



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Issuing Date 02-Jun-2022

Revision Date 02-Jun-2022

Revision Number 1

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

1.1. Product identifier

Product Code(s) AMHSC
Product Name Heavy Duty Metal Protector
Synonyms None
Pure substance/mixture Mixture

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

Recommended use Aerosol
Uses advised against No specific uses advised against are identified

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

Regulation (EC) No 1272/2008

Aspiration hazard	Category 1 - (H304)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Specific target organ toxicity (repeated exposure)	Category 1 - (H372)
Chronic aquatic toxicity	Category 2 - (H411)
Aerosols	Category 1 - (H222, H229)

2.2. Label elements

Contains Stoddard solvent, Hydrogenated base oil, Hydrogenated base oil, Heptane

**Signal word**

Danger

Hazard statements

H304 - May be fatal if swallowed and enters airways

H332 - Harmful if inhaled

H372 - Causes damage to organs through prolonged or repeated exposure

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P321 - Specific treatment (see supplemental first aid instructions on this label)

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P211 - Do not spray on an open flame or other ignition source

P251 - Do not pierce or burn, even after use

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P273 - Avoid release to the environment

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

P331 - Do NOT induce vomiting

P391 - Collect spillage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

Additional information

This product requires child resistant fastenings if supplied to the general public. This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

Causes mild skin irritation. Toxic to aquatic life.

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	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Stoddard solvent 8052-41-3	20-<50	No data available	232-489-3	Muta. 1B [*P](H340) Carc. 1B [*P](H350) STOT RE 1 (H372) Asp. Tox. 1 (H304)	-	-	-
Hydrogenated base	10-<25	No data	265-151-9	Asp. Tox. 1	-	-	-

oil 64742-49-0		available		(H304) Muta. 1B [*P] (H340) Carc. 1B [*P] (H350)			
Propane 74-98-6	10-<20	No data available	200-827-9	Flam. Gas 1 (H220) Press. Gas	-	-	-
Hydrogenated base oil 64742-47-8	10-<20	No data available	265-149-8	Asp. Tox. 1 (H304)	-	-	-
Heptane 142-82-5	5-<10	No data available	205-563-8	Skin Irrit. 2 (H315) STOT SE 3 (H336) Asp. Tox. 1 (H304) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Flam. Liq. 2 (H225)	-	-	-
Hydrogenated base oil 64742-54-7	1-<5	No data available	265-157-1	Carc. 1B [*L](H350)	-	-	-
Hydrogenated base oil 64742-55-8	1-<5	No data available	265-158-7	Carc. 1B [*L](H350)	-	-	-
Hydrogenated base oil 64742-56-9	1-<5	No data available	265-159-2	Carc. 1B [*L](H350)	-	-	-
Hydrogenated base oil 64742-65-0	1-<5	No data available	265-169-7	Carc.1B [*L] (H350)	-	-	-
2-(2-butoxyethoxy)et hanol 112-34-5	1-<5	No data available	203-961-6	Eye Irrit. 2 (H319)	-	-	-

Additional information

Note P applies: The classification as a carcinogen and mutagen need not apply if it can be shown that the substance contains less than 0.1% w/w benzene (EINECS No. 200-753-7). This is the case for this material.

Note L (*L): The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 "Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions - Dimethyl sulphoxide extraction refractive index method", Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.

Full text of H- and EUH-phrases: see section 16Acute 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 - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Stoddard solvent 8052-41-3	No data available	3003	5.5055	No data available	No data available
Hydrogenated base oil	5005	3163.16	No data available	No data available	No data available

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
64742-49-0					
Propane 74-98-6	No data available	No data available	No data available	No data available	200200
Hydrogenated base oil 64742-47-8	5005	2002	No data available	No data available	No data available
Heptane 142-82-5	No data available	3000	73.5735	No data available	No data available
Hydrogenated base oil 64742-54-7	15015	5005	No data available	No data available	No data available
Hydrogenated base oil 64742-56-9	5005	5005	No data available	No data available	No data available
Hydrogenated base oil 64742-65-0	15015	5005	2.4024	No data available	No data available
2-(2-butoxyethoxy)ethanol 112-34-5	5660	2700	No data available	No data available	No data available

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
Inhalation	Remove to fresh air. Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical attention. Delayed pulmonary edema may occur.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. 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	ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical attention.
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Avoid breathing vapors or mists. See section 8 for more information.

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

Symptoms	Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Prolonged contact may cause redness and irritation.
-----------------	--

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

Note to physicians	Treat symptomatically. Symptoms may be delayed. Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.
---------------------------	---

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO ₂). Water spray. Use extinguishing agent suitable for type of surrounding fire.
-------------------------------------	--

Unsuitable extinguishing media	DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.
---------------------------------------	--

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Cylinders may rupture under extreme heat. Damaged cylinders should be handled only by specialists. Containers may explode when heated. Thermal decomposition can lead to release of irritating gases and vapors.
---	--

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	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Take precautionary measures against static discharges. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid breathing vapors or mists.
-----------------------------	--

Other information	Ventilate the area. Refer to protective measures listed in Sections 7 and 8.
--------------------------	--

For emergency responders	Use personal protection recommended in Section 8.
---------------------------------	---

6.2. Environmental precautions

Environmental precautions	Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.
----------------------------------	--

6.3. Methods and material for containment and cleaning up

Methods for containment	Keep out of drains, sewers, ditches and waterways. Stop leak if you can do it without risk. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Flood with water to complete polymerization and scrape off floor.
--------------------------------	---

Methods for cleaning up	Take precautionary measures against static discharges. Dam up. Soak up with inert
--------------------------------	---

absorbent material. Pick up and transfer to properly labeled containers.

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 Use personal protection equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use spark-proof tools and explosion-proof equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Keep in an area equipped with sprinklers. Do not puncture or incinerate cans. Contents under pressure. In case of rupture. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Avoid contact with used product. Handle in accordance with good industrial hygiene and safety practice. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product.

General hygiene considerations Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Protect from sunlight. Keep at a temperature not exceeding 50 °C. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store in a cool, dry area away from potential sources of heat, open flames, sunlight or other chemicals. Do not reuse empty containers. Store locked up. Keep out of the reach of children. Store away from other materials.

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
Stoddard solvent 8052-41-3	-		TWA: 100 ppm TWA: 533 mg/m ³		
Propane 74-98-6	-	TWA: 1000 ppm TWA: 1800 mg/m ³ STEL 2000 ppm STEL 3600 mg/m ³	TWA: 1000 ppm	TWA: 1800.0 mg/m ³	
Heptane 142-82-5	TWA: 500 ppm TWA: 2085 mg/m ³	TWA: 500 ppm TWA: 2000 mg/m ³ STEL 2000 ppm	TWA: 400 ppm TWA: 1664 mg/m ³ STEL: 500 ppm	TWA: 1600 mg/m ³	TWA: 500 ppm TWA: 2085 mg/m ³ *

2-(2-butoxyethoxy)ethanol 112-34-5	TWA: 10 ppm TWA: 67.5 mg/m ³	STEL 8000 mg/m ³ TWA: 10 ppm TWA: 67.5 mg/m ³ STEL 15 ppm STEL 101.2 mg/m ³	STEL: 2085 mg/m ³ TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³	STEL: 15 ppm STEL: 101.2 mg/m ³ TWA: 10 ppm TWA: 67.5 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Stoddard solvent 8052-41-3		TWA: 200 mg/m ³ Ceiling: 1000 mg/m ³	TWA: 25 ppm TWA: 145 mg/m ³	TWA: 50 ppm TWA: 300 mg/m ³ STEL: 100 ppm STEL: 600 mg/m ³	-
Propane 74-98-6			TWA: 1000 ppm TWA: 1800 mg/m ³	TWA: 1000 ppm TWA: 1800 mg/m ³	TWA: 800 ppm TWA: 1500 mg/m ³ STEL: 1100 ppm STEL: 2000 mg/m ³
Heptane 142-82-5	TWA: 500 ppm TWA: 2085 mg/m ³	TWA: 1000 mg/m ³ Ceiling: 2000 mg/m ³	TWA: 200 ppm TWA: 820 mg/m ³	TWA: 500 ppm TWA: 2085 mg/m ³	TWA: 300 ppm TWA: 1200 mg/m ³ STEL: 500 ppm STEL: 2100 mg/m ³
2-(2-butoxyethoxy)ethanol 112-34-5	STEL: 15 ppm STEL: 101.2 mg/m ³ TWA: 10 ppm TWA: 67.5 mg/m ³	TWA: 100 mg/m ³ Ceiling: 100 mg/m ³	TWA: 10 ppm TWA: 68 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³	TWA: 10 ppm TWA: 68 mg/m ³
Chemical name	France	Germany	Germany MAK	Greece	Hungary
Stoddard solvent 8052-41-3				TWA: 100 ppm TWA: 575 mg/m ³ STEL: 125 ppm STEL: 720 mg/m ³	
Propane 74-98-6		TWA: 1000 ppm TWA: 1800 mg/m ³	TWA: 1000 ppm TWA: 1800 mg/m ³ Peak: 4000 ppm Peak: 7200 mg/m ³	TWA: 1000 ppm TWA: 1800 mg/m ³	
Hydrogenated base oil 64742-47-8		TWA:	TWA: 5 mg/m ³ TWA: 50 ppm TWA: 350 mg/m ³ Peak: 20 mg/m ³ Peak: 100 ppm Peak: 700 mg/m ³		
Heptane 142-82-5	TWA: 400 ppm TWA: 1668 mg/m ³ STEL: 500 ppm STEL: 2085 mg/m ³	TWA: 500 ppm TWA: 2100 mg/m ³	TWA: 500 ppm TWA: 2100 mg/m ³ Peak: 500 ppm Peak: 2100 mg/m ³	TWA: 500 ppm TWA: 2000 mg/m ³ STEL: 500 ppm STEL: 2000 mg/m ³	TWA: 2000 mg/m ³
2-(2-butoxyethoxy)ethanol 112-34-5	TWA: 10 ppm TWA: 68 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³	TWA: 10 ppm TWA: 67 mg/m ³	TWA: 67 mg/m ³ TWA: 10 ppm Peak: 15 ppm Peak: 100.5 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³	TWA: 67.5 mg/m ³ STEL: 101.2 mg/m ³
Chemical name	Ireland	Italy	Italy REL	Latvia	Lithuania
Stoddard solvent 8052-41-3	TWA: 100 ppm TWA: 573 mg/m ³		TWA: 100 ppm TWA: 573 mg/m ³		TWA: 50 ppm TWA: 300 mg/m ³ STEL: 600 mg/m ³ STEL: 100 ppm
Propane 74-98-6	STEL: 3000 ppm		:	TWA: 1000 ppm TWA: 1800 mg/m ³ STEL: 300 mg/m ³	
Heptane 142-82-5	TWA: 500 ppm TWA: 2085 mg/m ³ STEL: 1500 ppm STEL: 6255 mg/m ³	TWA: 500 ppm TWA: 2085 mg/m ³	TWA: 400 ppm TWA: 1639 mg/m ³ STEL: 500 ppm STEL: 2049 mg/m ³	TWA: 85 ppm TWA: 350 mg/m ³ STEL: 500 ppm STEL: 2085 mg/m ³	TWA: 500 ppm TWA: 2085 mg/m ³ STEL: 750 ppm STEL: 3128 mg/m ³
2-(2-butoxyethoxy)ethanol 112-34-5	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³	TWA: 10 ppm TWA: 66 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³	TWA: 67.5 mg/m ³ TWA: 10 ppm STEL: 101.2 mg/m ³ STEL: 15 ppm

Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Stoddard solvent 8052-41-3					STEL: 900 mg/m ³ TWA: 300 mg/m ³
Hydrogenated base oil 64742-49-0					STEL: 1500 mg/m ³ TWA: 500 mg/m ³
Propane 74-98-6				TWA: 500 ppm TWA: 900 mg/m ³ STEL: 625 ppm STEL: 1125 mg/m ³	TWA: 1800 mg/m ³
Heptane 142-82-5	TWA: 500 ppm TWA: 2085 mg/m ³	TWA: 500 ppm TWA: 2085 mg/m ³	TWA: 1200 mg/m ³ STEL: 1600 mg/m ³	TWA: 200 ppm TWA: 800 mg/m ³ STEL: 250 ppm STEL: 1000 mg/m ³	STEL: 2000 mg/m ³ TWA: 1200 mg/m ³
2-(2-butoxyethoxy)ethanol 112-34-5	Peau* STEL: 15 ppm STEL: 101.2 mg/m ³ TWA: 10 ppm TWA: 67.5 mg/m ³	STEL: 15 ppm STEL: 101.2 mg/m ³ TWA: 10 ppm TWA: 67.5 mg/m ³	TWA: 50 mg/m ³ STEL: 100 mg/m ³ H*	TWA: 10 ppm TWA: 68 mg/m ³ STEL: 20 ppm STEL: 102 mg/m ³	STEL: 100 mg/m ³ TWA: 67 mg/m ³
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Stoddard solvent 8052-41-3	TWA: 100 ppm				
Propane 74-98-6	TWA: 1000 ppm	TWA: 778 ppm TWA: 1400 mg/m ³ STEL: 1000 ppm STEL: 1800 mg/m ³		TWA: 1000 ppm TWA: 1800 mg/m ³ STEL: 4000 ppm STEL: 7200 mg/m ³	TWA: 1000 ppm
Heptane 142-82-5	TWA: 500 ppm TWA: 2085 mg/m ³ STEL: 500 ppm	TWA: 500 ppm TWA: 2085 mg/m ³ STEL: 1000 mg/m ³	TWA: 500 ppm TWA: 2085 mg/m ³	TWA: 500 ppm TWA: 2085 mg/m ³ STEL: 500 ppm STEL: 2085 mg/m ³	TWA: 500 ppm TWA: 2085 mg/m ³
2-(2-butoxyethoxy)ethanol 112-34-5	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 101.2 mg/m ³ STEL: 15 ppm	TWA: 67.5 mg/m ³ TWA: 10 ppm STEL: 15 ppm STEL: 101.2 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ Ceiling: 101.2 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³
Chemical name	Sweden		Switzerland		United Kingdom
Stoddard solvent 8052-41-3	NGV: 300 mg/m ³ NGV: 50 ppm NGV: 175 mg/m ³ NGV: 30 ppm Vägledande KGV: 100 ppm Vägledande KGV: 600 mg/m ³ Vägledande KGV: 60 ppm Vägledande KGV: 350 mg/m ³ H*				
Propane 74-98-6	NGV: 350 mg/m ³		TWA: 1000 ppm TWA: 1800 mg/m ³ STEL: 4000 ppm STEL: 7200 mg/m ³		
Hydrogenated base oil 64742-47-8			TWA: 50 ppm TWA: 350 mg/m ³ TWA: 5 mg/m ³ STEL: 100 ppm STEL: 700 mg/m ³		
Heptane 142-82-5	NGV: 200 ppm NGV: 800 mg/m ³ Vägledande KGV: 300 ppm Vägledande KGV: 1200 mg/m ³		TWA: 400 ppm TWA: 1600 mg/m ³ STEL: 400 ppm STEL: 1600 mg/m ³		TWA: 500 ppm TWA: 2085 mg/m ³ STEL: 1500 ppm STEL: 6255 mg/m ³
2-(2-butoxyethoxy)ethanol 112-34-5	NGV: 10 ppm NGV: 68 mg/m ³ Bindande KGV: 15 ppm Bindande KGV: 101 mg/m ³		TWA: 10 ppm TWA: 67 mg/m ³ STEL: 15 ppm STEL: 101 mg/m ³		TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³

Biological occupational exposure limits

Chemical name	Denmark	Finland	France	Germany	Germany
Heptane 142-82-5	-	-	-	250 µg/L (urine - Heptan-2,5-dione end of shift) 250 µg/L - BAT (end of exposure or end of shift) urine	250 µg/L (urine - Heptan-2,5-dione end of shift)

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection If there is a risk of contact: Tight sealing safety goggles. Eye protection must conform to standard EN 166. Safety glasses with side shields are recommended for medical or industrial exposures.

Hand protection If there is a risk of contact: Wear suitable gloves. Impervious 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). Long sleeved clothing. Chemical resistant apron. Antistatic boots.

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 Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water. Local authorities should be advised if significant spillages cannot be contained.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties****Appearance**

Physical state Liquid, Aerosol
Color Amber
Odor Solvent
Odor 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 Aerosol Level 3
Flammability Limit in Air
Upper flammability or explosive limits 9.5 %(V) Estimated
Lower flammability or explosive limits 2.2 %(V) Estimated

Flash point	-104.4 °C	Estimated
Autoignition temperature		No data available
Decomposition temperature		No data available
pH		No data available
pH (as aqueous solution)		No data available
Kinematic viscosity		No data available
Dynamic viscosity		No data available
Water solubility		No data available
Solubility(ies)		No data available
Partition coefficient		No data available
Vapor pressure		No data available
Relative density		No data available
Bulk density		No data available
Liquid Density		No data available
Vapor density		No data available
Particle characteristics		
Particle Size		No data available
Particle Size Distribution		No data available

9.2. Other information

9.2.1. Information with regard to physical hazard classes
Not applicable

9.2.2. Other safety characteristics
No information available

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 Yes.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks. Excessive heat. Protect from direct sunlight.

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 vapors. 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	Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Specific test data for the substance or mixture is not available. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract. Harmful by inhalation. (based on components).
Eye contact	Specific test data for the substance or mixture is not available. May cause irritation.
Skin contact	Repeated exposure may cause skin dryness or cracking. Specific test data for the substance or mixture is not available. Causes mild skin irritation.
Ingestion	Specific test data for the substance or mixture is not available. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Prolonged contact may cause redness and irritation.
-----------------	--

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document:

ATEmix (oral)	4,011.60 mg/kg
ATEmix (dermal)	2,691.66 mg/kg
ATEmix (inhalation-gas)	600.90 ppm
ATEmix (inhalation-dust/mist)	3.99 mg/l

Unknown acute toxicity

54.96 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Stoddard solvent 8052-41-3	-	> 3000 mg/kg (Rabbit)	> 5.5 mg/L (Rat) 4 h
Hydrogenated base oil 64742-49-0	> 5000 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 73680 ppm (Rat) 4 h
Propane 74-98-6	-	-	> 800000 ppm (Rat) 15 min
Hydrogenated base oil 64742-47-8	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h
Heptane 142-82-5	-	= 3000 mg/kg (Rabbit)	> 73.5 mg/L (Rat) 4 h
Hydrogenated base oil 64742-54-7	> 15 g/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Hydrogenated base oil 64742-55-8	-	-	= 3900 mg/m ³ (Rat) 4 h
Hydrogenated base oil 64742-56-9	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 5399 mg/m ³ (Rat) 4 h
Hydrogenated base oil 64742-65-0	> 15000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 2400 mg/m ³ (Rat) 4 h
2-(2-butoxyethoxy)ethanol 112-34-5	= 5660 mg/kg (Rat)	= 2700 mg/kg (Rabbit)	-

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

Skin corrosion/irritation Classification based on data available for ingredients. Causes mild skin irritation.

Component Information	
Hydrogenated base oil (64742-54-7)	
Method	OECD Test No. 404: Acute Dermal Irritation/Corrosion
Species	Rabbit
Exposure route	Dermal
Effective dose	0.5 mL
Exposure time	24 hours
Results	non-irritant

Serious eye damage/eye irritation No information available.

Component Information	
Hydrogenated base oil (64742-54-7)	
Species	Rabbit
Exposure route	Eye
Effective dose	0.1 mL
Exposure time	72 hours
Results	non-irritant

Respiratory or skin sensitization No information available.

Component Information	
Hydrogenated base oil (64742-54-7)	
Method	OECD Test No. 429: Skin Sensitization: Local Lymph Node Assay
Species	Guinea pig
Exposure route	Dermal
Results	Not a skin sensitizer

Germ cell mutagenicity No information available.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as mutagenic.

Chemical name	European Union
Stoddard solvent	Muta. 1B
Hydrogenated base oil	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
Stoddard solvent	Carc. 1B
Hydrogenated base oil	Carc. 1B
Hydrogenated base oil	Carc. 1B
Hydrogenated base oil	Carc. 1B
Hydrogenated base oil	Carc. 1B
Hydrogenated base oil	Carc. 1B

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.
H372 - Causes damage to the following organs through prolonged or repeated exposure: Central nervous system.

Aspiration hazard May be fatal if swallowed and enters airways.

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 Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Hydrogenated base oil 64742-49-0	-	LC50: =8.41mg/L (96h, Oncorhynchus mykiss)	-	-
Hydrogenated base oil 64742-47-8	-	LC50: =45mg/L (96h, Pimephales promelas) LC50: =2.2mg/L (96h, Lepomis macrochirus) LC50: =2.4mg/L (96h, Oncorhynchus mykiss)	-	-
Heptane 142-82-5	-	LC50: =375.0mg/L (96h, Cichlid fish)	-	-
Hydrogenated base oil 64742-54-7	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
Hydrogenated base oil 64742-55-8	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
Hydrogenated base oil 64742-56-9	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
Hydrogenated base oil 64742-65-0	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
2-(2-butoxyethoxy)ethanol 112-34-5	EC50: >100mg/L (96h, Desmodesmus subspicatus)	LC50: =1300mg/L (96h, Lepomis macrochirus)	-	EC50: >100mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential**Bioaccumulation****Component Information**

Chemical name	Partition coefficient
Stoddard solvent	6.4
Propane	1.09
Heptane	4.66
2-(2-butoxyethoxy)ethanol	1

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment**PBT and vPvB assessment**

Chemical name	PBT and vPvB assessment
Stoddard solvent 8052-41-3	The substance is not PBT / vPvB
Hydrogenated base oil 64742-49-0	The substance is not PBT / vPvB
Propane 74-98-6	The substance is not PBT / vPvB
Hydrogenated base oil 64742-47-8	The substance is not PBT / vPvB
Heptane 142-82-5	The substance is not PBT / vPvB
Hydrogenated base oil 64742-54-7	The substance is not PBT / vPvB
Hydrogenated base oil 64742-55-8	The substance is not PBT / vPvB
Hydrogenated base oil 64742-56-9	The substance is not PBT / vPvB
Hydrogenated base oil 64742-65-0	The substance is not PBT / vPvB
2-(2-butoxyethoxy)ethanol 112-34-5	The substance is not PBT / vPvB PBT assessment does not apply

12.6. Endocrine disrupting properties

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

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Waste from residues/unused products	Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.
Waste codes / waste designations according to EWC / AVV	According to the European Waste Catalog, 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**

14.1 UN number or ID number	UN1950
14.2 UN proper shipping name	AEROSOLS
14.3 Transport hazard class(es)	2.1
14.4 Packing group	Not regulated
Description	UN1950, AEROSOLS (Hydrogenated base oil), 2.1, (-104.4°C C.C.), Marine pollutant
14.5 Environmental hazards	Yes

14.6 Special Precautions for Users

Special Provisions 63,190, 277, 327, 344, 381, 959
EmS-No F-D, S-U

14.7 Maritime transport in bulk according to IMO instruments No information available

RID

14.1 UN number UN1950
14.2 UN proper shipping name AEROSOLS
14.3 Transport hazard class(es) 2.1
14.4 Packing group Not regulated
Description UN1950, AEROSOLS, 2.1, Environmentally Hazardous
14.5 Environmental hazards Yes
14.6 Special Precautions for Users
Special Provisions None
Classification code 5F

ADR

14.1 UN number or ID number UN1950
14.2 UN proper shipping name AEROSOLS
14.3 Transport hazard class(es) 2.1
14.4 Packing group Not regulated
Description UN1950, AEROSOLS, 2.1, Environmentally Hazardous
14.5 Environmental hazards Yes
14.6 Special Precautions for Users
Special Provisions 190, 327, 344, 625
Classification code 5F
Tunnel restriction code (D)

IATA

14.1 UN number or ID number UN1950
14.2 UN proper shipping name Aerosols, flammable
14.3 Transport hazard class(es) 2.1
14.4 Packing group Not regulated
Description UN1950, Aerosols, flammable, 2.1
14.5 Environmental hazards Yes
14.6 Special Precautions for Users
Special Provisions A145, A167, A802
ERG Code 10L
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
Stoddard solvent 8052-41-3	RG 84
Hydrogenated base oil 64742-49-0	RG 84
Hydrogenated base oil 64742-47-8	RG 84
Heptane 142-82-5	RG 84
2-(2-butoxyethoxy)ethanol 112-34-5	RG 84

Germany**Water hazard class (WGK)** strongly hazardous to water (WGK 3)**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.

Authorizations 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 authorization per REACH Annex XIV
Stoddard solvent - 8052-41-3	28. 29. 75.	
Hydrogenated base oil - 64742-49-0	28. 29. 75.	
Heptane - 142-82-5	75.	
Hydrogenated base oil - 64742-54-7	28. 75.	
Hydrogenated base oil - 64742-55-8	28. 75.	
Hydrogenated base oil - 64742-56-9	28. 75.	
Hydrogenated base oil - 64742-65-0	28. 75.	
2-(2-butoxyethoxy)ethanol - 112-34-5	55. 75.	

Persistent Organic Pollutants

Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)

E2 - Hazardous to the Aquatic Environment in Category Chronic 2

Named dangerous substances per Seveso Directive (2012/18/EU)

Chemical name	Lower-tier requirements (tons)	Upper-tier requirements (tons)
Stoddard solvent - 8052-41-3		25000
Hydrogenated base oil - 64742-49-0		25000

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

Not applicable

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**

H220 - Extremely flammable gas
 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
 H340 - May cause genetic defects
 H350 - May cause cancer
 H372 - Causes damage to organs through prolonged or repeated exposure
 H400 - Very toxic to aquatic life
 H410 - Very toxic to aquatic life with long lasting effects

Legend

ATE: Acute Toxicity Estimate

SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)
 Ceiling Maximum limit value * Skin designation

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 - vapor	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitization	Calculation method
Skin sensitization	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	On basis of test data
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

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)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AELG(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
 Australia 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 Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Issuing Date 02-Jun-2022

Revision Date 02-Jun-2022

Revision Note Initial Release.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet