



Dependable Precision

Material Safety Data Sheet 02/03/2023, Rev.7

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation(EU) No. 2020/878

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

1.1. Product identifier

Product name: HYDROFLOW HFC 46
Type of product: Fire resistant hydraulic water-glycol based fluid
Code n°: F-731

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

1.3. Details of the supplier of the safety data sheet

Manufacturer: Excision
Address: 35 Peck Street, Hamilton VIC 3300 Australia
Tel: +61 (0)3 5551 4555
Fax: Not Available
E-mail: info@excision.com.au


1.4. Emergency telephone number

Tel: +61 (0)3 5551 4555

SECTION 2 Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 :

 Attention, Acute Tox. 4, Harmful if swallowed.

2.2. Label elements

Symbols:



Hazard statement(s):

H302 Harmful if swallowed.

Precautionary statements:

P264 Wash...thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P301+P312.IF SWALLOWED: Call a POSITION CENTER or doctor/physican if you feel unwell.

P330 Rinse mouth.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Contains:

2,2'-oxydiethanol



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2.3. Other hazards

No PBT nor mPmB substance, no endocrine disruptor present at a concentration \geq 0.1%
Other warnings:
None

SECTION 3 Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Dangerous substances according to CLP Regulation and corresponding classification:
< 50% 2,2'-oxydiethanol
Index-no: 603-140-00-6, CAS: 111-46-6, EC: 203-872-2

 3.1/4/Oral Acute Tox. 4 H302

SECTION 4 First aid measures

4.1. Description of first aid measures

Skin contact

Wash immediately with plenty of running water and possibly soap the areas of the body that have come into contact with the product, even if it is only a suspicion.
Wash the body thoroughly (shower or bath).
Remove contaminated clothing immediately and dispose of it safely.
In case of skin contact, wash immediately with plenty of soap and water.

Eye contact

Immediately wash with water and Contact a physician at once.

Ingestion

Do not induce vomiting in any case. IMMEDIATELY SEEK MEDICAL ADVICE.

Inhalation

Ventilate the affected area. Have affected person leave the area and rest in a well ventilated area. In case of sickness, seek medical advice.

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

None

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

IF exposed or concerned.

Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet.

Treatment:

None



SECTION 5 Firefighting measures

5.1. Extinguishing media

Recommendation: Water, CO₂.

Unsuitable extinguishers: None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale gases produced by the explosion and combustion.

Burning produces heavy smokes.

5.3. Advice for firefighters

Use appropriate respiratory equipment.

Collect separately contaminated water used to extinguish the fire. Do not discharge into the sewer.

Is possible, from the point of view of safety, immediately remove the containers undamaged area.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

Remove persons to safety.

See the security measures in sections 7 and 8 .

6.2. Environmental precautions

In order to prevent outlet to the surroundings, put up waste collecting trays/basins.

Avoid spreading to lakes, streams, sewers etc. In case of an outlet, to the surroundings, contact the local environmental government.

6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. If possible, clean with cleaning supplies. Solvents should be avoided.

6.4. Reference to other sections

See sections 8 and 13.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Do not use empty containers that have not been previously cleaned.

Before transfer operations, make sure that there are no incompatible waste materials in the containers.

Refer also to section 8 for recommended protective equipment.



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Contaminated clothing must be replaced before accessing lunch areas.
Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities

Avoid contact with eat, drink.

Incompatible materials:

None.

Warehouse conditions:

Suitably ventilated areas.

7.3. Specific end use(s)

No particular uses

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Level of exposure DNEC

N.A

Level of exposure PNEC

N.A

8.2. Exposure controls

General precautions:

Suitably ventilate areas where the product is stored and/or used.

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection: Not required.

Protection of hands:

Protective gloves (the glove material has to be impermeable and resistant to the product/ the substance/ the preparation).

Eye protection:

Tightly sealed goggles

Goggles recommended during refilling

Appropriate engineering controls

none

SECTION 9 Physical and chemical properties

9.1. Information on basic physical and chemical properties

Property	Value
Appearance and color:	Clear liquid, red
Smell:	characteristic
Odor threshold:	N.D.



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pH:	10
Melting point / freezing point:	N.D.
Initial point and boiling range:	N.D.
Flash point;	N.A.
Evaporation rate:	N.D.
Flammability (solid / gas);	N.D.
Upper / lower limit of flammability or explosiveness	N.D.
Vapor pressure:	N.D.
Vapor density:	N.D.
Density (20°C):	1.07g/cm ³
Solubility (s);	Soluble
Solubility in oil:	Insoluble
N-octanol / water partition coefficient;	N.D.
Spontaneous ignition temperature	N.D.
Decomposition temperature:	N.D.
Viscosity:	N.D.
Explosive properties:	N.D.
Combustive properties:	N.D.
Particle characteristics:	
Particle size:	-

9.2. Additional information

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is stable under the conditions

10.2. Chemical stability

The product is stable under the conditions

10.3. Possibility of hazardous reactions

Non specific

10.4. Conditions to avoid

The product is stable under the conditions

10.5. Incompatible materials

No special instructions.

10.6. Hazardous decomposition products

None.



SECTION 11 Toxicological information

11.1. Information on toxicological effects

Toxicological information relating to the mix:

N.A.

Toxicological information relating to the main substances in the mixture: N.A.

Unless specified otherwise, the data required by Regulation (UE)2020/878 listed below should be NA:

- a) acute toxicity;
- b) corrosion or skin irritation;
- c) serious injury or irritation;
- d) respiratory or skin sensitization;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) Specific target organ toxicity (STOT) - single exposure;
- i) Specific target organ toxicity (STOT) - repeated exposure
- j) aspiration hazard.

11.2 Information on other hazards

Endocrine disruptive properties

No endocrine disruptor present at a concentration $\geq 0.1\%$

SECTION 12 Ecological information

12.1. Toxicity

Use suitable working methods, avoiding dispersion of the product into the environment.

12.2. Persistence and degradability

NA.

12.3. Bioaccumulative potential

NA.

12.4. Mobility in soil

NA.

12.5. Results of PBT and vPvB assessment

Substances vPvB ; None

Substances PBT: Nones

12.6. Properties of endocrine alteration

No endocrine disruptor present at a concentration $\geq 0.1\%$

12.7. Other adverse effects

None



SECTION 13 Disposal considerations

13.1 Waste treatment methods

Recover used product if possible. Use in accordance with legal regulations or common industrial practice.

SECTION 14 Transport information

14.1. UN number or ID number

Product is not dangerous according to current transport regulations

14.2. UN proper shipping name

N.A

14.3. Transport hazard class(es)

N.A

14.4. Packing group

N.A

14.5. Environmental hazards

N.A

14.6. Special precautions for user

N.A

14.7. Maritime transport in bulk according to IMO instruments

N.A

SECTION 15 Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents during work)

Dir 2000/39/EC (Occupational Exposure Limits)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (UE) n. 758/2013

Regulation (UE) n. 2020/878

Regulation (UE) n. 286/2011 (ATP 2 CLP)

Regulation (UE) n. 618/2012 (ATP 3 CLP)

Regulation (UE) n. 487/2013 (ATP 4 CLP)

Regulation (UE) n. 944/2013 (ATP 5 CLP)

Regulation (UE) n. 605/2014 (ATP 6 CLP)

Regulation (UE) n. 2015/1221 (ATP 7 CLP)

Regulation (UE) n. 2016/918 (ATP 8 CLP)

Regulation (UE) n. 2016/1179 (ATP 9 CLP)

Regulation (UE) n. 2017/776 (ATP 10 CLP)



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Regulation (UE) n. 2018/669 (ATP 11 CLP)

Regulation (UE) n. 2018/1480 (ATP 13 CLP)

Regulation (UE) n. 2019/521 (ATP 12 CLP)

Regulation (UE) n. 2020/217 (ATP 14 CLP)

Regulation (UE) n. 2020/1182 (ATP 15 CLP)

Regulation (UE) n. 2021/643 (ATP 16 CLP)

Regulation (UE) n. 2021/849 (ATP 17 CLP)

Regulation (UE) n. 2022/692 (ATP 18 CLP)

Restrictions relating to the product or contained substances according to Annex XVII of Regulation (EC) 1907/2006 (REACH) and subsequent amendments:

None.

Where applicable, refer to the following standards:

Directive 2012/18/EU (Seveso III).

Regulation (EC) No 648/2004 (detergents).

Dir.2004/42/CE (directive COV)

Provisions on EU Directive 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1.

None

15.2. Chemical safety assessment : None

SECTION 16 Other information

Text of phrases referred to under heading 3:

H302 Harmful if swallowed.

This document has been prepared by a competent person who has received adequate training

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinhold

CCNL - Allegato 1 "TLV of 1989-90"

Indicate additional literature consulted

The information contained here is based on our knowledge at the date indicated above.

It refers solely to the product indicated and constitutes no guarantee of particular quality.

The user must ensure the adequacy and accuracy of this information in relation to the specific use of the product should do.

This MSDS cancel and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS = Chemical Abstracts Service (American Chemical Society).

CLP: Classification, labeling, packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

ETA: Estimation of acute toxicity



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ETAmix: Estimation of acute toxicity (mixtures)

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of classification and labeling of chemicals.

IATA: International Air Transport Association.

IATA-DGR: Standards applied to dangerous goods by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation.

ICAO-TI: Technical Instructions "Organization International Civil Aviation" (ICAO).

IMDG: International Maritime Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

KST: coefficient explosion.

LC50: Lethal concentration for 50% of the exposed population.

LD50: Lethal dose for 50% of the exposed population.

LTE: Long-term exposure.

PNEC: predicted no effect concentration

RID: Regulations concerning the international carriage of dangerous goods by rail.

STE: Short-term exposure.

STEL: level of short-term exposure.

STOT: Specific target organ toxicity.

TLV: Threshold Limit Value.

TWATLV: threshold limit value time weighted average of eight hours per day (Standard ACGIH).

WGK: Hazard class for water (Germany).