

SAFETY DATA SHEET HIDROLIK FREN YAGI (DOT3)

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended. Commission Regulation (EU) 2020/878 of 18 June 2020.

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

1.1. Product identifier

Product name HIDROLIK FREN YAGI (DOT3)

Product number 13099

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

Identified uses Brake fluid.

Uses advised against

This product must not be used in applications other than those recommended in Section 1, without first

seeking the advice of the supplier. This product is not to be used as a solvent or cleaning agent; for lighting or brightening fires; as a skin cleanser. This product is designed only to suit automotive

applications and no provision is made for the requirements of aviation applications.

1.3. Details of the supplier of the safety data sheet

Supplier PETROL OFISI A.Ş.

Ünalan Mahallesi, Libadiye Caddesi No: 82F Kat: 2-3-4, 34700 Üsküdar/ Istanbul

Tel: +90 850 339 1919 Fax: +90 216 275 3854 madeniyag@petrolofisi.com.tr

Contact person Customer Services: madeniyag@petrolofisi.com.tr

1.4. Emergency telephone number

Emergency telephone Madeni Yağ Customer Services: 0850 339 1919 (working hours)

National emergency telephone

number

National Poison Consultance Center: 114

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Eye Dam. 1 - H318

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms





Signal word Danger

Hazard statements H302 Harmful if swallowed.

H318 Causes serious eye damage.



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According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended. Commission Regulation (EU) 2020/878 of 18 June 2020.

Precautionary statements P264 Wash contaminated skin thoroughly after handling.

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

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/ doctor.

P330 Rinse mouth.

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

Contains 2-[2-(2-BUTOXYETHOXY)ETHOXY]ETHANOL, 2,2'-OXYBISETHANOL

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

2-[2-(2-BUTOXYETHOXY)ETHOXY]ETHANOL

60-80%

CAS number: 143-22-6 EC number: 205-592-6

Classification

Eye Dam. 1 - H318

2.2'-OXYBISETHANOL 25-40%

CAS number: 111-46-6 EC number: 203-872-2

Classification

Acute Tox. 4 - H302

2-(2-METHOXYETHOXY)ETHANOL

1-5%

CAS number: 111-77-3 EC number: 203-906-6

Classification

Repr. 2 - H361d

The full text for all hazard statements is displayed in Section 16.

Composition comments Some substances are not classified by legistlation. They are self classified by the manufacturer. The

DMSO extract by IP 346 of the oil is less than 3%

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Treat symptomatically.

Inhalation Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any

discomfort continues.

Ingestion Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly

with water. Get medical attention if any discomfort continues.

Skin contact Remove affected person from source of contamination. Remove contaminated clothing. Wash skin

thoroughly with soap and water. Get medical attention if any discomfort continues.



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Eye contact Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes.

Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

Protection of first aidersFirst aid personnel should wear appropriate protective equipment during any rescue.

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

General information Treat symptomatically. See Section 11 for additional information on health hazards.

 Inhalation
 No specific symptoms known.

 Ingestion
 No specific symptoms known.

Skin contact May cause skin sensitisation or allergic reactions in sensitive individuals.

Eye contact May irritate eyes.

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

Notes for the doctor Treat symptomatically.

Specific treatments Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.

Unsuitable extinguishing media Do not use the following: Water. Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Thermal decomposition or combustion products may include the following substances: Asphyxiating

gases. Carbon monoxide (CO). Nitrous gases (NOx).

Hazardous combustion products Oxides of carbon. BOx

5.3. Advice for firefighters

Protective actions during

Evacuate area. Use water to keep fire exposed containers cool and disperse vapours. Control run-off

water by containing and keeping it out of sewers and watercourses.

Special protective equipment for

firefighters

firefighting

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

For non-emergency personnel Necessary precautions should be taken to ensure that non-educated personnel do not intervene.

For emergency responders Wear protective clothing as shown in section 8 of this safety data sheet. Proper ventilation should be

provided.

6.2. Environmental precautions

Environmental precautionsDo not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Avoid

the spillage or runoff entering drains, sewers or watercourses.



According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended. Commission Regulation (EU) 2020/878 of 18 June 2020.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13. See Section 1 for emergency

contact information. See Section 11 for additional information on health hazards. See Section 12 for

additional information on ecological hazards.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes.

Advice on general occupational

hygiene

In the areas where the product is handled, food should not be eaten, beverages should not be drink and smoke should not be smoked. Good personal hygiene procedures should be implemented. Wash after

use and before eating, smoking and using the toilet.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep only in the original

container.

Storage class Chemical storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

Usage description The product must be used as specified in the data sheet.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

2-(2-methoxyethoxy)ethanol;EU IOELV, TWA: 50,1 mg/m3; 10 ppm (possibility of significant uptake through the skin)

2,2'-OXYBISETHANOL

Long-term exposure limit (8-hour TWA): WEL 23 ppm 101 mg/m³

Short-term exposure limit (15-minute): WEL

WEL = Workplace Exposure Limit.

Ingredient comments If this product contains a component with exclusion limits, to determine the effectiveness of ventilation and

other control measures; and / or the necessity of the use of respiratory protective devices, the working environment or biological measurement and monitoring of employees may be required. The European Standard EN 689 and the relevant national guidelines should be taken as reference for the detection

methods for assessing exposure to inhalation of chemicals of hazardous substances.

Biological limit values There is no available data.

DNEL There is no available data.

DMEL There is no available data.

PNEC There is no available data.

8.2. Exposure controls

Protective equipment









According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended. Commission Regulation (EU) 2020/878 of 18 June 2020.

Appropriate engineering controls Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for

the product or ingredients.

Personal protection Keep away from foodstuffs, beverages and foods. Instantly remove any soiled and impregnated

garments. Wash hands during breaks and at the end of the work. Store protective clothing separately. Personal protective equipment (PPE) should meet recommended national standards. Check with PPE

suppliers. Koruyucu elbise ve önlüklerin düzenli bakımı yapılmalıdır.

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact

is possible. The following protection should be worn: Chemical splash goggles or face shield.

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk

assessment indicates skin contact is possible.

Other skin and body protection Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the

toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or

smoke.

Respiratory protection No specific recommendations. Respiratory protection may be required if excessive airborne contamination

occurs.

high temperatures.

Environmental exposure controls Keep container tightly sealed when not in use. Store in a demarcated bunded area to prevent release to

drains and/or watercourses.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Liquid.

Colour Green

Odour Characteristic.

Odour threshold No specific test data are available.

pH pH, %100: ~8,55

Melting point

No specific test data are available.

Initial boiling point and range

No specific test data are available.

Flash point >118°C Closed cup.

Evaporation rate

No specific test data are available.

Evaporation factor

No specific test data are available.

Flammability (solid, gas)

No specific test data are available.

Upper/lower flammability or

explosive limits

No specific test data are available.

Other flammability

No specific test data are available.

Vapour pressure

No specific test data are available.



According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended. Commission Regulation (EU) 2020/878 of 18 June 2020.

Vapour density No specific test data are available.

Relative density 1.04-1.07 g/cm3 @ 20°C

Bulk density No specific test data are available. Solubility(ies) No specific test data are available. Partition coefficient No specific test data are available. Auto-ignition temperature No specific test data are available. **Decomposition Temperature** No specific test data are available.

Viscosity 14.5-17 mm2/s @ 20°C

Explosive properties No specific test data are available.

Explosive under the influence of a No suitable data is available.

flame

No data available. Oxidising properties

Comments Bilgi yok.

Particle characteristic

9.2. Other information

Other information No information required.

Refractive index No specific test data are available. Particle size No specific test data are available. Molecular weight No specific test data are available. Volatility No specific test data are available. Saturation concentration No specific test data are available. Critical temperature No specific test data are available. Volatile organic compound No specific test data are 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 at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Under normal conditions of storage and use, no hazardous reactions will occur.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Strong acids. Strong alkalis.



According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended. Commission Regulation (EU) 2020/878 of 18 June 2020.

10.6. Hazardous decomposition products

Hazardous decomposition

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO2). BOx

products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on hazard classes as defined in Regulation (EC) No

1272/2008

Other health effects No relevant information available.

Toxicological effects Information given is based on data of the components and of similar products.

Acute toxicity - oral

Summary Based on available data, the classification criteria are not met.

Notes (oral LD₅₀) Ethanol-2-butoxy- LD₅₀ 2630 mg/kg, Oral, Rat 2,2'-oxybisethanol,diethylene glycol: LD₅₀ 1120 mg/kg,

Oral, Human 2-(2-methoxyethoxy)ethanol: LD50 4 ml/kg, Oral, Rat dihydro-3-(tetrapropenyl)furan-2,5-

dione: LD₅o 2900 mg/kg, Oral, Rat

ATE oral (mg/kg) 1,666.67

Acute toxicity - dermal

Summary Based on the available data, the classification criteria are not met.

Notes (dermal LD₅₀) ethanol,-2-butoxy-: LD₅₀ 3540 (24h) mg/kg, Dermal, Rat 2,2'oxybisethanol,diethylene glycol: LD₅₀ 11890

mg/kg, Dermal, Rabbit 2-(2-methoxyethoxy)ethanol: LD₅₀ 650 mg/kg, Dermal, Rabbit dihydro-3-

(tetrapropenyl)furan-2,5-dione: LD₅₀ >2000 mg/kg, Dermal, Rat LD₅₀ 6200- 7500 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Summary Basen on the available data, the classification criteria are not met.

Notes (inhalation LC50) 2,2'oxybisethanol,diethylene glycol: LC50 >4600 (4h) mg/m³, Inhalation, Rat dihydro-3-

(tetrapropenyl)furan-2,5-dione: LC50 5,3 (4h) mg/l, Inhalation, Rat

Skin corrosion/irritation

Summary Basen on the available data, the classification criteria are not met.

Skin corrosion/irritation Not classified as a primary skin irritant.

Animal data

No information available.

Human skin model test

No information available.

Extreme pH

No information available.

Serious eye damage/irritation

Summary Based on available data, the classification criteria are not met.

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

SummaryBased on available data, the classification criteria are not met.

Respiratory sensitisationBased on available data the classification criteria are not met.

Skin sensitisation



According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended. Commission Regulation (EU) 2020/878 of 18 June 2020.

Summary Based on available data, the classification criteria are met.

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Summary There is no available data.

Genotoxicity - in vitro

Based on available data the classification criteria are not met.

Genotoxicity - in vivo

Based on available data the classification criteria are not met.

Carcinogenicity

Summary There is no test data about the carcinogenicity of this product.

Carcinogenicity Based on available data the classification criteria are not met.

Target organ for carcinogenicity No specific target organs known.

Not listed.

Not listed.

Not listed.

Reproductive toxicity

Summary Suspected of damaging the unborn child.

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity -

development

No information is required.

Specific target organ toxicity - single exposure

Summary Based on the available data, the classification criteria are not met.

STOT - single exposure Based on available data the classification criteria are not met.

Target organs No specific target organs known.

Specific target organ toxicity - repeated exposure

Summary Based on the available data, the classification criteria are not met.

STOT - repeated exposure May cause damage to organs (kidney) through prolonged or repeated exposure.

Target organs No specific target organs known.

Aspiration hazard

Summary

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Toxicokinetics No information is required.

General information Information given is based on data of the components and of similar products.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following

overexposure may include the following: Coughing.

Ingestion May cause discomfort if swallowed.

Skin contact Liquid may irritate skin.

Eye contact Vapour or spray in the eyes may cause irritation and smarting



According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended. Commission Regulation (EU) 2020/878 of 18 June 2020.

Acute and chronic health hazards No specific long-term effects known.

Route of exposure Not specific

Target organs No specific target organs known.

Medical symptoms Dizziness. Severe stomach pain. Nausea, vomiting.

Medical considerations No specific tes data are available.

11.2 Information on other hazards

Information on other hazards

SECTION 12: Ecological information

Ecotoxicity Not regarded as dangerous for the environment.

12.1. Toxicity

Toxicity The product is not believed to present a hazard due to its physical nature.

Acute aquatic toxicity

Summary Based on available information, the classification criteria are not met.

Acute toxicity - fish LC₅₀, 96 hours: 596 (96 h) mg/l, Fish

Acute toxicity - aquatic Ethylene glycol

invertebrates EC₅₀, 48 hours: >100 mg/l, Daphnia magna

Acute toxicity - aquatic plants

No information required.

Acute toxicity - microorganisms

No information required.

No information required.

Chronic aquatic toxicity

Summary Based on available information, the classification criteria are not met.

Chronic toxicity - fish early life

stage

No information required.

Short term toxicity - embryo and

sac fry stages

No information required.

Chronic toxicity - aquatic

invertebrates

No information required.

Toxicity to soil There is not enough data.

Toxicity to terrestrial plants There is not enough data.

12.2. Persistence and degradability

PhototransformationNo specific test data are available.Stability (hydrolysis)No specific test data are available.BiodegradationNo specific test data are available.Biological oxygen demandNo specific test data are available.



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According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended. Commission Regulation (EU) 2020/878 of 18 June 2020.

Chemical oxygen demand No specific test data are available.

12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient No specific test data are available.

12.4. Mobility in soil

Mobility Uygun bilgi bulunmamaktadır.

Adsorption/desorption coefficientNo specific test data are available.Henry's law constantNo specific test data are available.Surface tensionNo specific test data are available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

assessment

This product does not contain any substances classified as PBT or vPvB.

12.6 Endocrine disrupting

properties

Endocrine disrupting properties

12.6. Other adverse effects

Other adverse effects No information required.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Use the substance for its intended purpose and recycle if possible. If this product is to be disposed of, it

must be disposed of as defined by international, national or local laws and regulations. The generation of waste should be minimised or avoided wherever possible. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled

with their contents.

Disposal methodsDispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste

Disposal Authority.

Waste class

The waste code classification is to be carried out according to the European Waste Catalogue (EWC).

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA,

ADR/RID).

Road transport notes Not applicable.

Rail transport notes Not applicable.

Sea transport notes Not applicable.

Air transport notes Not applicable.

14.1. UN number

UN number or ID number



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According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended. Commission Regulation (EU) 2020/878 of 18 June 2020.

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

Transport labels

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Maritime transport in bulk according to IMO instruments

Transport in bulk according to Annex II of MARPOL 73/78 and

Not applicable.

the IBC Code

SECTION 15: Regulatory information

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

National regulations T. C. Regulation on the Classification, Labeling and Packaging of Substances and Mixtures No. 28848,

dated 11 December 2013, by the Ministry of Environment and Urbanization.

T. C. Regulation on the Classification, Labeling and Packaging of Substances and Mixtures No. 28848, dated 11 December 2013, by the Ministry of Environment and Urbanization.

According to Regulation (EC) No 1907/2006, Annex II, as amended.

EU legislation https://echa.europa.eu

Guidance Safety Data Sheets for Substances and Preparations.

Health and environmental listings Hazardous ingredients are listed.

15.2. Chemical safety assessment

Not applicable.

SECTION 16: Other information



HIDROLIK FREN YAGI (DOT3)

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended. Commission Regulation (EU) 2020/878 of 18 June 2020.

Abbreviations and acronyms used E.U.: European union

in the safety data sheet KKE: Personal protective aquipment

STEL: Short term exposure limit

T.C.: Republic of Turkey

TWA: Workplace exposure limits

UZEM: National Poison Information Center

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

DNEL: Derived No Effect Level.
GHS: Globally Harmonized System.

LC₅o: Lethal Concentration to 50 % of a test population.

LD₅o: Lethal Dose to 50% of a test population (Median Lethal Dose).

PBT: Persistent, Bioaccumulative and Toxic substance.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No

1907/2006

vPvB: Very Persistent and Very Bioaccumulative.

Classification abbreviations and

acronyms

Acute Tox. = Acute toxicity

General information

This document contains important information to ensure the safe storage, handling and use of this product. The information in this document should be brought to the attention of the person in your organisation responsible for advising on safety matters. Uses and Restrictions: This product must not be used in applications other than those recommended in Section 1, without first seeking the advice of the supplier. This product is not to be used as a solvent or cleaning agent; for lighting or brightening fires; as a skin cleanser. MSDS Distribution: The information in this document should be made available to all who may handle the product. Disclaimer: 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.

Key literature references and

sources for data

This SDS is prepared based on the information received from suppliers.

Classification procedures according to Regulation (EC)

1272/2008

EUH208: Supplier information

Training adviceUntrained personnel should not use.

Revision comments Revised classification.

Issued by Ece Korkut Safety and Data Sheet Specialist (Certificate No: GBF01.54.04 26.06.2024)

Revision date 31/01/2024

Revision 4

Supersedes date 26/02/2019

SDS number 10095

SDS status Approved.

Hazard statements in full H302 Harmful if swallowed.

H318 Causes serious eye damage.

H361d Suspected of damaging the unborn child.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.