SAFETY DATA SHEET

St1 MDF

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued	20.01.2020
Revision date	29.06.2020

1.1. Product identifier

Product name	St1 MDF
Synonyms	Marine gas oil
Extended SDS with ES incorporated	Yes
Extended SDS with ES incorporated, comments	See attachment(-s) in section 16.

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

Product group	Fuel
Use of the substance / preparation	Fuel for ships and other combustion equipment Distribution of substance, industrial Preparation and (re)packing of substances and its mixtures, industrial Use as a fuel, industrial Use as fuel, professional
Uses advised against	Applications that are not registered and risk assessed.

1.3. Details of the supplier of the safety data sheet

Company name	St1 Sverige AB
Postal address	Box 1029
Postcode	SE-172 21
City	Sundbyberg
Country	Sweden
Telephone number	+46 (0) 31 744 6000
Email	Supply-Sweden@st1.se

Website	www.st1.se

1.4. Emergency telephone number

Emergency telephone	Telephone number: 112 Description: Within Sweden: Ask for Poison Information

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Skin Irrit. 2; H315 Acute Tox. 4; H332 Carc. 2; H351 STOT RE 2; H373 Aquatic Chronic 2; H411
Substance / mixture hazardous properties	Flammable liquid and vapour. May be fatal if swallowed and enters airways. Causes skin irritation. Harmful by inhalation. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Hazard pictograms (CLP)

Composition on the label	Gas oils (petroleum), hydrodesulfurized light vacuum, Fuels, diesel
Signal word	Danger
Hazard statements	H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H332 Harmful if inhaled. H351 Suspected of causing cancer . H373 May cause damage to organs through prolonged or repeated exposure H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing dust / fume / gas / mist / vapours / spray.

P280 Wear protective gloves / protective clothing / eye protection / face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.

2.3. Other hazards

PBT / vPvB

The chemical contains no PBT or vPvB substances ≥ 0,1%.

Physicochemical effects

May ignite on surfaces at temperatures above auto-ignition temperature. Vapour in the headspace of tanks and containers may ignite and explode at temperatures exceeding auto ignition temperature, where vapour concentrations are within the flammability range.
Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire.

Health effect

Parts of the chemical might be absorbed through the skin.
If, by vomitting, the chemical reaches the lungs, life-threatening chemical pneumonia may develop.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Gas oils (petroleum) , hydrodesulfurized light vacuum	CAS No.: 64742-87-6 EC No.: 265-190-1 REACH Reg. No.: 01-2119485284-32	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Acute Tox. 4; H332 Skin Irrit. 2; H315 Carc. 2; H351 STOT RE 2; H373 Aquatic Chronic 2; H411	≤ 75 %	
Fuels, diesel	CAS No.: 68334-30-5 EC No.: 269-822-7 REACH Reg. No.: 01-2119484664-27	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Skin Irrit. 2; H315 Acute Tox. 4; H332 Carc. 2; H351 STOT RE 2; H373 Aquatic Chronic 2; H411	≥ 25 %	

Description of the mixture

A complex combination of hydrocarbons, predominantly in the range of C9 through C30 and boiling in the range of approximately 179 °C to 390 °C.

Substance comments

See section 16 for explanation of hazard statements (H) listed above.

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Emergency telephone number: see section 1.4. If medical advice is needed, have safety data sheet or label available at hand.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. If breathing stops, provide artificial respiration.
Skin contact	Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Wash skin with soap and water. If skin irritation or rash occurs: Get medical advice/ attention.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Ingestion	Rinse mouth thoroughly. DO NOT induce vomiting if swallowed chemical is dissolved in petroleum-based material. Danger of aspiration and development of chemical pneumonia. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention immediately!

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

Acute symptoms and effects	Inhalation: Solvent vapors may be harmful and overexposure may cause headaches, nausea, vomiting, and intoxication. Skin contact: The chemical irritates the skin and can cause itching, burning and redness. Absorption through the skin will give similar symptoms as for inhalation. Ingestion: May cause nausea, vomiting and diarrhea. Pneumonia can occur when vomiting resulting in solvent into the lungs.
Delayed symptoms and effects	Symptoms of chemical pneumonia may occur within 24 hours of difficulty breathing and coughing.

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

Other information	Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	In case of major fire and large quantities: Foam. Water spray, fog or mist. Small fires: Powder. Carbon dioxide (CO_2). Sand or earth are suitable in small fires.
Improper extinguishing media	Do not use water jet. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	Flammable liquid and vapour. Static accumulator: This product may accumulate static electricity. Can form explosive gas-air mixtures. Vapours are heavier than air and may spread near ground to sources of ignition. The product floats and can be reignited to burn on water surface.

Hazardous combustion products	May include, but is not limited to: Carbon dioxide (CO2). Carbon monoxide (CO). Sulphurous gases (SOx). Unspecified organic compounds.

5.3. Advice for firefighters

Personal protective equipment	Firefighters who may be exposed to smoke or thermal decomposition products shall wear all available personal protective equipment (PPE) and SCBA mask.
Other information	If there is no risk involved, move the containers to a safe place. If not possible, cool with water from a safe position. Extinguishing water must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Evacuate area. Provide adequate ventilation. Stop leak if safe to do so. Eliminate all ignition sources if safe to do so. If spill is large contact fire department immediately, dial 999 or 112.
Personal protection measures	Avoid inhalation of vapours and contact with skin and eyes. Use protective equipment as referred to in section 8.

6.2. Environmental precautions

Environmental precautionary measures	Avoid discharge into drains, water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body. Maritime spillages should be dealt with using a Shipboard Oil Pollution Emergency Plan (SOPEP), as required by MARPOL Annex 1 Regulation 26.

6.3. Methods and material for containment and cleaning up

Clean up	Remove ignition sources and work with non-sparking tools. Small Spillages: Collect with absorbent, non-combustible material into suitable containers. Proposals for inert materials: sand, kieselguhr, universal binder. Collect in a suitable container and dispose as hazardous waste according to section 13. Large Spillages: For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water.

6.4. Reference to other sections

Other instructions	See also sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Provide adequate ventilation. Local exhaust is recommended.

Avoid inhalation of vapours and contact with skin and eyes. Use protective equipment as referred to in section 8.
Risk for slippery floors and tools if spilled out. Risk of vapour concentration on the floor and in low-lying areas.

Protective safety measures

Safety measures to prevent fire

Smoking and naked flames and other ignition sources are prohibited.
Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Take precautionary measures against static discharges. Ground / bond container and receiving equipment. Use only non-sparking tools. Use explosion-proof electrical / ventilating / lighting / / equipment.

Additional information

Product transfer:
Avoid splash filling.
Wait 2 minutes after tank filling (for tanks such as those on road tanker vehicles) before opening hatches or manholes.
Wait 30 minutes after tank filling (for large storage tanks) before opening hatches or manholes. Keep containers closed when not in use.
Do not use compressed air for filling, discharging or handling.
Contamination resulting from product transfer may give rise to light hydrocarbon vapour in the headspace of tanks that have previously contained gasoline. This vapour may explode if there is a source of ignition.
Partly filled containers present a greater hazard than those that are full, therefore handling, transfer and sampling activities need special care.

Advice on general occupational hygiene

Do not eat, drink or smoke during work. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage

Drum and small container storage:
Drums should be stacked to a maximum of 3 high. Use properly labelled and closable containers.
Tank storage:
Tanks must be specifically designed for use with this product. Bulk storage tanks should be diked (bunded). Locate tanks away from heat and other sources of ignition. Must be stored in a diked (bunded) well-ventilated area, away from sunlight, ignition sources and other sources of heat. The vapour is heavier than air. Beware of accumulation in pits and confined spaces.
Keep in a bunded area with a sealed (low permeability) floor, to provide containment against spillage. Prevent ingress of water.

Conditions for safe storage

Packaging compatibilities

Recommended materials:
For containers, or container linings use mild steel, stainless steel.
For seals and gaskets use graphite, PTFE, Viton A or Viton B.

Unsuitable materials:
Some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use. Examples of materials to avoid are: natural rubber (NR), nitrile rubber (NBR), ethylene propylene rubber

(EPDM), polymethyl methacrylate (PMMA), polystyrene, polyvinyl chloride (PVC), and polyisobutylene. However, some may be suitable for glove materials.

Advice on storage compatability Keep away from: Strong oxidizing agents. Food and feed.

7.3. Specific end use(s)

Specific use(s) See section 1.2.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Oil mist (mineral particles)		Limit value (8 h) : 1 mg/m³	

Other Information about threshold limit values Gas oils (petroleum), hydrodesulfurized light vacuum and fuels, diesel have no established limit values because they are mixtures of a large number of substances, whose levels are not known in detail.
References (laws/regulations): EH40/2005 Workplace exposure limits, with later amendments.

DNEL / PNEC

DNEL

Group: Professional
Route of exposure: Acute inhalation (systemic)
Value: 4300 mg/m³
Reference: 15 minutes. (aerosol)

Group: Professional
Route of exposure: Long-term oral (systemic)
Value: 2,9 mg/kg
Reference: 8 h.

Group: Professional
Route of exposure: Long-term inhalation (systemic)
Value: 68 mg/m³
Reference: 8 h. (aerosol)

Group: Consumer
Route of exposure: Acute inhalation (systemic)
Value: 2600 mg/m³
Reference: 15 minutes. (aerosol)

Group: Consumer
Route of exposure: Long-term oral (systemic)
Value: 1,3 mg/kg
Reference: 24 h.

Group: Consumer
Route of exposure: Long-term inhalation (systemic)
Value: 20 mg/m³
Reference: 24 h. (aerosol)

PNEC	Comments: Substance is a hydrocarbon with a complex, unknown or variable composition. Conventional methods of deriving PNECs are not appropriate and it is not possible to identify a single representative PNEC for such substances.

8.2. Exposure controls

Precautionary measures to prevent exposure

Technical measures to prevent exposure	Provide adequate ventilation. Local exhaust ventilation is recommended, but adequate general ventilation may be sufficient. Explosion-proof general and local exhaust ventilation. The personal protective equipment must be CE-marked and the latest version of the standards shall be used. The protective equipment and the specified standards recommended below are only suggestions, and should be selected on advice from the supplier of such equipment. A risk assessment of the work place/work activities (the actual risk) may lead to other control measures. The protection equipment's suitability and durability will depend on application.

Eye / face protection

Eye protection equipment	Description: Wear tight-fitting goggles or face shield. Reference to relevant standard: EN 166 (Personal eye-protection. Specifications).
Additional eye protection measures	Eye wash facilities should be available at the work place. Either a fixed eye wash facility connected to the drinking water (preferably warm water) or a portable disposable unit.

Hand protection

Suitable materials	Nitrile. For incidental contact/splash protection, Neoprene, PVC gloves may be suitable.
Breakthrough time	Comments: Nitrile: > 240 minutes.
Thickness of glove material	Comments: Glove thickness must be chosen in consultation with the glove supplier.
Hand protection equipment	Description: Use protective gloves that are suitable for the application. The gloves abilities may vary among the different glove manufacturers. Reference to relevant standard: EN ISO 374 (Protective gloves against chemicals and micro-organisms). EN 420 (Protective gloves – General requirements and test methods).
Additional hand protection measures	Gloves must only be worn on clean hands. Wash promptly with soap & water if skin becomes contaminated.

Skin protection

Recommended protective clothing	Description: At risk of splashing: Wear impervious protective clothing, gloves, apron and boots.
Additional skin protection measures	Emergency shower should be available at the workplace. Remove contaminated clothing and wash the skin thoroughly with soap and water after work. Wash contaminated clothing before reuse.

Respiratory protection

Recommended respiratory protection	Description: In case of insufficient ventilation, use respirator with A filter against solvent vapors. (Boiling point > 65 °C) At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used. Reference to relevant standard: EN 14387 (Respiratory protective devices. Gas filter(s) and combined filter(s). Requirements, testing, marking).

Appropriate environmental exposure control

Environmental exposure controls	Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour. Do not allow to enter into sewer, water system or soil.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Yellow.
Odour	Hydrocarbon.
Odour limit	Comments: Data lacking.
pH	Comments: Not relevant.
Melting point / melting range	Value: 0 °C
Boiling point / boiling range	Value: 170 – 390 °C
Flash point	Value: > 60 °C
Evaporation rate	Comments: Data lacking.
Flammability	Not relevant, see flash point.
Explosion limit	Value: 1 – 6 vol%
Vapour pressure	Value: < 1 hPa Temperature: 37,8 °C
Vapour density	Value: > 1 Comments: Air=1.
Density	Value: ≤ 900 kg/m³ Temperature: 15 °C
Solubility	Medium: Water Comments: Ignorable.
Partition coefficient: n-octanol/ water	Comments: Data lacking.
Auto-ignition temperature	Value: > 220 °C
Decomposition temperature	Comments: Data lacking.
Viscosity	Value: 2 – 11 mm2/s Temperature: 40 °C

Type: Kinematic

Explosive properties Not classified as an explosive.

Oxidising properties Not oxidizing.

9.2. Other information

Other physical and chemical properties

Comments No further information is available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions May arise in contact with incompatible materials (see section 10.5) and/or under inappropriate conditions (see section 10.4).

10.4. Conditions to avoid

Conditions to avoid Keep away from heat sources, fire, sparks and other ignition sources.

10.5. Incompatible materials

Materials to avoid Strong oxidising substances.

10.6. Hazardous decomposition products

Hazardous decomposition products None under normal conditions. See also section 5.2.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Effect tested: LD50
Route of exposure: Oral
Value: > 5000 mg/kg
Species: Rat

Effect tested: LD50
Route of exposure: Dermal
Value: > 2000 mg/kg
Species: Rabbit

Effect tested: LC50
Route of exposure: Inhalation (vapour)
Duration: 4 hour(s)
Value: > 1 ≤ 5 mg/l
Species: Rat

Other information regarding health hazards

Assessment of acute toxicity, classification	Harmful if inhaled.
Assessment of skin corrosion / irritation, classification	Irritating to skin.
Assessment of eye damage or irritation, classification	Based on available data, the classification criteria are not met.
Assessment of respiratory sensitisation, classification	Based on available data, the classification criteria are not met.
Assessment of skin sensitisation, classification	Based on available data, the classification criteria are not met.
Assessment of germ cell mutagenicity, classification	Based on available data, the classification criteria are not met.
Assessment of carcinogenicity, classification	Suspected of causing cancer. Repeated skin contact has resulted in irritation and skin cancer in animals.
Assessment of reproductive toxicity, classification	Based on available data, the classification criteria are not met.
Assessment of specific target organ toxicity - single exposure, classification	Based on available data, the classification criteria are not met.
Assessment of specific target organ toxicity - repeated exposure, classification	May cause damage to organs (blood, thymus, liver) through prolonged or repeated exposure .
Assessment of aspiration hazard, classification	May be fatal if swallowed and enters airways.

Symptoms of exposure

In case of ingestion	Ingestion may cause the same symptoms as by inhalation. Symptoms such as coughing, breathing difficulties, vomiting or lethargy may indicate chemical pneumonitis.
In case of skin contact	The chemical irritates the skin and can cause itching, burning and redness. Parts of the chemical might be absorbed through the skin. Absorption through the skin will give similar symptoms as for inhalation.
In case of inhalation	Solvent vapors may be harmful and overexposure may cause headaches, nausea, vomiting, and intoxication. Abuse can lead to: Unconsciousness, possible death.
In case of eye contact	May cause temporary eye irritation.
Other information	May cause damage to organs through prolonged or repeated exposure.

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity, fish	Toxicity type: Acute Value: ≥ 1 ≤ 10 mg/l Method: LL/EL/IL50 Toxicity type: Chronic Value: > 0,01 ≤ 0,1 mg/l Method: NOEC/NOEL (based on test data)
Aquatic toxicity, algae	Toxicity type: Acute Value: ≥ 1 ≤ 10 mg/l Method: LL/EL/IL50
Aquatic toxicity, crustacean	Toxicity type: Acute Value: ≥ 1 ≤ 10 mg/l Method: LL/EL/IL50 Toxicity type: Chronic Value: > 0,1 ≤ 1,0 mg/l Method: NOEC/NOEL (based on test data)
Ecotoxicity	Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Persistence and degradability, comments	Expected to be readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential	The product contains potentially bioaccumulating substances.

12.4. Mobility in soil

Mobility	Floats on water. Partly evaporates from water or soil surfaces, but a significant proportion will remain after one day. May contaminate soil and groundwater.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	The chemical contains no PBT or vPvB substances ≥ 0,1%.

12.6. Other adverse effects

Other adverse effects, comments	The product forms a film on the water surface, which can affect the oxygen balance and damage the organisms.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal for the chemical	Recover and reclaim or recycle, if practical. Waste arising from a spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.
Appropriate methods of disposal for the contaminated packaging	Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard. Do not, puncture, cut, or weld uncleaned drums. Send to drum recoverer or metal reclaimer. Do not pollute the soil, water or environment with the waste container.
EWC waste code	EWC waste code: 130701 fuel oil and diesel Classified as hazardous waste: Yes EWC waste code: 130703 other fuels (including mixtures) Classified as hazardous waste: Yes
Other information	Do not empty into drains. Do not empty into drains.

SECTION 14: Transport information

14.1. UN number

ADR/RID/ADN	3082
IMDG	3082
ICAO/IATA	3082
Comments	ADR/RID has assigned UN 1202 also to diesel fuel with flash point > 60 °C c.c. to ≤ 100 °C c.c.

14.2. UN proper shipping name

Proper shipping name English ADR/RID/ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name/Danger releasing substance English ADR/RID/ADN	(diesel fuel)
ADR/RID/ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name/danger releasing substance ADR/RID/ ADN	(diesel fuel)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name/danger releasing substance IMDG	(diesel fuel)
ICAO/IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name/danger releasing substance ICAO/IATA	(diesel fuel)
Comments	ADR/RID has assigned proper shipping name: DIESEL FUEL, HEATING OIL, LIGHT or GAS OIL for diesel fuel with flash point > 60 °C c.c. to ≤ 100 °C c.c.

14.3. Transport hazard class(es)

ADR/RID/ADN	9
Classificaton code ADR/RID/ADN	M6
IMDG	9
ICAO/IATA	9
Comments	ADR/RID has assigned class 3 also for diesel fuel with flash point > 60 °C c.c. to ≤ 100 °C c.c.

14.4. Packing group

ADR/RID/ADN	III
IMDG	III
ICAO/IATA	III

14.5. Environmental hazards

IMDG Marine pollutant	Yes

14.6. Special precautions for user

Special safety precautions for user	Follow loading regulations in ADR/RID/IMDG/ICAO-TI

14.7. Maritime transport in bulk according to IMO instruments

Product name	Energy-rich fuels: MARPOL Annex I rules apply for bulk shipments by sea. Please also refer to MEPC.1/Circ.879 -GUIDELINES FOR THE CARRIAGE OF ENERGY-RICH FUELS AND THEIR BLENDS

Additional information

Hazard label ADR/RID/ADN	9
Hazard label IMDG	9
Hazard label ICAO/IATA	9

ADR/RID Other information

Tunnel restriction code	-
Transport category	3
Hazard No.	90

IMDG Other information

Additional information IMDG	Fp > 60 °C c.c.
EmS	F-A, S-F

SECTION 15: Regulatory information

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

References (laws/regulations)

Regulation (EC) No 1907/2006 on the registration, evaluation, authorization and restriction of chemicals (REACH Regulation), with later amendments.
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP-regulation) with later amendments.
European Waste Catalogue and Hazardous Waste List
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009.
Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances (Seveso II), with later amendments.

15.2. Chemical safety assessment

Chemical safety assessment

Chemical safety assessment has been performed for the following ingredients:
Gas oils (petroleum), hydrodesulfurized light vacuum CAS 64742-87-6
Fuels, diesel CAS 68334-30-5

SECTION 16: Other information

Supplier's notes

The information contained in this SDS must be made available to all those who handle the product.
The information in this document should be brought to the attention of the person in your organisation responsible for advising on safety matters.

List of relevant H-phrases (Section 2 and 3)

H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H332 Harmful if inhaled.
H351 Suspected of causing cancer .
H373 May cause damage to organs through prolonged or repeated exposure
H411 Toxic to aquatic life with long lasting effects.

Recommended restrictions on use

This product is intended for use in closed systems only.
This product is not to be used as a solvent or cleaning agent; for lighting or brightening fires; as a skin cleanser.

Abbreviations and acronyms used

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
DNEL: Derived No Effect Level
EL50: Effective level 50 % (median effective level): loading rate of the substance which kills or immobilizes 50 % of exposed organisms

EWC: European Waste Code (a code from the EU's common classification system for waste)
IATA: The International Air Transport Association
ICAO: The International Civil Aviation Organisation
IC50: The concentration of compound that results in 50% inhibition of a biological or biochemical function.

IL50: Inhibitory level: concentration that inhibits a biological function by 50%.
IMDG: The International Maritime Dangerous Goods Code
LC50: Median concentration lethal to 50% of a test population.
LD50: Lethal dose, is the amount of a substance given to a group of test animals, which causes the death of 50%.
LL50: Lethal level: loading rate that kills 50% of exposed organisms.
NOEC: No observed effect concentration
NOEL: No Observed Effect Level. The highest tested dose or exposure level at which, in a study, no statistically significant effect is observed in the exposed population compared with an appropriate control group.
PBT: Persistent, Bioaccumulative and Toxic
PNEC: Predicted No Effect Concentration
RID: The Regulations concerning the International Carriage of Dangerous Goods by Rail
vPvB: very Persistent and very Bioaccumulative

Information added, deleted or revised	Section 14 Transport information
Version	3
Prepared by	Teknologisk Lab Stockholm AB, subsidiary of Kiwa Teknologisk Institutt v/ Milvi Rohtla
Exposure scenario	1. Distribution of gas oils, light vacuum, industrial.pdf 1. Distribution of diesel, industrial.pdf 2. Formulation & (re)packing of gas oils, light vacuum, industrial.pdf 2. Formulation & (re)packing of diesel and mixtures, industrial.pdf 3. Use of gas oils, light vacuum as a fuel, industrial.pdf 3. Use of diesel as a fuel, industrial.pdf 4. Use of gas oils, light vacuum as a fuel, professional.pdf 4. Use of diesel as a fuel, professional.pdf