prevent electrostatic discharge.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements for storage areas and containers:**
Keep in a cool place.
Strictly prevent entry into soil.
· **Information regarding combined storage:** Not required
· **Additional information on storage requirements:** Store in a cool, dry place in tightly closed containers.
· **Storage class:** 3

· **7.3 Specific end use** No further relevant information is available.

SECTION 8: Exposure controls/personal protective equipment

· **8.1 Control parameters**
· **Additional information on the design of technical systems:**
No additional information. See Section 7.

· **Components with occupational exposure limits that must be observed:**	
141-78-6 ethyl acetate	
OEL	Short-term value: 1468 mg/m³ Long-term value: 734 mg/m³
67-64-1 acetone	
OEL	Short-term value: 2420 mg/m³, 1000 ppm Long-term value: 1210 mg/m³, 500 ppm
110-82-7 cyclohexane	
OEL	Short-term value: 1400 mg/m³, 400 ppm Long-term value: 700 mg/m³, 200 ppm
110-54-3 n-hexane	
OEL	Short-term value: 144 mg/m³, 40 ppm Long-term value: 72 mg/m³, 20 ppm

· **Regulatory information** OEL: Occupational exposure limits for substances hazardous to health

· **Derived No-Effect Level (DNELs)**

· **Worker**		
naphtha (petroleum), hydrotreated light		
Dermal	DNEL w	1 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL w	1 mg/m3 (long-term, systemic effects)
141-78-6 ethyl acetate		
Dermal	DNEL w	63 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL w	1 mg/m3 (acute, local effects) 1 mg/m3 (acute, systemic effects) 734 mg/m3 (long-term, local effects) 734 mg/m3 (long-term, systemic effects)
67-64-1 acetone		
Dermal	DNEL w	186 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL w	2 mg/m3 (acute, systemic effects) 2 mg/m3 (long-term, systemic effects)

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110-82-7 cyclohexane		
Dermal	DNEL (workers)	2.016 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL (workers)	700 mg/m3 (acute, local effects) 700 mg/m3 (acute, systemic effects) 700 mg/m3 (long-term, local effects) 700 mg/m3 (long-term, systemic effects)
110-54-3 n-hexane		
Dermal	DNEL (workers)	11 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL (workers)	75 mg/m3 (long-term, systemic effects)

· **Consumers**		
naphtha (petroleum), hydrotreated light		
Oral	DNEL (consumers)	1.301 mg/kg bw/day (long-term, systemic effects)
Dermal	DNEL (consumers)	1.377 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL (consumers)	1.131 mg/m3 (long-term, systemic effects)
141-78-6 ethyl acetate		
Oral	DNEL (consumers)	4.5 mg/kg bw/day (long-term, systemic effects)
Dermal	DNEL (consumers)	37 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL (consumers)	734 mg/m3 (acute, local effects)
		734 mg/m3 (acute, systemic effects)
		367 mg/m3 (long-term, local effects)
		367 mg/m3 (long-term, systemic effects)
67-64-1 acetone		
Oral	DNEL (consumers)	62 mg/kg bw/day (long-term, systemic effects)
Dermal	DNEL (consumers)	62 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL (consumers)	200 mg/m3 (long-term, systemic effects)
110-82-7 cyclohexane		
Oral	DNEL (consumers)	59.4 mg/kg bw/day (long-term, systemic effects)
Dermal	DNEL (consumers)	1.186 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL (consumers)	412 mg/m3 (acute, local effects)
		412 mg/m3 (acute, systemic effects)
		206 mg/m3 (long-term, local effects)
		206 mg/m3 (long-term, systemic effects)
110-54-3 n-hexane		
Oral	DNEL (consumers)	4 mg/kg bw/day (long-term, systemic effects)
Dermal	DNEL (consumers)	5.3 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL (consumers)	16 mg/m3 (long-term, systemic effects)

· **Predicted No-Effect Concentrations (PNECs)**		
141-78-6 ethyl acetate		
Oral	PNEC (oral)	0.2 mg/kg food (n.a.)
	PNEC (water)	0.26 mg/l (fresh water)
		1.65 mg/l (intermittent releases)
		0.026 mg/l (marine water)
		650 mg/l (STP)
	PNEC (sediment)	1.25 mg/kg (sediment, freshwater)
		0.125 mg/kg (sediment, marine water)
	PNEC (soil)	0.24 mg/kg (soil)

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67-64-1 acetone		
	PNEC water	10,6 mg/l (fresh water)
		21 mg/l (intermittent releases)
		1,06 mg/l (marine water)
		100 mg/l (STP)
	PNEC sediment	30,4 mg/kg (sediment, fresh water)
		3,04 mg/kg (sediment, marine water)
	PNEC soil	29,5 mg/kg (soil)
110-82-7 Cyclohexane		
	PNEC water	0.207 mg/L (freshwater)
		0.207 mg/L (intermittent releases)
		0.207 mg/L (marine water)
		3.24 mg/L (STP)
	PNEC sediment	3.627 mg/kg (sediment, freshwater)
		3.627 mg/kg (sediment, marine water)
	PNEC soil	2.99 mg/kg (soil)

· **Additional information:** The lists valid at the time this document was prepared were used as the basis.

· **8.2 Exposure controls**

· **Additional information regarding the design of technical installations:**
No additional information. Please refer to Section 7.

· **Personal protective equipment:**

· **General protective and hygiene measures:**
The customary precautionary measures for handling chemicals shall be observed.

Keep away from food, beverages, and animal feed.
Remove contaminated clothing immediately.
Wash hands before breaks and at the end of work.
Do not inhale gases/vapors/aerosols.
Please avoid contact with the eyes and skin.
Please do not eat or drink while using this product.

· **Respiratory protection:** Filter for short-term use:

· **Hand protection:** Impermeable gloves (EN 374).

· **Glove material**
Recommended material thickness: ≥ 0.7 mm
LLDPE gloves.

· **Breakthrough time of the glove material** Permeation value: Level ≤ 6

· **For prolonged contact in applications without increased risk of injury (e.g., laboratory work), gloves made of the following material are suitable:** LLDPE gloves.

· **For prolonged contact, gloves made of the following materials are suitable:** LLDPE gloves.

· **For prolonged contact of up to 15 minutes, gloves made of the following materials are suitable:** Butyl rubber

· **For protection against splashes, gloves made of the following materials are suitable:** Chloroprene rubber

· **Gloves made of the following materials are not suitable:**
Leather gloves
Thick fabric gloves

· **Eye protection:**
When decanting, the use of safety glasses is recommended. Protective goggles.

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SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General information**	
· **Appearance:**	
· **Physical state:**	liquid
· **Color:**	as specified in the product description
· **Odor:**	characteristic
· **Odor threshold:**	Not determined.
· **pH value:**	Not determined.
· **Change of state**	
· **Melting/freezing point:**	not determined
· **Initial boiling point and boiling range:**	60 °C
· **Flash point:**	-25 °C
· **Flammability (solid, gas):**	Highly flammable.
· **Ignition temperature:**	>200 °C
· **Decomposition temperature:**	Not determined.
· **Auto-ignition temperature:**	The product is not self-igniting.
· **Explosive properties:**	The product is not explosive; however, the formation of explosive vapor/air mixtures is possible.
· **Explosion limits:** · **lower:**	1.1 vol %
· **upper:**	11.5 vol %
· **Vapor pressure at 20 °C:**	110 hPa
· **Density at 20 °C:**	0.76 g/cm³
· **Relative density**	Not determined.
· **Vapor density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in/miscibility with:** · **Water:**	Not miscible or only slightly miscible
· **Partition coefficient: n-octanol/water:** Not determined.	
· **Viscosity**	
· **Dynamic:**	Not determined.
· **Kinematic:**	Not determined.
· **Solvent content:**	
· **Organic solvent:**	100.0 %
· **9.2 Additional information**	
· **Volatile organic compounds**	
· **EUROPEAN UNION**	100.00 %
· **Switzerland**	100.00 %
· **United States of America**	751.3 g/l / 6.27 lb/gal

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No additional relevant information is available.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to avoid:**
No decomposition occurs when used as directed.
· **10.4 Conditions to avoid** No additional relevant information is available.
· **10.5 Incompatible materials:** No additional relevant information is available. (Continued on page 8)

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· **10.6 Hazardous decomposition products:**
flammable gases/vapors
carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**

· **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**		
naphtha (petroleum), hydrotreated light		
Oral	LD50 (oral)	16,750 mg/kg (rat)
Dermal	Dermal LD50	>8,000 mg/kg (rabbit)
Inhalation	LC50 / 4 h	43.7 mg/L (rat)
141-78-6 Ethyl acetate		
Oral	LD50 (oral)	4,934 mg/kg (rabbit)
Dermal	Dermal LD50	18,000 mg/kg (rabbit)
Inhalation	LC50 / 4 h	56 mg/L (rat)
67-64-1 Acetone		
Oral	LD50 (oral)	3,592 mg/kg (rat)
Dermal	Dermal LD50	15,688 mg/kg (rabbit)
Inhalation	LC50 / 4 h	76 mg/L (rat)
110-82-7 Cyclohexane		
Oral	LD50 (oral)	5,100 mg/kg (rat)
Inhalation	LC50 / 4 h	>32.88 mg/L (rat)
110-54-3 n-Hexane		
Oral	LD50 (oral)	28,710 mg/kg (rat)

· **Primary condition:**
· **Skin corrosion/irritation**
Causes skin irritation.
· **Serious eye damage/eye irritation**
Causes serious eye irritation.
· **Respiratory/skin sensitization**
Based on available data, the classification criteria are not met.
· **Additional toxicological information:**
· **CMR effects (carcinogenicity, mutagenicity, and reproductive toxicity)**
· **Germ cell mutagenicity**
Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT — single exposure**
May cause drowsiness or dizziness.
· **STOT — repeated exposure** Based on available data, the classification criteria are not met.
· **Aspiration hazard** May be fatal if swallowed and enters the airways.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**	
naphtha (petroleum), hydrotreated light	
LC50 / 96 h	9.776 mg/L (Oncorhynchus mykiss)

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LC50 / 48 h	10 mg/L (Leuciscus idus)
EC50 / 48 h	17.06 mg/L (Daphnia magna)
EC50 / 72 h	75.6 mg/L (Desmodesmus subspicatus)
141-78-6 Ethyl acetate	
LC50 / 96 h	431 mg/L (Brachydanio rerio)
	230 mg/L (Oncorhynchus mykiss)
	230 mg/L (Pimephales promelas)
LC50 / 48 h	350 mg/L (Leuciscus idus)
LC50	200 mg/L (rat)
EC50 / 48 h	3,300 mg/L (Desmodesmus subspicatus)
	610 mg/L (Daphnia magna)
EC50 / 24 h	724 mg/L (Daphnia magna)
EC50	17.9 mg/L (Desmodesmus subspicatus)
67-64-1 acetone	
LC50 / 96 h	5,540 mg/L (Oncorhynchus mykiss)
LC50 / 48 h	7,500 mg/L (Leuciscus idus)
EC50 / 48 h	8,800 mg/L (Daphnia magna)
EC50 / 16 h	1,700 mg/L (Pseudomonas/Nitrosomonas/Nitrobacter)
NOEC	3,400 mg/L (Desmodesmus subspicatus)
110-82-7 cyclohexane	
LC50 / 96 h	4.53 mg/L (Pimephales promelas)
EC50 / 48 h	0.9 mg/L (Daphnia magna)
EC50 / 72 h	3.428 mg/L (Desmodesmus subspicatus)
110-54-3 n-hexane	
LC0	150–4,280 mg/L (Leuciscus idus)
EC50 / 48 h (static)	45 mg/L (Daphnia magna)
EC50 / 24 h	>50–>1,000 mg/L (Daphnia magna)

· **12.2 Persistence and degradability** No further relevant information is available. · **12.3 Bioaccumulation** No further relevant information is available. · **12.4 Mobility in soil** No further relevant information is available.

· **Ecotoxic effects:**

· **Note:** Toxic to fish.

· **Behavior in wastewater treatment plant:**	
141-78-6 Ethyl acetate	
EC10 / 16 h	2,900 mg/L (Pseudomonas putida)

· **Additional ecological information:**

· **COD value:**	
67-64-1 acetone	
COD	2,210 mg/g (n/a)

· **General information:** Water hazard class 2 (D) (self-classification): hazardous to water. Do not discharge into groundwater, surface water, or the sewer system. Presents a risk to drinking water even if small quantities seep into the subsurface. In surface waters, it is also toxic to fish and plankton. The product contains substances that are hazardous to the environment and toxic to aquatic organisms · **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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· **12.6 Other adverse effects** No additional relevant information is available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation:**

Do not dispose of with household waste or allow to enter the sewer system. Please deliver to authorized recipients of controlled materials or to a hazardous-waste collection facility.

· **European Waste Catalogue**	
07 02 04*	other organic solvents, washing liquids, and mother liquors
15 01 10*	packaging that contains residues of hazardous substances or is contaminated with such substances

· **Uncleaned packaging:**

· **Recommendation:**

Packaging that can no longer be cleaned must be disposed of in the same manner as the substance itself. The packaging must be destroyed in accordance with the applicable packaging regulations.
Packaging containing cured adhesive residues may be recycled.
Packaging containing cured adhesive residues may be handled as household waste.
Packaging containing uncured adhesive residues must be disposed of as hazardous waste.

· **Recommended cleaning agent:** Alcohol

SECTION 14: Transport information

· **14.1 UN number**

· **ADR, IMDG, IATA** UN1993

· **14.2 Proper shipping name in accordance with the UN Model Regulations**

· **ADR** 1993 FLAMMABLE LIQUID, N.O.S. (HEXANES), ENVIRONMENTALLY HAZARDOUS

1993 FLAMMABLE LIQUID SUBSTANCE, N.O.S. (HEXANE), ENVIRONMENTALLY HAZARDOUS

· **IMDG** FLAMMABLE LIQUID, N.O.S. (HEXANES, CYCLOHEXANE), MARINE POLLUTANT

· **IATA** FLAMMABLE LIQUID, N.O.S. (HEXANES)

· **14.3 Transport hazard class(es)**

· **ADR**

· **Class** 3 (F1) Flammable liquids

· **Label** 3

· **IMDG**

· **Class** 3 Flammable liquids

· **Label** 3

· **IATA**

· **Class** 3 Flammable liquids

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· **Label**	3
· **14.4 Packing group:**	
· **ADR, IMDG, IATA**	II
· **14.5 Environmental hazards:**	Product contains environmentally hazardous substances: cyclohexane
· **Marine pollutant:**	Yes
· **Special marking (ADR):**	Symbol (fish and tree) Symbol (fish and tree)
· **14.6 Special precautions for the user**	Warning: Flammable liquids
· **Hazard Identification Number (Kemler Code):**	33
· **EMS Number:**	F-E,S-E
· **Stowage Category**	B
· **14.7 Bulk transport in accordance with Annex II of MARPOL and the IBC Code**	Not applicable.
· **Transport / additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	1 L
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 mL Maximum net quantity per outer packaging: 500 mL
· **Transport category**	2
· **Tunnel restriction code**	D/E
· **IMDG**	
· **Limited quantities (LQ)**	1 L
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 mL Maximum net quantity per outer packaging: 500 mL
· **UN "Model Regulations":**	UN 1993 FLAMMABLE LIQUID, N.O.S. (HEXANES), 3, II, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory Information

· **15.1 Safety, health, and environmental regulations/legislation specific to the substance or mixture**

Whether the substance is applicable (CMR) may be verified in Section 3 of the safety data sheet.

· **SZW list of carcinogenic substances**

None of the components is listed.

· **SZW list of mutagenic substances**

None of the components is listed.

· **Non-exhaustive list of substances toxic to reproduction – Fertility**

110-54-3	n-hexane	2

· **Non-exhaustive list of substances toxic to reproduction – Development**

None of the components is listed.

· **Non-exhaustive list of substances toxic to reproduction – Lactation**

None of the components is listed.

· **List of Substances of Very High Concern (SVHC)**

None of the components is listed.

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· **List of Potential Substances of Very High Concern**
None of the components are listed.

· **Directive 2012/18/EU** · **Hazardous substances specifically named**
– ANNEX I None of the components are listed.

· **Seveso category** E2 Hazardous to the aquatic environment P5c
FLAMMABLE LIQUIDS
· **Threshold quantity (tons) for application of requirements for lower-tier establishments** 200 t
· **Threshold quantity (tons) for application of requirements for upper-tier establishments** 500 t

· **REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)**
None of the components are listed.

· **LIST OF SUBSTANCES SUBJECT TO AUTHORIZATION (ANNEX XIV)**
None of the components are listed.

· **Regulation (EC) No. 1907/2006 ANNEX XVII** Conditions of restriction: 3, 57

· **Regulation (EU) No. 649/2012 (PIC)**
None of the components are listed.

· **Directive 2011/65/EU on restricting the use of certain hazardous substances in electrical and electronic equipment – Annex II**
None of the components are listed.

· **REGULATION (EU) 2019/1148**

· **Annex I – EXPLOSIVES PRECURSORS SUBJECT TO RESTRICTION (Upper limit value for licensing pursuant to Article 5(3))**
None of the components are listed.

· **Annex II – EXPLOSIVES PRECURSORS THAT MUST BE REPORTED**		
67-64-1	acetone	10-<15%

· **Regulation (EC) No. 273/2004 on drug precursors**		
67-64-1	acetone	3

· **Regulation (EC) No. 111/2005 laying down rules for monitoring trade in drug precursors between the Community and third countries**		
67-64-1	acetone	3 10-<15%

· **15.2 Chemical Safety Assessment:** A chemical safety assessment has been performed.

SECTION 16: Other Information

This information is based on the current state of our knowledge. However, it does not constitute a guarantee of product properties and does not establish any contractual legal validity.
All customary industry precautionary measures relating to health protection and safe handling shall be observed. The recommendations must be reviewed in the context of the intended use and, where necessary, complied with.

· **Relevant statements**
H225 Highly flammable liquid and vapor. H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness. H361f Suspected of damaging fertility.
H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.

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· **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organization
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (a division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative, and Toxic
SVHC: Substances of Very High Concern vPvB:
very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Repr. 2: Reproductive toxicity – Category 2 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment – acute hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment – long-term hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment – long-term hazard – Category 2

· *** Information that has been revised compared with the previous version**

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Appendix: Exposure Scenario 1

· **Short title of the exposure scenario**

· **Use sector** SU3 Industrial use: Use of substances as such or in preparations in an industrial setting

· **Product category**

PC9a Coatings and paints, thinners, paint removers

PC1 Adhesives, sealants

· **Process category**

PROC1 Chemical manufacturing or refining in a closed process, where exposure is not likely, or in processes with comparable containment conditions.

PROC2 Chemical manufacturing or refining in a closed, continuous process with occasional controlled exposure, or in processes with comparable containment conditions.

PROC3 Manufacture or formulation within the chemical industry in a closed, batch process with occasional controlled exposure, or processes with comparable containment conditions.

PROC4 Chemical manufacturing with potential for exposure

PROC5 Mixing in batch processes

PROC8a Transfer of a substance or mixture (filling/emptying in non-specialized facilities

PROC8b Transfer of a substance or mixture (filling/emptying in specialized facilities

PROC9 Transfer of a substance or mixture into small containers (specialized filling line, including weighing)

PROC10 Application by roller or brush

PROC15 Use as a laboratory reagent

· **Environmental release category**

ERC4 Use of a non-reactive processing aid at an industrial site (no inclusion in or on an article)

· **Notes** Not for private (household) use

· **Description of the exposure scenario(s), taking activities/methods into account** Please refer to Section 1 in the appendix to the safety data sheet.

· **Conditions of use**

· **Duration and frequency**

8 hours (full shift).

5 workdays/week.

· **Physical parameters**

· **Physical state** liquid

· **Concentrations of substances in the mixture** The substance is a minor component.

· **Quantity used per unit of time or activity** 6,000 tons per year per site

· **Additional conditions of use**

· **Additional conditions of use affecting environmental exposure** Number of emission days per year: 300

· **Additional conditions of use affecting worker exposure** Avoid contact with skin and eyes. Implement measures to prevent electrostatic charge buildup.

Keep away from sources of ignition — No smoking.

· **Risk management measures**

· **Worker protection**

· **Engineering controls** Ensure adequate ventilation/local exhaust at workstations.

· **Personal precautions** Avoid contact with eyes and skin. During work, wear appropriate protective gloves and safety goggles/face protection. Maintain cleanliness and good order.

Do not inhale gases/vapors/aerosols.

· **Measures to protect the consumer** Ensure adequate identification.

· **Environmental protection measures**

· **Water** Do not allow entry into groundwater, waterways, or the sewer system.

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· **Soil** Avoid contact with soil and/or groundwater during application.
· **Waste treatment measures** Deliver to a special-waste incineration facility in accordance with applicable local official regulations. Ensure that waste is collected and kept separate.

· **Method of waste disposal and treatment**
Do not dispose of together with household waste and do not allow it to enter the sewer system.
· **Nature of the waste** Partially emptied and uncleaned packaging
· **Exposure forecast**
· **Consumers** Not relevant for this exposure scenario.
· **Guidance for downstream users** No further relevant information is available.

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Appendix: Exposure Scenario 2

· **Short title of the exposure scenario**

· **Use sector** SU22 Professional use: Public domain (administration, education, entertainment, services, craftspeople)

· **Product category**

PC1 Adhesives, sealants

PC9a Coatings and paints, thinners, paint removers

· **Process category**

PROC1 Chemical manufacture or refining in a closed process where exposure is not likely, or processes with comparable containment conditions.

PROC2 Chemical manufacture or refining in a closed, continuous process with occasional controlled exposure, or processes with comparable containment conditions.

PROC8a Transfer of a substance or mixture (filling/emptying in non-specialized facilities

PROC8b Transfer of a substance or mixture (filling/emptying in specialized facilities

· **Environmental release category**

ERC8a Widespread use of a non-reactive processing aid (no incorporation into or onto an article, indoor)

ERC8d Widespread use of a non-reactive processing aid (no incorporation into or onto an article, outdoor)

· **Remarks** Not for private (household) use

· **Description of the exposure scenario(s), taking activities/methods into account** Please refer to Section 1 in the appendix to the safety data sheet.

· **Conditions of use**

· **Duration and frequency**

1–4 h/day (PROC8a)

8 hours (full shift).

5 working days/week.

· **Physical parameters**

· **Physical state** liquid

· **Concentrations of substances in the mixture** The substance is a primary component.

· **Additional conditions of application**

· **Other conditions of use affecting worker exposure** Avoid contact with skin and eyes. Take measures to prevent electrostatic charge buildup.

Keep away from ignition sources - No smoking.

· **Risk management measures**

· **Worker protection**

· **Engineering controls** Ensure adequate ventilation/local exhaust at the workplace.

· **Personal precautions**

Avoid contact with eyes and skin.

During work, wear appropriate protective gloves and safety goggles/face protection

Maintain cleanliness and good order.

Do not inhale gases/vapors/aerosol.

· **Measures to protect the consumer** Ensure adequate identification.

· **Environmental protection measures**

· **Water** Prevent release to groundwater, waterways, or the sewer system.

· **Soil** Avoid contact with soil and/or groundwater during application.

· **Waste treatment measures**

Deliver to a special-waste incineration facility in accordance with applicable local official regulations.

Ensure that waste is collected and kept separate.

· **Method for waste disposal and treatment** Must not be disposed of with household waste or discharged into the sewer system. (Continued on p. 17)

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· **Type of Waste** Partially emptied, uncleaned packaging
· **Exposure Forecast**
· **Consumers** Not applicable to this exposure scenario.
· **Guidance for Downstream Users** No additional relevant information is available.

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SECTION 1: Identification of the substance or mixture and of the company/undertaking

· **1.1 Product identifier**
· **Trade name: Jowat 401.10**
· **UFI:** MS9E-V122-K00P-9WJJ
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No additional relevant information is available.
· **Use of the substance/mixture** Solvent cleaner

· **Uses advised against** For professional use only.

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Jowat SE
Ernst-Hilker-Str. 10–14; D-32758 Detmold
Tel. +49 (0)5231 749 0
Email: info@jowat.de
www.jowat.de · **Environmental Department data sheet.** Environmental Department Tel. +49 5231 749-218 / -211 / -270 Email: umweltmanagement@jowat.de

· **Information contact:** Jowat Nederland B.V.
Ootmarsumseweg 283
7666 NB Fleringen Tel.:
+31 541 670629
Email: info@jowat.nl · **1.4 Emergency phone number:** InfraServ Hoechst - Emergency Response Control Center
D-65926 Frankfurt
Phone: +49 (0)69-305-6418

SECTION 2: Hazard identification

· **2.1 Classification of the substance or mixture**
· **Classification in accordance with Regulation (EC) No. 1272/2008**

GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

GHS08 Health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters the airways.

GHS09 Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long-lasting effects.

GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.

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· **2.2 Label Elements**

· **Labeling in accordance with Regulation (EC) No. 1272/2008**

The product is classified and labeled in accordance with the CLP Regulation.

· **Hazard Pictograms**

GHS02 GHS07 GHS08 GHS09

· **Signal word** Danger

· **Hazard-determining components for labeling:** naphtha (petroleum), hydrotreated light ethyl acetate

cyclohexane
n-hexane

· **Hazard statements**

H Highly flammable liquid and vapor.
H Causes skin irritation.
H Causes serious eye irritation.
H May cause drowsiness or dizziness. H304 May be fatal if swallowed and enters airways.
H Toxic to aquatic life with long-lasting effects.

· **Precautionary statements**

P Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331 Do NOT induce vomiting.
P362+P364 Remove contaminated clothing and wash it before reuse. P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container through an approved waste disposal or recycling facility in accordance with national regulations.

· **Additional information:**

Product contains: Reportable explosives precursors. Making available, introduction, possession, and use in accordance with Regulation (EU) 2019/1148, Article 9.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.
· **vPvB:** Not applicable.

SECTION 3: Composition/Information on Ingredients

· **3.2 Mixtures**

· **Description:** Cleaning agent

· **Hazardous ingredients:**		
	naphtha (petroleum), hydrotreated light Contains: 110-54-3 n-hexane (<5%) Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	35-<50%
CAS: 141-78-6 EINECS: 205-500-4 Registration No.: 01-2119475103-46	ethyl acetate Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	35-<50%
CAS: 67-64-1 EINECS: 200-662-2 Registration No.: 01-2119471330-49	acetone Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	10-<15%

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CAS: 110-82-7 EINECS: 203-806-2 Registration No.: 01-2119463273-41	cyclohexane Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; STOT SE 3, H336	10-<15%
CAS: 110-54-3 EINECS: 203-777-6 Registration No.: 01-2119480412-44	n-hexane Flam. Liq. 2, H225; Repr. 2, H361f; STOT RE 2, H373; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336 Specific concentration limit: STOT RE 2; H373: C ≥ 5 %	1-<2.5%

· **SVHC** Not applicable.
· **Additional information:**
The complete text of the listed hazard statements is provided in Section 16.

Contains < 0.1% benzene (Note P)

SECTION 4: First-aid measures

· **4.1 Description of first-aid measures**
· **After skin contact:** Wash immediately with soap and water, then rinse thoroughly.
· **After eye contact:**
Rinse the eyes under running water for several minutes, keeping the eyelids open. If symptoms persist, please consult a physician.
· **After swallowing:** If symptoms occur, please consult a physician.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information is available.
· **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information is available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing media:** Foam
CO_2, dry chemical, or water spray. For larger fires, use alcohol-resistant foam.
· **Extinguishing media not suitable for safety reasons:** High-pressure water jet.
· **5.2 Specific hazards arising from the substance or mixture** Carbon monoxide (CO)
· **5.3 Advice for firefighters**
· **Special protective equipment:**
Please use a self-contained breathing apparatus (SCBA).
Please do not inhale explosion or fire gases.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment, and emergency procedures**
Please wear appropriate personal protective clothing.
· **6.2 Environmental precautions:**
Please do not discharge into sewers or wastewater. Prevent entry into wastewater systems, sewers, pits, or basements.
If the material enters wastewater or sewers, please notify the responsible authority. Prevent the fire from spreading (e.g., by diking or by stopping oil supplies).
· **6.3 Methods and materials for containment and cleanup:**
Absorb with a liquid-binding material (sand, diatomaceous earth, acid binder, universal binder, sawdust). Dispose of contaminated material as waste in accordance with Section 13.
Please ensure adequate ventilation.
· **6.4 Reference to other sections** For guidance on safe handling, please refer to Section 7.
For information on personal protective equipment, please refer to Section 8. For disposal information, please refer to Section 13.

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* SECTION 7: Handling and Storage

· **7.1 Precautions for safe handling of the substance or mixture**
Please store in a cool, dry place in tightly sealed containers.

· **Information on fire and explosion hazards:**
Please take appropriate measures to prevent electrostatic discharge.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements for storage areas and containers:**
Please keep in a cool location.
Please strictly prevent release into soil.

· **Information on joint storage:** Not required

· **Additional information on storage requirements:** Please store in a cool, dry place in tightly closed containers.

· **Storage class:** 3

· **7.3 Specific end use** No further relevant information is available.

SECTION 8: Exposure Controls/Personal Protection

· **8.1 Control parameters**

· **Additional information on the design of technical systems:**
No additional information is available. Please refer to Section 7.

· **Components with workplace exposure limits that must be observed:**	
141-78-6 Ethyl acetate	
OEL	Short-term value: 1468 mg/m³ Long-term value: 734 mg/m³
67-64-1 Acetone	
OEL	Short-term value: 2420 mg/m³, 1000 ppm Long-term value: 1210 mg/m³, 500 ppm
110-82-7 Cyclohexane	
OEL	Short-term value: 1400 mg/m³, 400 ppm Long-term value: 700 mg/m³, 200 ppm
110-54-3 n-Hexane	
OEL	Short-term value: 144 mg/m³, 40 ppm Long-term value: 72 mg/m³, 20 ppm

· **Regulations** WGW: Occupational exposure limits for hazardous substances

· **Derived no-effect dose (DNELs)**

· **Worker**		
Naphtha (petroleum), hydrotreated light		
Dermal / Inhalation	DNEL (workers) DNEL (workers)	1 mg/kg bw/day (long-term, systemic effects) 1 mg/m3 (long-term, systemic effects)
141-78-6 Ethyl acetate		
Dermal Inhalation	DNEL (workers) DNEL (workers)	63 mg/kg bw/day (long-term, systemic effects) 1 mg/m3 (acute, local effects) 1 mg/m3 (acute, systemic effects) 734 mg/m3 (long-term, local effects) 734 mg/m3 (long-term, systemic effects)
67-64-1 Acetone		
Dermal / Inhalation	DNEL (workers) DNEL (workers)	186 mg/kg bw/day (long-term, systemic effects) 2 mg/m3 (acute, systemic effects) 2 mg/m3 (long-term, systemic effects)

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110-82-7 Cyclohexane		
Dermal	DNEL (workers)	2.016 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL (workers)	700 mg/m3 (acute, local effects) 700 mg/m3 (acute, systemic effects) 700 mg/m3 (long-term, local effects) 700 mg/m3 (long-term, systemic effects)
110-54-3 n-Hexane		
Dermal	DNEL (workers)	11 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL (workers)	75 mg/m3 (long-term, systemic effects)

· **Consumers**		
Naphtha (petroleum), hydrotreated light		
Oral	DNEL (consumers)	1.301 mg/kg bw/day (long-term, systemic effects)
Dermal	DNEL (consumers)	1.377 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL (consumers)	1.131 mg/m3 (long-term, systemic effects)
141-78-6 Ethyl acetate		
Oral	DNEL (consumers)	4.5 mg/kg bw/day (long-term, systemic effects)
Dermal	DNEL (consumers)	37 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL (consumers)	734 mg/m3 (acute, local effects)
		734 mg/m3 (acute, systemic effects)
		367 mg/m3 (long-term, local effects)
		367 mg/m3 (long-term, systemic effects)
67-64-1 Acetone		
Oral	DNEL (consumers)	62 mg/kg bw/day (long-term, systemic effects)
Dermal	DNEL (consumers)	62 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL (consumers)	200 mg/m3 (long-term, systemic effects)
110-82-7 Cyclohexane		
Oral	DNEL (consumers)	59.4 mg/kg bw/day (long-term, systemic effects)
Dermal	DNEL (consumers)	1.186 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL (consumers)	412 mg/m3 (acute, local effects)
		412 mg/m3 (acute, systemic effects)
		206 mg/m3 (long-term, local effects)
		206 mg/m3 (long-term, systemic effects)
110-54-3 n-Hexane		
Oral	DNEL (consumers)	4 mg/kg bw/day (long-term, systemic effects)
Dermal	DNEL (consumers)	5.3 mg/kg bw/day (long-term, systemic effects)
Inhalation	DNEL (consumers)	16 mg/m3 (long-term, systemic effects)

· **Predicted No-Effect Concentrations (PNECs)**		
141-78-6 Ethyl acetate		
Oral	PNEC oral	0.2 mg/kg food (n.a.)
	PNEC water	0.26 mg/l (fresh water)
		1.65 mg/l (intermittent releases)
		0.026 mg/l (marine water)
		650 mg/l (STP)
	PNEC sediment	1.25 mg/kg (sediment, freshwater)
		0.125 mg/kg (sediment, marine water)
	PNEC soil	0.24 mg/kg (soil)

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67-64-1 Acetone		
	PNEC (water)	10.6 mg/L (freshwater)
		21 mg/L (intermittent releases)
		1.06 mg/L (marine water)
		100 mg/L (STP)
	PNEC (sediment)	30.4 mg/kg (sediment, freshwater)
		3.04 mg/kg (sediment, marine water)
	PNEC (soil)	29.5 mg/kg (soil)
110-82-7 Cyclohexane		
	PNEC (water)	0.207 mg/L (freshwater)
		0.207 mg/L (intermittent releases)
		0.207 mg/L (marine water)
		3.24 mg/L (STP)
	PNEC (sediment)	3.627 mg/kg (sediment, freshwater)
		3.627 mg/kg (sediment, marine water)
	PNEC (soil)	2.99 mg/kg (soil)

· **Additional information:** This document was prepared based on the lists in effect at the time of drafting.

· **8.2 Exposure controls**

· **Additional details regarding the design of technical systems:**
No additional information is available. Please refer to Section 7.

· **Personal protective equipment (PPE):**

· **General protective and hygiene measures:**
Please observe standard precautionary measures when handling chemicals.

Please keep this product away from foodstuffs, beverages, and animal feed.
Please remove contaminated clothing immediately.
Please wash hands before breaks and at the end of the workday.
Please do not inhale gases, vapors, or aerosols.
Please avoid contact with eyes and skin.
Please do not eat or drink while using this product.

· **Respiratory protection:** Filter for short-term use:

· **Hand protection:** Impermeable gloves (EN 374).

· **Glove material**
Recommended material thickness: ≥ 0.7 mm
LLDPE gloves.

· **Breakthrough time of the glove material** Permeation value: Level ≤ 6

· **For prolonged contact in applications with no increased risk of injury (e.g., laboratory settings), gloves made of the following material are suitable:** LLDPE gloves.

· **For prolonged contact, gloves made of the following materials are suitable:** LLDPE gloves.

· **For prolonged contact of up to 15 minutes, gloves made of the following material are suitable:** Butyl rubber

· **For splash protection, gloves made of the following material are suitable:** Chloroprene rubber

· **Gloves made of the following materials are not suitable:**
Leather gloves
Heavy fabric gloves

· **Eye protection:**
When decanting, the use of safety glasses is recommended. Protective goggles may also be used.

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SECTION 9: Physical and Chemical Properties

· **9.1 Information on basic physical and chemical properties**	
· **General information**	
· **Appearance:**	
· **Form:**	Liquid
· **Color:**	As specified in the product specification
· **Odor:**	Characteristic
· **Odor threshold:**	Not determined.
· **pH value:**	Not determined.
· **Change in state**	
· **Melting point/freezing point:**	Not determined
· **Initial boiling point and boiling range:**	60 °C
· **Flash point:**	-25 °C
· **Flammability (solid, gas):**	Highly flammable.
· **Auto-ignition temperature:**	>200 °C
· **Decomposition temperature:**	Not determined.
· **Self-ignition temperature:**	The product is not self-igniting.
· **Explosive properties:**	The product is not explosive; however, explosive vapor/air mixtures may form.
· **Explosion limits:** ·	
Lower:	1.1 vol %
· **Upper:**	11.5 vol %
· **Vapor pressure at 20 °C:**	110 hPa
· **Density at 20 °C:**	0.76 g/cm³
· **Relative density**	Not determined.
· **Vapor density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in/miscibility with:** · **Water:**	Not miscible or only slightly miscible
· **Partition coefficient (n-octanol/water):** Not determined.	
· **Viscosity**	
· **Dynamic:**	Not determined.
· **Kinematic:**	Not determined.
· **Solvent content:**	
· **Organic solvent:**	100.0 %
· **9.2 Other information**	
· **Volatile organic compounds (VOCs)**	
· **EUROPEAN UNION**	100.00 %
· **Switzerland**	100.00 %
· **United States of America**	751.3 g/l / 6.27 lb/gal

SECTION 10: Stability and Reactivity

· **10.1 Reactivity** No additional relevant information is available.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to avoid:**
No decomposition occurs when used as directed.
· **10.4 Conditions to avoid** No additional relevant information is available.
· **10.5 Incompatible materials:** No additional relevant information is available. (Continued on page 8)

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· **10.6 Hazardous Decomposition Products:**
Flammable gases/vapors
Carbon monoxide and carbon dioxide

SECTION 11: Toxicological Information

· **11.1 Information on Toxicological Effects**

· **Acute Toxicity** Based on the available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**		
naphtha (petroleum), hydrotreated light		
Oral	Oral LD50	16,750 mg/kg (rat)
Dermal	Dermal LD50	>8,000 mg/kg (rabbit)
Inhalation	LC50 / 4 h	43.7 mg/L (rat)
141-78-6 ethyl acetate		
Oral	Oral LD50	4,934 mg/kg (rabbit)
Dermal	Dermal LD50	18,000 mg/kg (rabbit)
Inhalation	LC50 / 4 h	56 mg/L (rat)
67-64-1 acetone		
Oral	Oral LD50	3,592 mg/kg (rat)
Dermal	Dermal LD50	15,688 mg/kg (rabbit)
Inhalation	LC50 / 4 h	76 mg/L (rat)
110-82-7 cyclohexane		
Oral	Oral LD50	5,100 mg/kg (rat)
Inhalation	LC50 / 4 h	>32.88 mg/L (rat)
110-54-3 n-hexane		
Oral	Oral LD50	28,710 mg/kg (rat)

· **Primary Condition:**
· **Skin Corrosion/Irritation**
Causes skin irritation.
· **Serious Eye Damage/Eye Irritation**
Causes serious eye irritation.

· **Respiratory/Skin Sensitization**
Based on the available data, the classification criteria are not met.

· **Additional Toxicological Information:**
· **CMR Effects (carcinogenicity, mutagenicity, and reproductive toxicity)**
· **Germ Cell Mutagenicity**
Based on the available data, the classification criteria are not met.
· **Carcinogenicity** Based on the available data, the classification criteria are not met.
· **Reproductive Toxicity** Based on the available data, the classification criteria are not met.
· **STOT — Single Exposure**
May cause drowsiness or dizziness.
· **STOT — Repeated Exposure** Based on the available data, the classification criteria are not met.
· **Aspiration Hazard** May be fatal if swallowed and enters the airways.

SECTION 12: Ecological Information

· **12.1 Toxicity**

· **Aquatic Toxicity:**	
naphtha (petroleum), hydrotreated light	
LC50 / 96 h	9.776 mg/L (Oncorhynchus mykiss)

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LC50 / 48 h	10 mg/L (Leuciscus idus)
EC50 / 48 h	17.06 mg/L (Daphnia magna)
EC50 / 72 h	75.6 mg/L (Desmodesmus subspicatus)
141-78-6 Ethyl acetate	
LC50 / 96 h	431 mg/L (Brachydanio rerio)
	230 mg/L (Oncorhynchus mykiss)
	230 mg/L (Pimephales promelas)
LC50 / 48 h	350 mg/L (Leuciscus idus)
LC50	200 mg/L (rat)
EC50 / 48 h	3,300 mg/L (Desmodesmus subspicatus)
	610 mg/L (Daphnia magna)
EC50 / 24 h	724 mg/L (Daphnia magna)
EC50	17.9 mg/L (Desmodesmus subspicatus)
67-64-1 Acetone	
LC50 / 96 h	5,540 mg/L (Oncorhynchus mykiss)
LC50 / 48 h	7,500 mg/L (Leuciscus idus)
EC50 / 48 h	8,800 mg/L (Daphnia magna)
EC50 / 16 h	1,700 mg/L (Pseudomonas/Nitrosomonas/Nitrobacter)
NOEC	3,400 mg/L (Desmodesmus subspicatus)
110-82-7 Cyclohexane	
LC50 / 96 h	4.53 mg/L (Pimephales promelas)
EC50 / 48 h	0.9 mg/L (Daphnia magna)
EC50 / 72 h	3.428 mg/L (Desmodesmus subspicatus)
110-54-3 n-Hexane	
LC0	150–4,280 mg/L (Leuciscus idus)
EC50 / 48 h (static)	45 mg/L (Daphnia magna)
EC50 / 24 h	>50–>1,000 mg/L (Daphnia magna)

· **12.2 Persistence and degradability** No additional relevant information is available. · **12.3 Bioaccumulative potential** No additional relevant information is available. · **12.4 Mobility in soil** No additional relevant information is available.

· **Ecotoxic effects:**

· **Note:** Toxic to fish.

· **Behavior in wastewater treatment plant:**	
141-78-6 Ethyl acetate	
EC10 / 16 h	2,900 mg/L (Pseudomonas putida)

· **Additional ecological information:**

· **COD value:**	
67-64-1 Acetone	
COD	2,210 mg/g (n.a.)

· **General information:** Water hazard class 2 (D) (self-classification): hazardous to water. Please do not discharge into groundwater, surface water, or sewers. There is a risk to drinking water even if small quantities seep into the ground. In surface waters, it is also toxic to fish and plankton. This product contains substances that are hazardous to the environment and toxic to aquatic organisms · **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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· **12.6 Other adverse effects** No additional relevant information is available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation:**

Please do not dispose of this material with household waste and do not allow it to enter the sewer system. Please deliver it to an authorized recipient for restricted materials or take it to a hazardous-waste collection facility.

· **European Waste Catalogue**	
07 02 04*	Other organic solvents, washing liquids, and mother liquors
15 01 10*	Packaging containing residues of hazardous substances or contaminated by such substances

· **Uncleaned packaging:**

· **Recommendation:**

Packaging that can no longer be cleaned must be disposed of in the same manner as the substance itself. The packaging must be destroyed in accordance with applicable packaging regulations.
Packaging containing cured adhesive residue may be recycled.
Packaging containing cured adhesive residue may be disposed of with household waste.
Packaging containing uncured adhesive residue must be disposed of as hazardous waste.

· **Recommended cleaning agent:** Alcohol

SECTION 14: Transport information

· **14.1 UN number**

· **ADR, IMDG, IATA** UN1993

· **14.2 Proper shipping name in accordance with the UN Model Regulations**

· **ADR** 1993 FLAMMABLE LIQUID, N.O.S. (HEXANES), ENVIRONMENTALLY HAZARDOUS

1993 FLAMMABLE LIQUID, N.O.S.
N.O.S. (HEXANE), ENVIRONMENTALLY HAZARDOUS

· **IMDG** FLAMMABLE LIQUID, N.O.S. (HEXANES, CYCLOHEXANE), MARINE POLLUTANT

· **IATA** FLAMMABLE LIQUID, N.O.S. (HEXANES)

· **14.3 Transport hazard class(es)**

· **ADR**

· **Class** 3 (F1) Flammable liquids
· **Label** 3

· **IMDG**

· **Class** 3 Flammable liquids
· **Label** 3

· **IATA**

· **Class** 3 Flammable liquids

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· **Label**	3
· **14.4 Packing group:**	
· **ADR, IMDG, IATA**	II
· **14.5 Environmental hazards:**	The product contains environmentally hazardous substances: cyclohexane
· **Marine pollutant:**	Yes
· **Special marking (ADR):**	Symbol (fish and tree) Symbol (fish and tree)
· **14.6 Special precautions for the user**	Warning: Flammable liquids
· **Hazard Identification Number (Kemler code):**	33
· **EMS number:**	F-E,S-E
· **Stowage Category**	B
· **14.7 Bulk transport in accordance with Annex II of MARPOL and the IBC Code**	Not applicable.
· **Transport / additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	1 L
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 mL Maximum net quantity per outer packaging: 500 mL
· **Transport category**	2
· **Tunnel restriction code**	D/E
· **IMDG**	
· **Limited quantities (LQ)**	1 L
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner package: 30 mL Maximum net quantity per outer package: 500 mL
· **UN "Model Regulations":**	UN 1993 FLAMMABLE LIQUID, N.O.S. (HEXANES), 3, II, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

· **15.1 Safety, health, and environmental regulations/legislation specific to the substance or mixture**

Whether the substance is subject to CMR may be verified in Section 3 of the safety data sheet.

· **SZW list of carcinogenic substances**

None of the ingredients are listed.

· **SZW list of mutagenic substances**

None of the ingredients are listed.

· **NON-exhaustive list of reproductive toxicants – Fertility**

110-54-3	n-hexane	2

· **NON-exhaustive list of reproductive toxicants – Development**

None of the ingredients are listed.

· **NON-exhaustive list of reproductive toxicants – Breastfeeding**

None of the ingredients are listed.

· **List of Substances of Very High Concern (SVHC)**

None of the ingredients are listed.

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· **List of Potential Substances of Very High Concern**
None of the ingredients are listed.

· **Directive 2012/18/EU** · **Named hazardous substances – ANNEX I**
No ingredients are listed.

· **Seveso category** E2 Hazardous to the aquatic environment P5c
FLAMMABLE LIQUIDS
· **Threshold quantity (tons) for applying requirements for lower-tier establishments** 200 t
· **Threshold quantity (tons) for applying requirements for upper-tier establishments** 500 t

· **REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)**
None of the ingredients are listed.

· **LIST OF SUBSTANCES SUBJECT TO AUTHORIZATION (ANNEX XIV)**
None of the ingredients are listed.

· **Regulation (EC) No. 1907/2006 ANNEX XVII** Restriction conditions: 3, 57

· **Regulation (EU) No. 649/2012 (PIC)**
None of the ingredients are listed.

· **Directive 2011/65/EU restricting the use of certain hazardous substances in electrical and electronic equipment - Annex II**
None of the ingredients are listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - EXPLOSIVES PRECURSORS SUBJECT TO RESTRICTIONS (Upper limit value for licensing pursuant to Article 5(3))**
None of the ingredients are listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**	
67-64-1 acetone	10-<15%

· **Regulation (EC) No. 273/2004 on drug precursors**	
67-64-1 acetone	3

· **Regulation (EC) No. 111/2005 establishing rules for monitoring trade in drug precursors between the Community and third countries**		
67-64-1 acetone	3	10-<15%

· **15.2 Chemical Safety Assessment:** A chemical safety assessment has been conducted.

SECTION 16: Other Information

This information reflects our current state of knowledge. However, it does not warrant any product properties and does not constitute legally binding contractual terms.
All standard industry precautionary measures for health protection and safe handling apply. The recommendations shall be reviewed for the intended use and, where applicable, complied with.

· **Relevant statements**
H225 Highly flammable liquid and vapor. H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness. H361f Suspected of damaging fertility.
H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.

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· **Abbreviations and Acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organization
ADR: Agreement concerning the International Carriage of Dangerous Goods by Road (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Dangerous Goods Code
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (a division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal Concentration, 50 Percent
LD50: Lethal Dose, 50 Percent
PBT: Persistent, Bioaccumulative, and Toxic
SVHC: Substances of Very High Concern vPvB:
Very Persistent and Very Bioaccumulative
Flam. Liq. 2: Flammable Liquids – Category 2
Skin Irrit. 2: Skin Corrosion/Irritation – Category 2
Eye Irrit. 2: Serious Eye Damage/Eye Irritation – Category 2
Repr. 2: Reproductive Toxicity – Category 2 STOT SE 3: Specific Target Organ Toxicity (Single Exposure) – Category 3
STOT RE 2: Specific Target Organ Toxicity (Repeated Exposure) – Category 2
Asp. Tox. 1: Aspiration Hazard – Category 1
Aquatic Acute 1: Hazardous to the Aquatic Environment – Acute Hazard – Category 1
Aquatic Chronic 1: Hazardous to the Aquatic Environment – Long-Term Hazard – Category 1
Aquatic Chronic 2: Hazardous to the Aquatic Environment – Long-Term Hazard – Category 2

· *** Information Updated from the Previous Version**

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Appendix: Exposure Scenario 1

· **Brief title of the exposure scenario**
· **Use sector** SU3 Industrial use: Use of substances as such or in preparations within an industrial setting

· **Product category**
PC9a Coatings and paints, thinners, paint removers
PC1 Adhesives, sealants
· **Process category**
PROC1 Chemical manufacturing or refining in a closed process where exposure is unlikely, or in processes with comparable containment conditions.
PROC2 Chemical manufacturing or refining in a closed, continuous process with occasional controlled exposure, or in processes with comparable containment conditions.
PROC3 Manufacturing or formulation in the chemical industry in a closed batch process with occasional controlled exposure, or in processes with comparable containment conditions.
PROC4 Chemical manufacturing with potential for exposure
PROC5 Mixing in batch processes
PROC8a Transfer of a substance or mixture (filling/emptying in non-specialized facilities

PROC8b Transfer of a substance or mixture (filling/emptying in specialized facilities

PROC9 Transfer of a substance or mixture into small containers (specialized filling line, including weighing)
PROC10 Application by roller or brush
PROC15 Use as a laboratory reagent
· **Environmental release category**
ERC4 Use of a non-reactive processing aid at an industrial site (no incorporation into or onto an article)
· **Notes** Not intended for private (household) use
· **Description of exposure scenarios, taking activities/methods into account** Please refer to Section 1 in the appendix to the safety data sheet.
· **Conditions of use**
· **Duration and frequency**
8 hours (full shift).
5 workdays per week.
· **Physical parameters**
· **Physical state** liquid
· **Concentrations of substances in the mixture** The substance is present as a minor component.
· **Amount used per unit of time or activity** 6,000 tons per year, per site
· **Additional conditions of use**
· **Additional conditions affecting environmental exposure** Number of emission days per year: 300
· **Additional conditions affecting worker exposure** Please avoid contact with skin and eyes. Please implement measures to prevent the buildup of electrostatic charge.

Please keep away from ignition sources - No smoking.
· **Risk management measures**
· **Worker protection**
· **Engineering controls** Please ensure adequate ventilation and/or local exhaust at workstations.
· **Personal precautions** Please avoid contact with eyes and skin. During work, please wear suitable protective gloves and safety glasses/face protection. Please maintain cleanliness and good housekeeping practices.

Please do not inhale gases/vapors/aerosols.
· **Measures to protect the consumer** Please ensure adequate identification.
· **Environmental protection measures**
· **Water** Please prevent entry into groundwater, waterways, or the sewer system.

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· **Soil** Please avoid contact with soil and/or groundwater during application.
· **Waste treatment measures** Dispose of at a special-waste incineration facility in accordance with applicable local regulations. Please ensure that waste is collected and kept separate.

· **Method of disposal and waste treatment**
Do not dispose of with household waste, and do not allow entry into the sewer system.
· **Type of waste** Partially emptied, uncleaned containers
· **Exposure estimate**
· **Consumers** Not applicable to this exposure scenario.
· **Guidance for downstream users** No additional relevant information is available.

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Appendix: Exposure Scenario 2

· **Short title of the exposure scenario**
· **Use sector** SU22 Professional use: Public domain (administration, education, entertainment, services, craftspeople)

· **Product category**
PC1 Adhesives, sealants
PC9a Coatings and paints, thinners, paint removers
· **Process category**
PROC1 Chemical manufacturing or refining conducted in a closed process where exposure is unlikely, or in processes with comparable containment conditions.
PROC2 Chemical manufacturing or refining conducted in a closed, continuous process with occasional controlled exposure, or in processes with comparable containment conditions.
PROC8a Transfer of a substance or mixture (filling/emptying in non-specialized facilities

PROC8b Transfer of a substance or mixture (filling/emptying in specialized facilities

· **Environmental release category**
ERC8a Widespread use of a non-reactive processing aid (not included in or on an article, indoor)

ERC8d Widespread use of a non-reactive processing aid (not included in or on an article, outdoor)

· **Notes** Not intended for private (household) use
· **Description of the exposure scenario(s), taking activities/methods into account** Please refer to Section 1 in the appendix to the safety data sheet.
· **Conditions of use**
· **Duration and frequency**
1–4 h/day (PROC8a)
8 hours (full shift).
5 workdays/week.
· **Physical parameters**
· **Physical state** liquid
· **Concentrations of substances in the mixture** The substance is a primary component.
· **Other conditions of use**
· **Other conditions of use that affect worker exposure** Please avoid contact with skin and eyes.
Please take measures to prevent the buildup of electrostatic charge.

Please keep away from ignition sources - No smoking.
· **Risk management measures**
· **Worker protection**
· **Engineering controls** Please ensure adequate ventilation/local exhaust at workstations.
· **Personal precautions**
Please avoid contact with eyes and skin.
Please wear appropriate safety gloves and safety goggles/face protection while working.

Please maintain cleanliness and good housekeeping.

Please do not inhale gases/vapors/aerosols.
· **Measures to protect consumers** Please ensure adequate identification.
· **Environmental protection measures**
· **Water** Please prevent release into groundwater, waterways, or sewers.
· **Soil** Please avoid contact with soil and/or groundwater during application.
· **Waste treatment measures**
Please send to a special-waste incineration facility in accordance with applicable local regulations.

Please ensure that waste is collected and kept separate.
· **Method for waste disposal and treatment** It must not be disposed of with household waste or discharged into the sewer system. (Continued on page 17)

Safety Data Sheet

in accordance with 1907/2006/EC, Article 31; (EU) 2020/878

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Product name: Jowat 401.10

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· **Waste type** Partially emptied, uncleaned packaging
· **Exposure forecast**
· **Consumers** Not relevant for this exposure scenario.
· **Guidance for downstream users** No further relevant information available.