Safety Data Sheet according to HSNO Regulations

Issue Date: 15/01/2020 S.GHS.NZL.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name

H46 (ISO Hydraulic Oil)

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

Relevant identified uses

Use according to manufacturer's directions.

21 O'Rorke Road, Penrose, Auckland, New Zealand

Hydraulic fluid,

Details of the manufacturer/importer

| Registered company name |
|-------------------------|
| Address |
| Telephone |

Hydraulink Fluid Connectors Ltd

+64 (09) 525 2626 +64 (09) 525 2151

Fay Website Emall

http://www.hydraulink.com sales@hydraulink.com

Emergency telephone number

Association / Organisation

NCEC

Emergency telephone Taiwan: +886 2 8793 3212, Japan: +81 3 4578 9341, South Korea: +82 2 3479 8401, Australia: +61 2 8014 4558, New Zealand: +64 9 929 1483/0800 446 881 (toll free), The rest of AP Countries: +65 3158 1074 (24 hrs)

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Not considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Not regulated for transport of Dangerous Goods.

| GHS Classification | N |
|--------------------|---|
| | |

lot Applicable

HSNO criteria

Not Available

Label elements

GHS label elements

Not Applicable

SIGNAL WORD

NOT APPLICABLE

Hazard statement(s)

Precautionary statement(s) Prevention

| P | 101 | If medical advice is needed, have product container or label at hand |
|---|-----|--|
| P | 102 | Keen out of reach of children |
| P | 103 | Read label before use. |

Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name I Same I Sa |
|------------|-----------|--|
| 64742-54-7 | >60 | paraffinic distillate, heavy, hydrotreated (severe) |

SECTION 4 FIRST AID MEASURES

NZ Poisons Centre 0800 POISON (0800 764 766) | NZ Emergency Services: 111

Description of first aid measures

| Eye Contact | If this product comes in contact with the eyes: Nash out immediately with fresh running water, Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids, Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
|--------------|---|
| Skin Contact | If skin or hair contact occurs: ► Flush skin and hair with running water (and soap if available). ► Seek medical attention in event of irritation. |
| Inhalation | If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary. |
| Ingestion | If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice. |

Indication of any immediate medical attention and special treatment needed

- Heavy and persistent skin contamination over many years may lead to dysplastic changes. Pre-existing skin disorders may be aggravated by exposure to this product.
- In general, emesis induction is unnecessary with high viscosity, low volatility products, i.e. most oils and greases.
- > High pressure accidental injection through the skin should be assessed for possible incision, irrigation and/or debridement.

NOTE: Injuries may not seem serious at first, but within a few hours tissue may become swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Product may be forced through considerable distances along tissue planes.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- ▶ Foam
- Dry chemical powder.
- ▶ BCF (where regulations permit).
- Carbon dioxide.

Special hazards arising from the substrate or mixture

Fire Incompatibility

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Advice for firefighters

Fire Fighting

- Alert Fire Brigade and tell them location and nature of hazard.
- ▶ Wear full body protective dothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water course.
 Use water delivered as a fine spray to control fire and cool adjacent area.
- Combustible

Fire/Explosion Hazard

- Slight fire hazard when exposed to heat or flame.
- Heating may cause expansion or decomposition leading to violent rupture of containers.
- On combustion, may emit toxic furnes of carbon monoxide (CO).

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills

- Slippery when spilt.
- ► Remove all ignition sources.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.

Major Spills

Slippery when spilt.

Moderate hazard.

- Clear area of personnel and move upwind.
- ▶ Alert Fire Brigade and tell them location and nature of hazard.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling

- ► Containers, even those that have been emptied, may contain explosive vapours.
- ▶ Do NOT cut, drill, grind, weld or perform similar operations on or near containers.
- ▶ Avoid all personal contact, including inhalation.
- ▶ Wear protective clothing when risk of exposure occurs.

Other Information

- Store in original containers.
- Keep containers securely sealed.
 No smoking, naked lights or ignition sources,
- Store in a cool, dry, well-ventilated area.

Conditions for safe storage, including any incompatibilities

Suitable container

- Metal can or drum
- Packaging as recommended by manufacturer,
- ▶ Check all containers are clearly labelled and free from leaks.
- Avoid reaction with oxidising agents

Storage incompatibility

CARE: Water in contact with heated material may cause feaming or a steam explosion with possible severe burns from wide scattering of hot material Resultant overflow of containers may result in fire,

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|--------------------------|---|---------------|-------|-------|-----------|---|
| New Zealand Workplace | paraffinic distillate, heavy, hydrotreated (severe) | Oll mist, | 5 | 10 | Not | Sampled by a method that does not collect |
| Exposure Standards (WES) | | mineral | mg/m3 | mg/m3 | Available | vapour. |

EMERGENCY LIMITS

| Ingredient | Material name | TEEL-1 | TEEL-2 | TEEL-3 |
|--|---|---------------|-----------|------------|
| paraffinic distillate, heavy, hydrotreated (severe) | Hydrotreated (mild & severe) heavy paraffinic distillates | 45 mg/m3 | 500 mg/m3 | 3000 mg/m3 |
| Ingredient | Original IDLH | Revised IDLH | | |
| paraffinic distillate, heavy, hydrotreated (severe) | Not Available | Not Available | | |

Exposure controls

Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

Personal protection









Eye and face protection

Safety glasses with side shields.

Chemical goggles.

- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of
- lenses or restrictions on use, should be created for each workplace or task.

Skin protection

See Hand protection below

Hands/feet protection

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Suitability and durability of glove type is dependent on usage.

| Body protection | See Other protection below | |
|------------------|--|--|
| Other protection | ► Overalls. ► P.V.C. apron. ► Barrier cream. | |
| Thermal hazards | Not Available | |

Recommended material(s)

GLOVE SELECTION INDEX

64 - 4 - sl - 1

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

selection must be based on detailed observation.

The effect(s) of the following substance(s) are taken into account in the $\it computer-generated$ selection:

H46 (ISO Hydraulic Oil) Not Available

| Material | CPI | |
|---------------------------|--|--|
| * CPI - Chemwatch Perfo | mance Index | |
| A: Best Selection | | |
| B: Satisfactory; may degr | ade after 4 hours continuous immersion | |
| C: Poor to Dangerous C | oice for other than short term immersion | |
| NOTE: As a series of far | tors will influence the actual performance of the glove, a final | |

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

Respiratory protection

Type A-P Fitter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required,

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter,

| Required Minimum Protection Factor | Half-Face Respirator | Full-Face Respirator | Powered Air Respirator |
|---------------------------------------|-------------------------|-------------------------|----------------------------|
| up to 10 x ES | A-AUS P2 | - | A-PAPR-AUS / Class 1 P2 |
| up to 50 x ES | (20) | A-AUS / Class 1 P2 | je: |
| up to 100 x ES | - | A-2 P2 | A-PAPR-2 P2 ^ |

^{^ -} Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| Appearance | Bright and clear liquid; insoluble in | water. | |
|--|---------------------------------------|---|-----------------|
| Physical state | Liquid | Relative density (Water = 1) | <1 |
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available |
| Odour threshold | Not Available | Auto-Ignition temperature (°C) | Not Available |
| pH (as supplied) | Not Applicable | Decomposition temperature | Not Available |
| Melting point / freezing point (°C) | Not Available | Viscosity (cSt) | 46,3 @ 40 deg.C |
| Initial boiling point and boiling range (°C) | Not Available | Molecular weight (g/mol) | Not Applicable |
| Flash point (°C) | 240 | Taste | Not Available |
| Evaporation rate | Not Available | Explosive properties | Not Available |
| Flammability | Not Applicable | Oxidising properties | Not Available |
| Upper Explosive Limit (%) | Not Available | Surface Tension (dyn/cm or mN/m) | Not Available |
| Lower Explosive Limit (%) | Not Available | Volatile Component (%vol) | Not Available |
| Vapour pressure (kPa) | Not Available | Gas group | Not Available |
| Solubility in water (g/L) | Immiscible | pH as a solution(1%) | Not Applicable |
| Vapour density (Air = 1) | Not Available | VOC g/L | Not Available |

SECTION 10 STABILITY AND REACTIVITY

| Reactivity | See section 7 |
|------------------------------------|--|
| Chemical stability | Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur. |
| Possibility of hazardous reactions | See section 7 |
| Conditions to avoid | See section 7 |
| Incompatible materials | See section 7 |
| Hazardous decomposition products | See section 5 |

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

| H46 (ISO Hydraulic Oll) | TOXICITY Not Available | IRRITATION Not Available | |
|--|--|-----------------------------|--|
| paraffinic distillate, heavy, hydrotreated (severe) | TOXICITY Dermal (Rabbit) LD50: >5000 mg/kg Oral (rat) LD50: >15000 mg/kg | IRRITATION Not Available | |

CMR STATUS

Not Applicable

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

DO NOT discharge into sewer or waterways.

Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|--------------------|--------------------------|-------------------|
| | No Data available | No Data available |
| | | |
| Rioaccumulative no | tential | |
| Bioaccumulative po | tential Bioaccumulation | |

Mobility in soil

| Ingredient | Mobility | | |
|------------|-------------------|--|--|
| | No Data available | | |

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal

- Recycle wherever possible or consult manufacturer for recycling options.
- ► Consult State Land Waste Authority for disposal.
- ▶ Bury or incinerate residue at an approved site...
- ▶ Recycle containers if possible, or dispose of in an authorised landfill.

Ensure that the disposal of material is carried out in accordance with Hazardous Substances (Disposal) Regulations 2001.

SECTION 14 TRANSPORT INFORMATION

Labels Required

| Marine Pollutant | NO |
|------------------|----------------|
| HAZCHEM | Not Applicable |

Land transport (UN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION

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

This substance is not subject to any HSR Group Standard

Location Test Certificate

Subject to Regulation 55 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations a location test certificate is required when quantity greater than or equal to those indicated below are present.

| Hazard Class | Quantity beyond which controls apply for closed containers | Quantity beyond which controls apply when use occurring in open containers |
|----------------|--|--|
| Not Applicable | Not Applicable | Not Applicable |

Approved Handler

Subject to Regulation 56 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations, the substance must be under the personal control of an Approved Handler when present in a quantity greater than or equal to those indicated below.

| greater train or equal to those kin | DICATED DOIOW. | | | |
|-------------------------------------|----------------|--|--|--|
| Class of substance | Quantities | | | |
| Not Applicable | Not Applicable | | | |

National Inventory Status

| National Inventory | Status |
|---------------------|--------------------|
| Australia - AICS | Listed or exempted |
| China - IECSC | Listed or exempted |
| Japan - ENCS | Listed or exempted |
| Korea - KECI | Listed or exempted |
| New Zealand - NZIoC | Listed or exempted |
| Philippines - PICCS | Listed or exempted |
| Taiwan | Listed or exempted |

SECTION 16 OTHER INFORMATION

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment, Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.