SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 as amended by Regulation (EU) No. 2020/878, and
Regulation (EC) No. 1272/2008

Issuing Date 05-Apr-2024 **Revision Date** 05-Apr-2024 **Revision Number** 1

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

1.1. Product identifier

Product Name AMSOIL SAE 10W-40 Synthetic Marine Engine Oil

Product Code(s) WCF

Synonyms None

Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Lubricating Oil

Uses advised against Avoid formation of mists

1.3. Details of the supplier of the safety data sheet

Supplier
AMSOIL INC.
One AMSOIL Center
Superior, WI 54880, USA
T: +1 715-392-7101

For further information, please contact

E-mail address compliance@amsoil.com

1.4. Emergency telephone number

Emergency telephone CHEMTREC International: +1 703-741-5970

Emergency telephone - §45 - (EC)1272/2008	
Europe	**112**

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP].

2.2. Label elements

Hazard statements
Not classified.
EUH210 - Safety data sheet available on request

2.3. Other hazards

Other hazards No information available.

PBT & vPvB None known

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Base oil 64742-54-7	75-85	No data available	265-157-1 (649-467-00-8)	Carc. 1B (H350) (*L)	-	-	-
Base oil 64742-65-0	5-10	No data available	265-169-7 (649-474-00-6)	Carc. 1B (*L) (H350)	-	-	-
Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) 2215-35-2	1-5	No data available	218-679-9	No data available	-	-	-
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethyl butyl and iso-Pr) esters, zinc salts 84605-29-8	<1.0	No data available	283-392-8	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 2 (H411)	Skin Irrit. 2 :: C>=6.25% Eye Dam. 1 :: C>12.5% Eye Irrit. 2 :: 10%<C<=12.5 %	-	-
Toluene 108-88-3	<0.001	-	203-625-9 (601-021-00-3)	Skin Irrit. 2 (H315) Repr. 2 (H361d) STOT SE 3 (H336) STOT RE 2 (H373) Asp. Tox. 1 (H304) Flam. Liq. 2 (H225)	-	-	-
Naphthalene 91-20-3	<0.001	No data available	202-049-5 (601-052-00-2)	Acute Tox. 4 (H302) Carc. 2 (H351) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-	-	-

Benzene 71-43-2	<0.001	-	200-753-7 (601-020-00-8)	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Muta. 1B (H340) Carc. 1A (H350) STOT RE 1 (H372) Asp. Tox. 1 (H304) Flam. Liq. 2 (H225)	-	-	-

Additional information
The classification as a carcinogen does not apply as it can be shown that the substance(s) contain(s) less than 3% DMSO extract as measured by IP 346

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate
If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Base oil 64742-54-7	15000	5000	No data available	No data available	No data available
Base oil 64742-65-0	15000	5000	2.4	No data available	No data available
Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) 2215-35-2	2000	3160	0.5	No data available	No data available
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts 84605-29-8	3100 3200	2000	2.3	No data available	No data available
Toluene 108-88-3	2600	12000	12.5	No data available	No data available
Naphthalene 91-20-3	1110	1120	0.4	No data available	No data available
Benzene 71-43-2	810	8200	44.66	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Get medical attention immediately if symptoms occur. Show this safety data sheet to the doctor in attendance.

Inhalation Remove person to fresh air and keep comfortable for breathing.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin contact Wash skin with soap and water. Take off contaminated clothing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms May cause temporary eye irritation. May cause gastrointestinal discomfort if consumed in large amounts. Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitisation in susceptible persons. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness and difficulty breathing.

Effects of Exposure None.

4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Water spray, carbon dioxide (CO_2), dry chemical, alcohol-resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Containers can burst or explode when heated, due to excessive pressure build-up. Thermal decomposition can lead to release of irritating gases and vapours.

Hazardous combustion products Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

5.3. Advice for firefighters

Specific/special fire-fighting measures Fires need to be assessed to determine appropriate protocols and safety measures for firefighting, including establishing safe zones, extinguishing media to be used, firefighter protection, and actions to control or extinguish the fire.

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment as required. See section 8

for more information.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13). Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections For additional information see: Section 8: Exposure controls/personal protection; Section 12: Ecological information; Section 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Avoid contact with used product. Wash hands thoroughly after handling.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Do not reuse empty containers. Store away from incompatible materials. See section 10 for more information. Protect from physical damage.

Storage class (TRGS 510) LGK 10.

7.3. Specific end use(s)

Specific use(s). The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits Under conditions which may generate mists, the following exposure limits are recommended: Long-term exposure limit (8-hour TWA): 5 mg/m³. Short-term exposure limit (15-minute): 10 mg/m³.

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Toluene 108-88-3	TWA: 50 ppm TWA: 192 mg/m³ STEL: 100 ppm STEL: 384 mg/m³ Sk*	TWA: 50 ppm TWA: 190 mg/m³ STEL 100 ppm STEL 380 mg/m³ Sk*	TWA: 20 ppm TWA: 77 mg/m³ STEL: 100 ppm STEL: 384 mg/m³ Sk*	TWA: 50 ppm TWA: 192.0 mg/m³ STEL: 100 ppm STEL: 384.0 mg/m³ Sk*	TWA: 50 ppm TWA: 192 mg/m³ STEL: 100 ppm STEL: 384 mg/m³ Sk*

Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m³	TWA: 10 ppm TWA: 50 mg/m³ Sk*	TWA: 10 ppm TWA: 53 mg/m³ STEL: 15 ppm STEL: 80 mg/m³ Sk*	TWA: 50.0 mg/m³ STEL: 75.0 mg/m³	TWA: 10 ppm TWA: 50 mg/m³
Benzene 71-43-2	TWA: 0.2 ppm TWA: 0.5 ppm TWA: 1 ppm TWA: 0.66 mg/m³ TWA: 1.65 mg/m³ TWA: 3.25 mg/m³ Sk*	Sk*	TWA: 1 ppm TWA: 3.25 mg/m³ Sk*	TWA: 3.25 mg/m³ TWA: 1 ppm Sk*	TWA: 1 ppm TWA: 3.25 mg/m³ Sk*
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Toluene 108-88-3	TWA: 50 ppm TWA: 192 mg/m³ STEL: 100 ppm STEL: 384 mg/m³ Sk*	TWA: 200 mg/m³ Sk* Ceiling: 500 mg/m³	TWA: 25 ppm TWA: 94 mg/m³ STEL: 384 mg/m³ STEL: 100 ppm Sk*	TWA: 50 ppm TWA: 192 mg/m³ STEL: 100 ppm STEL: 384 mg/m³ Sk*	TWA: 25 ppm TWA: 81 mg/m³ STEL: 100 ppm STEL: 380 mg/m³ Sk*
Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m³	TWA: 50 mg/m³ Ceiling: 100 mg/m³	TWA: 10 ppm TWA: 50 mg/m³ STEL: 20 ppm STEL: 100 mg/m³	TWA: 10 ppm TWA: 50 mg/m³	TWA: 1 ppm TWA: 5 mg/m³ STEL: 2 ppm STEL: 10 mg/m³
Benzene 71-43-2	TWA: 1 ppm TWA: 3.25 mg/m³ Sk*	TWA: 3 mg/m³ Sk* Ceiling: 10 mg/m³	TWA: 0.5 ppm TWA: 1.6 mg/m³ STEL: 1 ppm STEL: 3.2 mg/m³ Sk*	TWA: 0.5 ppm TWA: 1.5 mg/m³ STEL: 3 ppm STEL: 9 mg/m³ Sk*	TWA: 1 ppm : TWA: 3.25 mg/m³ Sk*
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Toluene 108-88-3	TWA: 20 ppm TWA: 76.8 mg/m³ STEL: 100 ppm STEL: 384 mg/m³ Sk*	TWA: 50 ppm TWA: 190 mg/m³ Sk*	TWA: 50 ppm TWA: 190 mg/m³ Peak: 100 ppm Peak: 380 mg/m³ Sk*	TWA: 50 ppm TWA: 192 mg/m³ STEL: 100 ppm STEL: 384 mg/m³ Sk*	TWA: 190 mg/m³ TWA: 50 ppm STEL: 384 mg/m³ STEL: 100 ppm Sk*
Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m³	TWA: 0.4 ppm TWA: 2 mg/m³ Sk*	Sk*	TWA: 10 ppm TWA: 50 mg/m³	TWA: 50 mg/m³ TWA: 10 ppm
Benzene 71-43-2	TWA: 1 ppm TWA: 3.25 mg/m³ STEL: 1500 mg/m³ Sk*	Sk*	Sk*	TWA: 3.25 mg/m³ TWA: 1.0 ppm Sk*	TWA: 1 ppm TWA: 3.25 mg/m³ Sk*
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Toluene 108-88-3	TWA: 192 mg/m³ TWA: 50 ppm STEL: 384 mg/m³ STEL: 100 ppm Sk*	TWA: 50 ppm TWA: 192 mg/m³ Sk*	TWA: 20 ppm TWA: 75.4 mg/m³	TWA: 14 ppm TWA: 50 mg/m³ STEL: 40 ppm STEL: 150 mg/m³ Sk*	TWA: 50 ppm TWA: 192 mg/m³ STEL: 100 ppm STEL: 384 mg/m³ Sk*
Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m³ STEL: 30 ppm STEL: 150 mg/m³	-	TWA: 10 ppm TWA: 52 mg/m³ Sk*	TWA: 10 ppm TWA: 50 mg/m³	TWA: 10 ppm TWA: 50 mg/m³
Benzene 71-43-2	TWA: 1 ppm TWA: 3.25 mg/m³ STEL: 3 ppm STEL: 9.75 mg/m³ Sk*	TWA: 3.25 mg/m³ TWA: 1 ppm Sk*	TWA: 0.5 ppm TWA: 1.6 mg/m³ STEL: 2.5 ppm STEL: 8 mg/m³ Sk*	TWA: 1 ppm TWA: 3.25 mg/m³ Sk*	TWA: 1 ppm TWA: 3.25 mg/m³ STEL: 6 ppm STEL: 19 mg/m³ Sk*
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Toluene 108-88-3	TWA: 50 ppm TWA: 192 mg/m³ STEL: 100 ppm	TWA: 50 ppm TWA: 192 mg/m³ STEL: 100 ppm	TWA: 39 ppm TWA: 150 mg/m³ STEL: 100 ppm	TWA: 25 ppm TWA: 94 mg/m³ STEL: 37.5 ppm	TWA: 100 mg/m³ STEL: 200 mg/m³ Sk*

	STEL: 384 mg/m³ Sk*	STEL: 384 mg/m³ Sk*	STEL: 384 mg/m³	STEL: 141 mg/m³ Sk*	
Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m³	TWA: 10 ppm TWA: 50 mg/m³	TWA: 10 ppm TWA: 50 mg/m³ STEL: 16 ppm STEL: 80 mg/m³	TWA: 10 ppm TWA: 50 mg/m³ STEL: 20 ppm STEL: 75 mg/m³	TWA: 20 mg/m³ STEL: 50 mg/m³ Sk*
Benzene 71-43-2	-	-	TWA: 0.2 ppm TWA: 0.7 mg/m³ Sk*	TWA: 0.2 ppm TWA: 0.66 mg/m³ STEL: 0.6 ppm STEL: 1.98 mg/m³ Sk*	TWA: 1.6 mg/m³ Sk*

Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Toluene 108-88-3	TWA: 50 ppm TWA: 192 mg/m³ STEL: 100 ppm STEL: 384 mg/m³ Sk*	TWA: 50 ppm TWA: 192 mg/m³ STEL: 100 ppm STEL: 384 mg/m³ Sk*	TWA: 50 ppm TWA: 192 mg/m³ Sk* Ceiling: 384 mg/m³	TWA: 50 ppm TWA: 192 mg/m³ STEL: 100 ppm STEL: 384 mg/m³ Sk*	TWA: 50 ppm TWA: 192 mg/m³ STEL: 100 ppm STEL: 384 mg/m³ Sk*
Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m³ STEL: 15 ppm Sk*	TWA: 10 ppm TWA: 50 mg/m³	TWA: 10 ppm TWA: 50 mg/m³ Sk* Ceiling: 80 mg/m³	TWA: 10 ppm TWA: 50 mg/m³ STEL: 10 ppm STEL: 50 mg/m³ Sk*	TWA: 10 ppm TWA: 53 mg/m³ STEL: 15 ppm STEL: 80 mg/m³ Sk*
Benzene 71-43-2	TWA: 1 ppm TWA: 3.25 mg/m³ STEL: 2.5 ppm Sk*	TWA: 1 ppm TWA: 3.25 mg/m³ Sk*	TWA: 1.0 ppm TWA: 3.25 mg/m³ STEL: 5.0 ppm STEL: 16.25 mg/m³ Sk*	TWA: 1 ppm TWA: 3.25 mg/m³ Sk*	TWA: 1 ppm TWA: 3.25 mg/m³ Sk*

Chemical name	Sweden	Switzerland	United Kingdom
Toluene 108-88-3	NGV: 50 ppm NGV: 192 mg/m³ Bindande KGV: 100 ppm Bindande KGV: 384 mg/m³ Sk*	TWA: 50 ppm TWA: 190 mg/m³ STEL: 200 ppm STEL: 760 mg/m³ Sk*	TWA: 50 ppm TWA: 191 mg/m³ STEL: 100 ppm STEL: 384 mg/m³ Sk*
Naphthalene 91-20-3	NGV: 10 ppm NGV: 50 mg/m³ Vägledande KGV: 15 ppm Vägledande KGV: 80 mg/m³	TWA: 10 ppm TWA: 50 mg/m³ Sk*	-
Benzene 71-43-2	NGV: 0.5 ppm NGV: 1.5 mg/m³ Bindande KGV: 3 ppm Bindande KGV: 9 mg/m³ Sk*	TWA: 0.2 ppm TWA: 0.7 mg/m³ Sk*	TWA: 1 ppm TWA: 3.25 mg/m³ STEL: 3 ppm STEL: 9.75 mg/m³ Sk*

Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Toluene 108-88-3	-	Check 10 g/dL Hemoglobin (blood - by the first screening and once yearly) 12 g/dL Hemoglobin (blood - by the first screening and once yearly) 3.2 million/µL Erythrocytes (blood - by the first screening	1.6 mmol/mmol Creatinine - urine (Hippuric acid) - at the end of exposure or end of work shift	1.0 mg/L - blood (Toluene) - at the end of the work shift 20 ppm - final exhaled air (Toluene) - during exposure 2.50 g/g Creatinine - urine (Hippuric acid) - at the end of the work shift 1.0 mg/g Creatinine -	1.6 µmol/mmol Creatinine (urine - o-Cresol end of shift) 1000 µmol/mmol Creatinine (urine - Hippuric acid end of shift) 1.5 mg/g Creatinine (urine - o-Cresol end of shift) 1600 mg/g Creatinine (urine -

		and once yearly) 3.8 million/µL Erythrocytes (blood - by the first screening and once yearly) 4000 Leukocytes/µL (blood - by the first screening and once yearly) 13000 Leukocytes/µL (blood - by the first screening and once yearly) 130000 Thrombocytes/µL (blood - by the first screening and once yearly) 150000 Thrombocytes/µL (blood - by the first screening and once yearly) 0.8 mg/L (urine - o-Cresol after end of work day, at the end of a work week/end of the shift)		urine (o-Cresol) - at the end of the work shift	Hippuric acid end of shift)
Benzene 71-43-2	-	Check 10 g/dL Hemoglobin (blood - by the first screening and once yearly or for work in cokery plants every six months) 12 g/dL Hemoglobin (blood - by the first screening and once yearly or for work in cokery plants every six months) 79 - 97 fL mean corpuscular volume (blood - by the first screening and once yearly or for work in cokery plants every six months) 3.8 million/µL Erythrocytes (blood - by the first screening and once yearly or for work in cokery plants every six months) 3.2 million/µL Erythrocytes (blood - by the first screening and once yearly or	2.0 mg/L - urine (Trans, trans-Muconic acid) - at the end of exposure or end of work shift 0.045 mg/g Creatinine - urine (S-Phenyl Mercapturic acid) - at the end of exposure or end of work shift	28 µg/L - blood (Benzene) - right at the end of the work shift 46 µg/g Creatinine - urine (S-Phenylmercapturic acid) - at the end of the work shift	0.024 µmol/mmol Creatinine (urine - S-Phenylmercapturic acid end of shift) 0.05 mg/g Creatinine (urine - S-Phenylmercapturic acid end of shift) 1.2 µmol/mmol Creatinine (urine - trans,trans-Muconic acid end of shift) 1.5 mg/g Creatinine (urine - trans,trans-Muconic acid end of shift)

		for work in cokery plants every six months) 13000 Leukocytes/µL (blood - by the first screening and once yearly or for work in cokery plants every six months) 4000 Leukocytes/µL (blood - by the first screening and once yearly or for work in cokery plants every six months) 130000 Thrombocytes/µL (blood - by the first screening and once yearly or for work in cokery plants every six months) 150000 Thrombocytes/µL (blood - by the first screening and once yearly or for work in cokery plants every six months) 1.6 mg/L (urine - t,t-Muconic acid after end of work day, at the end of a work week/end of the shift)			
Chemical name	Denmark	Finland	France	Germany DFG	Germany TRGS
Toluene 108-88-3	-	500 nmol/L (blood - Toluene in the morning after a working day)	20 µg/L - blood (Toluene) - end of workweek - urine (Hippuric acid) - end of shift	600 µg/L (whole blood - Toluene immediately after exposure) 75 µg/L (urine - Toluene end of shift) 1.5 mg/L (urine - o-Cresol (after hydrolysis) for long-term exposures: at the end of the shift after several shifts) 1.5 mg/L (urine - o-Cresol (after hydrolysis) end of shift) 600 µg/L - BAT (immediately after exposure) blood 75 µg/L - BAT (end of exposure or end of shift) urine	600 µg/L (whole blood - Toluene immediately after exposure) 75 µg/L (urine - Toluene end of shift) 1.5 mg/L (urine - o-Cresol (after hydrolysis) for long-term exposures: at the end of the shift after several shifts) 1.5 mg/L (urine - o-Cresol (after hydrolysis) end of shift)

				1.5 mg/L - BAT (end of exposure or end of shift) urine	
Naphthalene 91-20-3	-	-	-	35 µg/L - BAR (for long-term exposures: at the end of the shift after several shifts) urine 4000 µg/L - (end of exposure or end of shift) - urine 13500 µg/L - (end of exposure or end of shift) - urine 23300 µg/L - (end of exposure or end of shift) - urine 34200 µg/L - (end of exposure or end of shift) - urine 30 µg/L - (end of exposure or end of shift) - urine 60 µg/L - (end of exposure or end of shift) - urine 175 µg/L - (end of exposure or end of shift) - urine 280 µg/L - (end of exposure or end of shift) - urine 390 µg/L - (end of exposure or end of shift) - urine 220 µg/L - (end of exposure or end of shift) - urine 500 µg/L - (end of exposure or end of shift) - urine 1500 µg/L - (end of exposure or end of shift) - urine 2300 µg/L - (end of exposure or end of shift) - urine 3300 µg/L - (end of exposure or end of shift) - urine	-
Benzene 71-43-2	-	-	- urine (Muconic acid) - end of shift	0.3 µg/g Creatinine - BAR (for long-term exposures: at the end of the shift after several shifts) urine 150 µg/g Creatinine - BAR (end of exposure or end of shift) urine 0.3 µg/L - BAR (end	-

				of exposure or end of shift) urine 0.5 µg/L - (end of exposure or end of shift) - urine 0.8 µg/L - (end of exposure or end of shift) - urine 1.5 µg/L - (end of exposure or end of shift) - urine 2.75 µg/L - (end of exposure or end of shift) - urine 5.0 µg/L - (end of exposure or end of shift) - urine 7.5 µg/L - (end of exposure or end of shift) - urine 12.5 µg/L - (end of exposure or end of shift) - urine 300 µg/g Creatinine - (end of exposure or end of shift) - urine 500 µg/g Creatinine - (end of exposure or end of shift) - urine 750 µg/g Creatinine - (end of exposure or end of shift) - urine 1200 µg/g Creatinine - (end of exposure or end of shift) - urine 1.5 µg/g Creatinine - (end of exposure or end of shift) - urine 3 µg/g Creatinine - (end of exposure or end of shift) - urine 5 µg/g Creatinine - (end of exposure or end of shift) - urine 12 µg/g Creatinine - (end of exposure or end of shift) - urine 25 µg/g Creatinine - (end of exposure or end of shift) - urine 45 µg/g Creatinine - (end of exposure or end of shift) - urine 90 µg/g Creatinine - (end of exposure or end of shift) - urine	

Chemical name	Hungary	Ireland	Italy MDLPS	Italy AIDII
Toluene 108-88-3	1 mg/g Creatinine (urine - o-Cresol end of shift)	0.02 mg/L (blood - Toluene prior to last shift	-	0.3 mg/g Creatinine - urine (o-Cresol (with

	1 µmol/mmol Creatinine (urine - o-Cresol end of shift)	of workweek) 0.03 mg/L (urine - Toluene end of shift) 0.3 mg/g Creatinine (urine - o-Cresol end of shift)		hydrolysis)) - end of shift 0.03 mg/L - urine (Toluene) - end of shift 0.02 mg/L - blood (Toluene) - prior to last shift of workweek
Naphthalene 91-20-3	-	-	-	- () - end of shift
Benzene 71-43-2	0.04 mg/g Creatinine (urine - s-Phenyl mercapturic acid end of shift) 0.22 µmol/mmol Creatinine (urine - s-Phenyl mercapturic acid end of shift)	25 µg/g Creatinine (urine - s-Phenylmercapturic acid end of shift) 500 µg/g Creatinine (urine - t,t-Muconic acid end of shift)	-	25 µg/g Creatinine - urine (S-Phenylmercapturic acid) - end of shift 500 µg/g Creatinine - urine (t,t-Muconic acid) - end of shift

Chemical name	Latvia	Luxembourg	Romania	Slovakia
Toluene 108-88-3	1.6 g/g Creatinine - urine (Hippuric acid) - end of shift 0.05 mg/L - blood (Toluene) - end of shift	-	2 g/L - urine (Hippuric acid) - end of shift 3 mg/L - urine (o-Cresol) - end of shift	600 µg/L (blood - Toluene end of exposure or work shift) 1.5 mg/L (urine - o-Cresol after all work shifts) 1.5 mg/L (urine - o-Cresol end of exposure or work shift) 1600 mg/g creatinine (- Hippuric acid end of exposure or work shift)
Benzene 71-43-2	46 µg/g Creatinine - urine (Phenol) - end of shift 28 µg/L - blood () - end of shift	-	25 µg/g Creatinine - urine (S-Phenylmercapturic acid) - end of shift 500 µg/g Creatinine - urine (trans,trans-Muconic acid) - end of shift 50 mg/L - urine (total Phenols) - end of shift	-

Chemical name	Slovenia	Spain	Switzerland	United Kingdom
Toluene 108-88-3	600 µg/L - blood (Toluene) - immediately after exposure 1.5 mg/L - urine (o-Cresol (after hydrolysis)) - at the end of the work shift; for long-term exposure: at the end of the work shift after several consecutive workdays 75 µg/L - urine (Toluene) - at the end of the work shift	0.6 mg/L (urine - o-Cresol end of shift) 0.05 mg/L (blood - Toluene start of last shift of workweek) 0.08 mg/L (urine - Toluene end of shift)	600 µg/L (whole blood - Toluene end of shift) 6.48 µmol/L (whole blood - Toluene end of shift) 2 g/g creatinine (urine - Hippuric acid end of shift, and after several shifts (for long-term exposures)) 1.26 mmol/mmol creatinine (urine - Hippuric acid end of shift, and after several shifts (for long-term exposures)) 0.5 mg/L (urine - o-Cresol end of shift, and after several shifts (for long-term exposures)) 4.62 µmol/L (urine - o-Cresol end of shift, and after several shifts (for long-term exposures)) 75 µg/L (urine - Toluol end of shift)	-

Benzene 71-43-2	5 µg/L - urine (Benzene) - at the end of the work shift 0.025 mg/g Creatinine - urine ((S)-Phenylmercapturic acid) - at the end of the work shift 500 µg/g Creatinine - urine (trans, trans-Muconic acid) - at the end of the work shift	0.045 mg/g Creatinine (urine - S-Phenyl mercapturic acid end of exposure or end of shift) 2 mg/L (urine - trans, trans-Muconic acid end of exposure or end of shift)	8 µg/g creatinine (urine - S-Phenyl-mercapturic acid end of shift) 0.004 µmol/mmol creatinine (urine - S-Phenyl-mercapturic acid end of shift)	-

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
Base oil 64742-54-7	-	0.97 mg/kg bw/day [4] [6]	2.73 mg/m³ [4] [6] 5.58 mg/m³ [5] [6]
Base oil 64742-65-0	-	0.97 mg/kg bw/day [4] [6]	2.73 mg/m³ [4] [6] 5.58 mg/m³ [5] [6]
Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) 2215-35-2	-	12.2 mg/kg bw/day [4] [6]	8.6 mg/m³ [4] [6]
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts 84605-29-8	-	12.1 mg/kg bw/day [4] [6]	8.31 mg/m³ [4] [6]
Naphthalene 91-20-3	-	3.57 mg/kg bw/day [4] [6]	25 mg/m³ [4] [6] 25 mg/m³ [5] [6]
Toluene 108-88-3	-	384 mg/kg bw/day [4] [6]	192 mg/m³ [4] [6] 384 mg/m³ [4] [7] 192 mg/m³ [5] [6] 384 mg/m³ [5] [7]

Notes

[4]	Systemic health effects.
[5]	Local health effects.
[6]	Long term.
[7]	Short term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
Base oil 64742-54-7	0.74 mg/kg bw/day [4] [6]	-	1.19 mg/m³ [5] [6]
Base oil 64742-65-0	0.74 mg/kg bw/day [4] [6]	-	1.19 mg/m³ [5] [6]
Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) 2215-35-2	0.24 mg/kg bw/day [4] [6]	-	2.13 mg/m³ [4] [6]
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts 84605-29-8	0.24 mg/kg bw/day [4] [6]	-	2.11 mg/m³ [4] [6]
Toluene 108-88-3	8.13 mg/kg bw/day [4] [6]	-	56.5 mg/m³ [4] [6] 226 mg/m³ [4] [7]

Chemical name	Oral	Dermal	Inhalation
			56.5 mg/m³ [5] [6] 226 mg/m³ [5] [7]

Notes

[4] Systemic health effects.
[5] Local health effects.
[6] Long term.
[7] Short term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) 2215-35-2	4 µg/L	45 µg/L	4.6 µg/L	-	-
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts 84605-29-8	4 µg/L	45 µg/L	4.6 µg/L	-	-
Naphthalene 91-20-3	2.4 µg/L	20 µg/L	2.4 µg/L	-	-
Toluene 108-88-3	0.68 mg/L	0.68 mg/L	0.68 mg/L	-	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
Base oil 64742-54-7	-	-	-	-	9.33 mg/kg food
Base oil 64742-65-0	-	-	-	-	9.33 mg/kg food
Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) 2215-35-2	0.074 mg/kg sediment dw	0.0074 mg/kg sediment dw	100 mg/L	0.01 mg/kg soil dw	10.67 mg/kg food
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts 84605-29-8	0.02203 mg/kg sediment dw	0.002203 mg/kg sediment dw	100 mg/L	0.00206 mg/kg soil dw	10.67 mg/kg food
Naphthalene 91-20-3	67.2 µg/kg sediment dw	67.2 µg/kg sediment dw	2.9 mg/L	53.3 µg/kg soil dw	-
Toluene 108-88-3	16.39 mg/kg sediment dw	16.39 mg/kg sediment dw	13.61 mg/L	2.89 mg/kg soil dw	-

8.2. Exposure controls

Engineering controls	Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas.
Personal protective equipment	
Eye/face protection	If there is a risk of contact: Wear safety glasses with side shields (or goggles). Eye protection must conform to standard EN 166.
Hand protection	If there is a risk of contact: Wear suitable gloves. Gloves must conform to standard EN 374. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves.
Skin and body protection	If there is a risk of contact: Wear suitable protective clothing (EN ISO 6529).
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.
Environmental exposure controls	Local authorities should be advised if significant spillages cannot be contained. Avoid release to the environment. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
Physical state	Liquid
Colour	Amber
Odour	Mild hydrocarbon
Odour threshold	No information available

Property	**Values**	**Remarks • Method**
Melting point / freezing point		No data available
Initial boiling point and boiling range		No data available
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits		No data available
Lower flammability or explosive limits		No data available
Flash point	240 °C	Cleveland Open Cup ASTM D 92
Autoignition temperature		No data available
Decomposition temperature		No data available
pH		No data available
pH (as aqueous solution)		No data available
Kinematic viscosity	93.3 cSt at 40 ºC 14.1 cSt at 100 ºC	ASTM D445
Dynamic viscosity		No data available
Water solubility		No data available
Solubility(ies)		No data available
Partition coefficient		No data available
Vapour pressure		No data available
Relative density	0.8540	No data available
Bulk density		No data available
Liquid Density		No data available

Relative vapour density No data available
Particle characteristics
Particle Size No data available
Particle Size Distribution No data available

9.2. Other information
Pour Point -38 ºC [ASTM D 97]

9.2.1. Information with regards to physical hazard classes
Not applicable

9.2.2. Other safety characteristics
No information available
Fire Point 256 ºC (COC) [ASTM D 92]

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity None under normal use conditions.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data
Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Excessive heat.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition can lead to release of irritating gases and vapours. Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information .

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause temporary eye irritation. Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitisation in susceptible persons. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness and difficulty breathing.

Acute toxicity

Numerical measures of toxicity

Based on available data, the classification criteria are not met

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Base oil 64742-54-7	> 15 g/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Base oil 64742-65-0	> 15000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 2400 mg/m³ (Rat) 4 h
Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) 2215-35-2	2000 - 5000 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	> 2 mg/L (Rat) 1 h
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts 84605-29-8	= 3100 mg/kg (Rat) = 3200 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2.3 mg/L (Rat) 4 h
Toluene 108-88-3	= 2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 12.5 mg/L (Rat) 4 h
Naphthalene 91-20-3	= 1110 mg/kg (Rat)	= 1120 mg/kg (Rabbit)	> 0.4 mg/L (Rat) 4 h
Benzene 71-43-2	> 2000 mg/kg (Rat)	> 8200 mg/kg (Rabbit)	= 44.66 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Component Information	
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)	
Method	OECD Test No. 404: Acute Dermal Irritation/Corrosion
Species	Rabbit
Exposure route	Dermal
Effective dose	0.5 mL
Exposure time	4 hours
Results	Irritant

Serious eye damage/eye irritation No information available.

Component Information	
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)	
Species	Rabbit
Exposure route	Eye
Effective dose	0.1 mL
Results	Eye Damage

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Chemical name	European Union
Benzene	Muta. 1B

Carcinogenicity The supplier declares that it can be shown that the substance(s) contain less than 3% DMSO extract as measured by IP 346.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	European Union
Base oil	Not classified
Base oil	Carc. 1B
Naphthalene	Carc. 2
Benzene	Carc. 1A

Reproductive toxicity No information available.

Chemical name	European Union
Toluene	Repr. 2

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard Due to the viscosity, this product does not present an aspiration hazard.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Not considered to be harmful to aquatic life. Large or frequent spills may have hazardous effects on the environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Base oil 64742-54-7	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
Base oil 64742-65-0	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) 2215-35-2	EC50: 1.0 - 5.0mg/L (96h, Pseudokirchneriella subcapitata)	LC50: >100mg/L (96h, Pimephales promelas) LC50: 25 - 50mg/L (96h, Pimephales promelas)	-	EC50: 4.0 - 6.0mg/L (48h, Daphnia magna)
Phosphorodithioic acid, mixed	-	LC50: =4.5mg/L (96h,	-	EC50: =23mg/L (48h,

O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts 84605-29-8		Oncorhynchus mykiss)		Daphnia magna)
Toluene 108-88-3	EC50: >433mg/L (96h, Pseudokirchneriella subcapitata) EC50: =12.5mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 15.22 - 19.05mg/L (96h, Pimephales promelas) LC50: =12.6mg/L (96h, Pimephales promelas) LC50: 5.89 - 7.81mg/L (96h, Oncorhynchus mykiss) LC50: 14.1 - 17.16mg/L (96h, Oncorhynchus mykiss) LC50: =5.8mg/L (96h, Oncorhynchus mykiss) LC50: 11.0 - 15.0mg/L (96h, Lepomis macrochirus) LC50: =54mg/L (96h, Oryzias latipes) LC50: =28.2mg/L (96h, Poecilia reticulata) LC50: 50.87 - 70.34mg/L (96h, Poecilia reticulata)	-	EC50: 5.46 - 9.83mg/L (48h, Daphnia magna) EC50: =11.5mg/L (48h, Daphnia magna)
Naphthalene 91-20-3	-	LC50: 0.91 - 2.82mg/L (96h, Oncorhynchus mykiss)	-	EC50: 1.09 - 3.4mg/L (48h, Daphnia magna)
Benzene 71-43-2	EC50: =29mg/L (72h, Pseudokirchneriella subcapitata)	LC50: =22.49mg/L (96h, Lepomis macrochirus)	-	EC50: =10mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation No information available.

Chemical name	Partition coefficient
Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate)	2.21
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts	0.56
Toluene	2.73
Naphthalene	3.4
Benzene	2.13

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
Base oil 64742-54-7	The substance is not PBT / vPvB
Base oil	The substance is not PBT / vPvB

64742-65-0	
Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) 2215-35-2	The substance is not PBT / vPvB
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts 84605-29-8	The substance is not PBT / vPvB
Toluene 108-88-3	The substance is not PBT / vPvB
Naphthalene 91-20-3	The substance is not PBT / vPvB
Benzene 71-43-2	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties This product does not contain any known or suspected endocrine disruptors.

12.7. Other adverse effects

Other adverse effects No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

Waste codes / waste designations according to EWC / AVV According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

IMDG Not regulated
14.1 UN number or ID number Not regulated
14.2 UN proper shipping name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not applicable
14.5 Environmental hazards Not applicable
14.6 Special Precautions for Users
Special Provisions None
14.7 Maritime transport in bulk according to IMO instruments No information available

RID Not regulated
14.1 UN number or ID number Not regulated
14.2 UN proper shipping name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not applicable
14.5 Environmental hazards Not applicable
14.6 Special Precautions for Users
Special Provisions None

ADR Not regulated

14.1 UN number or ID number Not regulated
14.2 UN proper shipping name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not applicable
14.5 Environmental hazards Not applicable
14.6 Special Precautions for Users
Special Provisions None

ADN Not regulated
14.1 UN/ID no Not regulated
14.2 EPNN Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not applicable
14.5 Environmental hazard Not applicable
14.6 Special Precautions for Users
Special Provisions None

IATA Not regulated
14.1 UN number or ID number Not regulated
14.2 UN proper shipping name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not applicable
14.5 Environmental hazards Not applicable
14.6 Special Precautions for Users
Special Provisions None
Note: None

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

France
Occupational Illnesses (R-463-3, France)

Chemical name	French RG number
Toluene 108-88-3	RG 4bis,RG 84
Benzene 71-43-2	RG 4,RG 4bis,RG 84

Germany
Water hazard class (WGK) slightly hazardous to water (WGK 1)
TA Luft (German Air Pollution Control Regulation)
Class NK (Nicht Kassifiziert-Not Classified) **Technical Share of Air (%)** No information available

Chemical name	Number	Class
Benzene	5.2.7.1.1	Class II

Netherlands

Carcinogenic, mutagenic and reproductive toxic effects

Chemical name	Netherlands - List of Carcinogens	Netherlands - List of Mutagens	Netherlands - List of Reproductive Toxins
Toluene	-	-	Development Category 2
Benzene	Present	Present	-

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
Base oil - 64742-54-7	Use restricted. See entry 28. Use restricted. See entry 75.	-
Base oil - 64742-65-0	Use restricted. See entry 28. Use restricted. See entry 75.	-
Toluene - 108-88-3	Use restricted. See entry 48. Use restricted. See entry 75.	-
Naphthalene - 91-20-3	Use restricted. See entry 75.	-
Benzene - 71-43-2	Use restricted. See entry 72. Use restricted. See entry 5. Use restricted. See entry 28. Use restricted. See entry 29. Use restricted. See entry 75.	-

Persistent Organic Pollutants

Not applicable

Export Notification requirements

This product contains substances which are regulated pursuant to Regulation (EC) No. 649/2012 of the European parliament and of the council concerning the export and import of dangerous chemicals

Chemical name	European Export/Import Restrictions per (EC) 649/2012 - Annex Number
Benzene - 71-43-2	I.1

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

EU - Water Framework Directive (2000/60/EC)

Chemical name	EU - Water Framework Directive (2000/60/EC)
Naphthalene - 91-20-3	Priority substance
Benzene - 71-43-2	Priority substance

EU - Environmental Quality Standards (2008/105/EC)

Chemical name	EU - Environmental Quality Standards (2008/105/EC)
Naphthalene - 91-20-3	Priority substance
Benzene - 71-43-2	Priority substance

International Inventories

Contact supplier for inventory compliance status

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3
H350 - May cause cancer

Legend
SVHC: Substances of Very High Concern for Authorisation:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
STOT: Specific Target Organ Toxicity
ATE: Acute Toxicity Estimate
LC50: 50% Lethal Concentration
LD50: 50% Lethal Dose

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	Sk*	Skin designation
SCBA	Self-contained breathing apparatus		

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS
Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine’s PubMed database (NLM PUBMED)

U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

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This safety data sheet complies with the requirements of Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No. 1907/2006

Disclaimer
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End of Safety Data Sheet