Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 15-5-2018 Revision date: 20-9-2022 Supersedes version of: 11-2-2021 Version: 2.3

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

1.1. Product identifier

Product form : Mixture

Trade name : Hydraulic 68 HVLP
Product code : ST.O.05.02
Product group : Trade product

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

1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use, Consumer use

Use of the substance/mixture : Hydraulic oil

Function or use category : Hydraulic fluids and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Stirlings Oil.

Zevenkampse Ring 342

3068 HG Rotterdam (NL)

postbus

Netherlands

T 0031 (0) 85 822 3039

Info@stirlingsoil.com

1.4. Emergency telephone number

| Country | Organisation/Company | Address | Emergency number | Comment |
|----------------|---|--|--|-----------------------------------|
| Ireland | National Poisons Information Centre Beaumont Hospital | PO Box 1297 Beaumont Road 9 Dublin | +353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7) | |
| United Kingdom | National Poisons Information Service (Cardiff Centre) University Hospital Llandough | Penlan Road CF64 2XX Llandough | 0344 892 0111 | Only for healthcare professionals |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

EUH-statements : EUH210 - Safety data sheet available on request.

20-9-2022 (Revision date) EN (English) 1/11 20-9-2022 (Printing date)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

| Component | | |
|-----------|--|--|
| ,, , | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII | |

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments : Highly refined mineral oils and additives.

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|--|-----|---|
| Distillates (petroleum), hydrotreated light paraffinic (Note L) | CAS-No.: 64742-55-8 EC-No.: 265-158-7 EC Index-No.: 649-468-00-3 REACH-no: 01-2119487077- 29 | < 5 | Asp. Tox. 1, H304 |

Comments : The highly refined mineral oil contains <3% (w/w) DMSOextract, according to IP346.

Note 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-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

No additional information available

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

Treat symptomatically.

20-9-2022 (Revision date) EN (English) 2/11 20-9-2022 (Printing date)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustible liquid.

Hazardous decomposition products in case of fire Toxic fumes may be released. Incomplete combustion releases dangerous carbon

monoxide, carbon dioxide and other toxic gases.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide good ventilation in process area to prevent formation of vapour.

Wash hands and other exposed areas with mild soap and water before eating, drinking or Hygiene measures

smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Keep container closed when not in use. Keep in a cool, well-ventilated place away from

heat.

Storage temperature 0 - 40 °C

7.3. Specific end use(s)

No additional information available

20-9-2022 (Revision date) EN (English) 3/11

20-9-2022 (Printing date)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

| Hydraulic 68 HVLP | |
|---|---|
| EU - Indicative Occupational Exposure Limit (IOEL) | |
| Exposure limits/standards for materials that can be formed when handling this product. When mists/aerosols can occur the following is recommended | 5 mg/m³ - ACGIH TLV (inhalable fraction). |

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection: Safety glasses

| ye protection | | | | |
|----------------|----------------------|-----------------|----------|--|
| Туре | Field of application | Characteristics | Standard | |
| Safety glasses | Droplet | clear | EN 166 | |

8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

Hand protection: Protective gloves

| Hand protection | | | | | |
|-----------------|----------------------|-------------------|----------------|-------------|------------|
| Туре | Material | Permeation | Thickness (mm) | Penetration | Standard |
| Reusable gloves | Nitrile rubber (NBR) | 6 (> 480 minutes) | ≥0.35 | | EN ISO 374 |

20-9-2022 (Revision date) EN (English) 4/11 20-9-2022 (Printing date)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Other skin protection

Materials for protective clothing:

Wear suitable protective clothing

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Yellow.
Odour : characteristic.
Odour threshold : Not available
Melting point : Not applicable

Freezing point : -36 °C - ASTM D5950 (pour point)

Boiling point : Not available Flammability : Not applicable

Explosive properties : Presents no particular fire or explosion hazard.

Explosive limits : Not available
Lower explosion limit : Not available
Upper explosion limit : Not available

Flash point : 210 °C - ASTM D92 (COC)

Auto-ignition temperature : Not available
Decomposition temperature : Not available
pH : Not available
it Not available

Viscosity, kinematic : 68 mm²/s (40 °C) - ASTM D7279 Solubility : Water: Insoluble / Slightly miscible

Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50 °C : Not available

Density : 0,87 kg/l (15 °C) - ASTM D4052

Relative density : Not available
Relative vapour density at 20 °C : Not available
Particle characteristics : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content : 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

20-9-2022 (Revision date) EN (English) 5/11 20-9-2022 (Printing date)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Reacts violently with (strong) oxidizers.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No decomposition if stored normally.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) : Not classified

| Distillates (petroleum), hydrotreated light paraffinic (64742-55-8) | |
|---|-------------------|
| LD50 oral rat | > 5000 mg/kg |
| LD50 dermal rabbit | > 2000 mg/kg |
| LC50 Inhalation - Rat (Dust/Mist) | 5,53 mg/l/4h |
| China and manifestina | Net along it is d |

Skin corrosion/irritation : Not classified Serious eye damage/irritation : Not classified Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-repeated exposure : Not classified

| LOAEL (oral, rat, 90 days) | 125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 |
|----------------------------|---|
| | (Repeated Dose 90-Day Oral Toxicity in Rodents) |

Aspiration hazard : Not classified

| r | | | | |
|---|------------|----------|--|--|
| П | Hydraulia | 68 HVLP | | |
| ш | riyuraulio | 00 TIVLF | | |

| ı | | |
|---|----------------------|--|
| | Viscosity, kinematic | 68 mm ² /s (40 °C) - ASTM D7279 |

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)

| Viscosity, kinematic | < 20,5 mm²/s | |
|--|--------------|--|
| Aliphatic, alicyclic or aromatic hydrocarbon | Yes | |

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

20-9-2022 (Revision date) EN (English) 6/11 20-9-2022 (Printing date)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Hazardous to the aquatic environment, short-term

(acute)

: Not classified

Hazardous to the aquatic environment, long-term

: Not classified

(chronic)

Not rapidly degradable

| Distillates (petroleum), hydrotreated light paraffinic (64742-55-8) | |
|---|----------------|
| LC50 - Fish [1] | > 100 mg/l 96h |
| EC50 - Crustacea [1] | > 10000 mg/l |
| EC50 72h - Algae [1] | ≥ 100 mg/l |
| NOEC chronic crustacea | 10 mg/l 21d |

12.2. Persistence and degradability

| Distillates (petroleum), hydrotreated light paraffinic (64742-55-8) | |
|---|-------------------------|
| Persistence and degradability | Not established. |
| Biodegradation | 31 % (OECD 301F method) |

12.3. Bioaccumulative potential

| Distillates (petroleum), hydrotreated light paraffinic (64742-55-8) | | |
|---|------------------|--|
| Partition coefficient n-octanol/water (Log Pow) > 6 | | |
| Bioaccumulative potential | Not established. | |

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations

: Dispose in a safe manner in accordance with local/national regulations.

European List of Waste (LoW) code

: 13 01 10* - mineral based non-chlorinated hydraulic oils

20-9-2022 (Revision date) 20-9-2022 (Printing date) EN (English) 7/11

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

HP Code

- : HP3 "Flammable:"
 - flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C:
 - flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;
 - flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;
 - flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;
 - water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;
 - other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

| ADR | IMDG | IATA | ADN | RID |
|--------------------------|----------------|----------------|----------------|----------------|
| 4.1. UN number or ID n | umber | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.2. UN proper shipping | g name | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.3. Transport hazard o | lass(es) | | 20 | i. |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.4. Packing group | | , | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.5. Environmental haz | ards | | - | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

14.6. Special precautions for user

Overland transport Not applicable

Transport by sea Not applicable

Air transport Not applicable

Inland waterway transport Not applicable

Rail transport Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

20-9-2022 (Revision date) EN (English) 8/11 20-9-2022 (Printing date)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no REACH substances with Annex XVII restrictions

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

PIC Regulation (Prior Informed Consent)

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

VOC Directive (2004/42)

VOC content : 0 %

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

| Indication of ch | nanges | | |
|------------------|--|----------|----------|
| Section | Changed item | Change | Comments |
| | Revision date | Modified | |
| | Supersedes | Modified | 7 |
| 1.2 | Use of the substance/mixture | Added | |
| 1.2 | Function or use category | Added | |
| 5.2 | Hazardous decomposition products in case of fire | Modified | |
| 9.1 | Solubility in water | Added | |
| 10.3 | Possibility of hazardous reactions | Modified | |
| 13.1 | H code | Added | |

20-9-2022 (Revision date) EN (English) 9/11 20-9-2022 (Printing date)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Abbreviations a | nd acronyms: |
|-----------------|---|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration factor |
| BLV | Biological limit value |
| BOD | Biochemical oxygen demand (BOD) |
| COD | Chemical oxygen demand (COD) |
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |
| EC-No. | European Community number |
| EC50 | Median effective concentration |
| EN | European Standard |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LC50 | Median lethal concentration |
| LD50 | Median lethal dose |
| LOAEL | Lowest Observed Adverse Effect Level |
| NOAEC | No-Observed Adverse Effect Concentration |
| NOAEL | No-Observed Adverse Effect Level |
| NOEC | No-Observed Effect Concentration |
| OECD | Organisation for Economic Co-operation and Development |
| OEL | Occupational Exposure Limit |
| PBT | Persistent Bioaccumulative Toxic |
| PNEC | Predicted No-Effect Concentration |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS | Safety Data Sheet |
| STP | Sewage treatment plant |
| ThOD | Theoretical oxygen demand (ThOD) |
| TLM | Median Tolerance Limit |
| VOC | Volatile Organic Compounds |
| CAS-No. | Chemical Abstract Service number |
| N.O.S. | Not Otherwise Specified |
| vPvB | Very Persistent and Very Bioaccumulative |
| ED | Endocrine disrupting properties |

| Full text of H- and EUH-statements: | |
|-------------------------------------|---|
| Asp. Tox. 1 | Aspiration hazard, Category 1 |
| EUH210 | Safety data sheet available on request. |

20-9-2022 (Revision date) 20-9-2022 (Printing date)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Full text of H- and EUH- | -statements: |
|--------------------------|---|
| H304 | May be fatal if swallowed and enters airways. |

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

20-9-2022 (Revision date) EN (English) 11/11 20-9-2022 (Printing date)