

SAFETY DATA SHEET HIDROLIK FREN YAGI (DOT4)

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 (DOT4)

Product number 13102

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

Emergency Medical Services: 112 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 Repr. 2 - H361

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms



Signal word Warning

Hazard statements H361 Suspected of damaging fertility or the unborn child.



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 P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P308+P313 IF exposed or concerned: Get medical advice/ attention.

P405 Store locked up.

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

Supplemental label information EUH208 Contains: dihydro-3-(tetrapropenyl)furan-2,5-dione. May produce an allergic reaction.

Contains SAFEBRAKE 6 M (DOT 4)

2.3. Other hazards

Not applicable.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

SAFEBRAKE 6 M (DOT 4) 95-100%

CAS number: -

Classification Repr. 2 - H361

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.

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 aiders First 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.

 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.



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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 Not flammable. Heating causes rise in pressure with risk of bursting.

Hazardous combustion products Oxides of carbon. BOx

5.3. Advice for firefighters

Protective actions during

firefighting

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

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 Stop the leakage source if it can be done without risk. Limit spillage to prevent further contamination of

soil, surface or ground water.Remove any spilled material as soon as possible by following the precautions in the section Exposure Controls / Personal Protection.Use suitable techniques such as non-flammable absorbent materials or pumping.When possible or appropriate, remove the contaminated soil from the area.Place contaminated products in disposable boxes and dispose of in accordance with regulations.If a heated material is spilled, allow it to cool before handling with disposal methods.

6.2. Environmental precautions

Environmental precautions Do 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.

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. Do not handle broken packages without 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.

Advice on general occupational

hygiene

Persons susceptible to allergic reactions should not handle this product. When using do not eat, drink or smoke. Eye wash facilities and emergency shower must be available when handling this product.

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.

Storage class Not applicable.

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)

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







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.

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.



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

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

occurs.

Thermal hazards If there is a risk of contact with hot product, all protective equipment worn should be suitable for use with

high temperatures.

Environmental exposure controls Residues and empty containers should be taken care of as hazardous waste according to local and

national provisions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Liquid.

Colour Green

Odour Characteristic.

Odour threshold No information available.

pH 7 - 11,5

Melting point No information required.

Initial boiling point and range No information available.

Flash point No information available.

Evaporation rate No information available.

Evaporation factor No information available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or

Auto-ignition temperature

explosive limits

Vapour pressure

No information available.

No information available.

No information available

Other flammability No information available.

Vapour density No information available.

Relative density 0,96 - 1,16 g/cm3 @ 15,6°C

Bulk density

No information available.

Solubility(ies)

No information available.

Partition coefficient No information available.

Decomposition Temperature No information available.

Viscosity No information required.

Explosive properties Not applicable.

Explosive under the influence of a Not considered to be explosive.

flame

Oxidising properties Does not meet the criteria for classification as oxidising.



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

Particle characteristic

9.2. Other information

Other information No information required. Refractive index No information available. Particle size No information available. Molecular weight No information available. Volatility No information available Saturation concentration No information available. No information available. Critical temperature Volatile organic compound No information 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.

10.6. Hazardous decomposition products

Hazardous decomposition

products

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

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: LD₅₀ 2900 mg/kg, Oral, Rat



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 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 May cause sensitation or allergic reactions.

Animal data No specific test data are available.

Human skin model test No specific test data are available.

Extreme pH No specific test data are available.

Serious eye damage/irritation

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

Serious eye damage/irritation Product includes a compound which may cause eye irritation.

Respiratory sensitisation

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

Respiratory sensitisationThere is no evidence that the product can cause respiratory hypersensitivity.

Skin sensitisation

Summary Does not meet the classification criteria.

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

Germ cell mutagenicity

Summary It is not expected to cause genetic damage in the light of current data.

Genotoxicity - in vitro

No specific test data are available.

Genotoxicity - in vivo

No specific test data are available.

Carcinogenicity

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

Carcinogenicity 2,2'-oxybisethanol,diethylene glycol: NOAEL 1160- 1210 mg/kg, bw/day, Oral, Rat

Target organ for carcinogenicity No specific target organs known.

IARC carcinogenicity Not listed.

NTP carcinogenicity Not listed.

Reproductive toxicity

SummaryThere is no test data indicating that this product has a toxic effect on the reproductive system.

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



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

Reproductive toxicity -

This substance has no evidence of toxicity to reproduction.

development

Specific target organ toxicity - single exposure

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

STOT - single exposure 2,2'-oxybisethanol,diethylene glycol: NOAEL 100 mg/kg, bodyweight, Oral, Rat NOAEL 3549 mg/kg,

bodyweight, mouse, Dermal, Rat, Rabbit

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 2,2'-oxybisethanol,diethylene glycol: NOAEL 100 mg/kg, bodyweight, (225 days), Oral, Rat, mammalian

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.

Acute and chronic health hazards There is not enough data.

Route of exposure There is no available data.

Target organsNo specific target organs known.Medical symptomsNo specific tes data are available.

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 There is not enough data.

Acute aquatic toxicity

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



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

Acute toxicity - aquatic

invertebrates

No information required.

Acute toxicity - aquatic plants No information required. Acute toxicity - microorganisms No information required. Acute toxicity - terrestrial No information required.

Chronic aquatic toxicity

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

Chronic toxicity - fish early life

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

Persistence and degradability Based on available information, the classification criteria are not met.

Phototransformation No information available. Stability (hydrolysis) No information available. Biodegradation No information available. Biological oxygen demand No information available. Chemical oxygen demand No information available.

12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient No information available.

12.4. Mobility in soil

Mobility Uygun bilgi bulunmamaktadır.

Adsorption/desorption coefficient No information available. No information available. Henry's law constant Surface tension No information available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

12.6 Endocrine disrupting

properties



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

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.

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).

14.1. UN number

UN number or ID number

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.

Alliex II of MARPOL 73

the IBC Code

Revision date: 27/02/2024 Revision: 6 Supersedes date: 17/06/2011



HIDROLIK FREN YAGI (DOT4)

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

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

Abbreviations and acronyms used TWA: Workplace exposure limits

UZEM: National Poison Information Center in the safety data sheet

ATE: Acute Toxicity Estimate. CAS: Chemical Abstracts Service.

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

IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods. LC₅₀: 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. NOAEL: No Observed Adverse Effect Level.

Classification abbreviations and

acronyms

Eye Dam. = Serious eye damage Acute Tox. = Acute toxicity Eye Irrit. = Eye irritation

Skin Sens. = Skin sensitisation

Aquatic Chronic = Hazardous to the aquatic environment (chronic)

General information Only trained personnel should use this material. 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. 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.



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

Classification procedures according to Regulation (EC)

1272/2008

EUH208: Supplier information

Training advice Untrained personnel should not use.

Revision comments Revised formulation.

Issued by Ece Yigit Chemical Assessment Specialist (Certificate No: KDU01.30.08 18.02.2028)

Revision date 27/02/2024

Revision

Supersedes date 17/06/2011

SDS number 10096

SDS status Approved.

Hazard statements in full H361 Suspected of damaging fertility or the unborn child.

H361 Suspected of damaging fertility or the unborn child if swallowed.