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

1.1 Product identifier	HİDROLİK FREN YAĞI DOT 4
1.2 Relevant identified uses of the substance or mixture and uses advised against	Identified uses: Brake Fluid
1.3 Details of the supplier of the safety data sheet	GÜZEL ENERJİ AKARYAKIT A.Ş. 10013 Sokak No: 6 A.O.S.B. Çiğli / İZMİR Tel: 0 232 328 10 36 Faks: 0 232 328 20 82 e-mail : moillaboratuvar@oyakpetrol.com.tr
1.4 Emergency telephone number	Güzel Enerji Akaryakıt A.Ş. : 0 232 328 10 36 UZEM (National Poison Consultancy Center): 114

SECTION 2 : HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Eye Irrit. 2 H319; STOT RE 2 H373

2.2 Label elements

Label elements according to Regulation (EC) No 1272/2008

Pictograms:

Signal Words : Warning

Hazard Statements:

H319 : Causes serious eye irritation.
H373 : May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements:

P260 : Do not breathe dust/fume/gas/mist/vapours/spray.
P280 : Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.
P337+P313 : If eye irritation persists: Get medical advice/attention.
P501 : be included on the label of a substance .

2.3 Other hazards

Physical / Chemical Hazards : No significant hazards.

Health Hazards : Reproductive toxicity, Category 2

Environmental Hazards : No significant hazards

SECTION 3 : COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances
Not Applicable

3.2 Mixtures

Chemical Composition	CAS No	EC No	Concentration	Classification
Triethylene Glycol Monobutyl Ether	143-22-6	205-592-6	20-45%	Eye Dam. 1, H318
Diethylene glycol	111-46-6	203-872-2	10-25%	Akut Tox. 4- H302 STOT RE 2, H373
Diethylene glycol monomethyl ether	111-77-3	203-906-6	0-<3%	Regulation of reprotoxicity 2, H361d
Diethylene glycol monobutyl ether	112-34-5	203-961-6	0-<3%	Eye Irrit. 2, H319

Additional information:
The Full Text for all Hazard Statements are Displayed in Section 16

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

EYE CONTACT : Rinse the eyelids immediately with plenty of water for 15 minutes outdoors. Get medical attention if irritation or symptoms persist

SKIN CONTACT : Wash skin with soap and water. Get medical attention if irritation or symptoms persist.

INHALATION: Move exposed person to fresh air. Get medical attention if irritation or symptoms persist.

INGESTION: Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if irritation or symptoms persist.

4.2 Most important symptoms and effects, both acute and delayed

No information available

4.3 Indication of any immediate medical attention and special treatment needed

Notes to doctor/physician: Treat symptomatically

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, dry powder, carbon dioxide or water (fog or fine spray).

Unsuitable extinguishing media : Water jets (these can be used to cool adjacent containers).

5.2 Special hazards arising from the substance or mixture

In case of fire, toxic gases may be formed. Carbon monoxide (CO). Carbon dioxide (CO2).

5.3 Advice for firefighters

Containers close to the fire place should be taken to another location immediately or cooled with water. Avoid breathing fire vapors. If it is possible to do without any danger, remove the containers from the fire area. Note that there is a risk of fire again. Collect firefighting waters by pulling a barrier around.

Closed areas, by trained personnel using fire protective clothing and oxygen mask deflated.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Use personal protective equipment.

6.2 Environmental precautions

Protect drains from spills and prevent entry of product.

6.3 Methods and material for containment and cleaning up

Scrape up bulk of solid material and remove liquid with sand or other suitable inert absorbent material. Spilled product should be isolated from sources of ignition, good ventilation should be provided. Recovery of large spillages should be done by specialist personel.

6.4 Reference to other sections

For guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet.
For guidance on disposal of spilled material see Chapter 13 of this Safety Data Sheet.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

It should work well in the working environment.
Skin contact should be avoided and hygienic rules should be applied.
Avoid eating, drinking and smoking while using. Wash hands thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed. Store in a cool, dry and well-ventilated area.
Suitable packaging containers: Soft / stainless steel tanks equipped with steel drums
Unsuitable containers: Lined tanks or jerricans.

7.3 Specific end use(s)

Not applicable

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure Limit Values:

Matter	Standard	TWA (8 hour)		STEL (15 minute)		Note
Diethylene glycol monomethyl ether	-	50,1 mg/m3	10 ppm	-	-	Skin
Diethylene glycol monobutyl ether	-	67,5 mg/m3	10 ppm	101,2 mg/m3	15 ppm	-

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Provide adequate ventilation in the work area.

8.2.2 Individual protection measures, such as personal protective equipment

Eye protection

If contact is likely safety glasses with side shields are recommended.

Skin protection

Protective clothing should be used.

Hand protection

Chemical-resistant gloves should be used.
Recommended gloves: Butyl rubber, Natural rubber, Nitrile rubber and PVC.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

8.2.3 Environmental exposure controls

Take appropriate measures to fulfill the requirements of relevant environmental protection legislation.
Do not allow the material to interfere with water pipes, lacrimation and soil.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance **:** Clear, Liquid

Colour **:** Green

Odour **:** Characteristic

Odour Threshold **:** Data not available

pH **:** 7 – 11,5

Melting / Pour Point **:** < -50'C

Initial boiling point and boiling range : > 230'C

Flash Point 'C **:** 93 'C (Method: ASTM D92, Cleveland open cup).)

Evaporation Rate **:** Data not available

Flammability (solid, gas) **:** Data not available

Upper / Lower Flammability Limits: Data not available

Vapour Pressure **:** < 2 milibars

Vapour Density **:** Data not available

Density, 15'C **:** 1,06 g/ml

Solubility in Water **:** Complete

Partition Coefficient **:** <2.0

Auto-ignition Temperature **:** Data not available

Decomposition Temperature : > 300'C

Viskozite 20'C **:** 5-10 mm^2/s

Explosive properties **:** It is not explosive.

Oxidizing properties **:** It is not oxidizing.

9.2 Other information

Data not available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Harmful reactions do not occur when stored and handled as specified.

10.2 Chemical stability

Stabile

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

It should not be distilled until dry, without peroxide formation test.

10.5 Incompatible materials

Acids, bases, oxidizers

10.6 Hazardous decomposition products
There is no known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

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

Skin corrosion / irritation
Based on the available data, the classification criteria are not met.

Serious eye damage / eye irritation
Causes serious eye irritation.

Sensitization of the respiratory / skin
Based on the available data, the classification criteria are not met.

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

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

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

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

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

Specific target organ toxicity after single exposure
Based on the available data, the classification criteria are not met.

Specific target organ toxicity after repeated exposu (sub-acute / sub-chronic)
May cause damage to organs through prolonged or repeated exposure.

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

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

LC50 – Fish, Oncorhynchus Mykiss ≥100 mg/l – 96 hour

12.2 Persistence and degradability

The product is biodegradable by nature and is expected to biodegrade easily based on the components.
OECD 302B (Zahn Wellans / EMPA) = 100% elimination on day 21.

12.3 Bioaccumulative potential

It is not expected to accumulate biologically.
Log POW ≤2.0 for all major components

12.4 Mobility in soil

It dissolves in water and is divided into an aqueous phase. Evaporation from water to air is not expected. It is mobile in soil until it breaks.

12.5 Results of PBT and vPvB assessment

No PBT and no vPvB.

12.6 Other adverse effects

/

Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of by incineration or other suitable means under conditions approved by the local authority or via licensed waste disposal contractor.

Waste no time to be spilled to the environment and waterways.
Dispose of packaging or containers in accordance with local regional national and international regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

Not classified as hazardous for transport (ADR/RID, ADNR, IMDG, ICAO/IATA)

14.2 UN proper shipping name

Not classified as hazardous for transport (ADR/RID, ADNR, IMDG, ICAO/IATA)

14.3 Transport hazard class(es)

Not classified as hazardous for transport (ADR/RID, ADNR, IMDG, ICAO/IATA)

14.4 Packing group

Not classified as hazardous for transport (ADR/RID, ADNR, IMDG, ICAO/IATA)

14.5 Environmental hazards

Not classified as hazardous for transport (ADR/RID, ADNR, IMDG, ICAO/IATA)

14.6 Special precautions for user
Not applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

SECTION 15: REGULATORY INFORMATION

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

Applicable EU Directives and Regulations:

Regulation (EC) No 1907/2006 - REACH
Regulation No 1272/2008 – CLP (Regulation on classification, labelling and packaging)
Commission Regulation (EU) 2015/830
ECHA Guidance on the compilation of safety data sheets

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

ADR	: International Carriage of Dangerous Goods by Road
ADNR	: Carriage of Dangerous Goods by Inland Waterways
RID	: Regulations Relating to International Carriage of Dangerous Goods by Rail
IMDG	: International Maritime Dangerous Goods
ICAO-TI	: International Civil Aviation Organization - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IATA	: International Air Transport Association
ACGIH	: American Conference of Governmental Industrial Hygienists
ASTM	: American Society for Testing and Materials
CAS	: Chemical Abstracts Service
GHS	: Globally Harmonised System of Classification and Labelling of Chemicals
OEL	: Occupational Exposure Limit
TWA	: Time-Weighted Average.
STEL	: Short term exposure limit
PBT	: Persistent, Bioaccumulative and Toxic
vPvB	: very Persistent and very Bioaccumulative
MARPOL 73/78	: International Convention for the Prevention of Pollution From Ships

Wording of the H-statements in section 2 and 3:

H319	: Causes serious eye irritation
H373	: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H318	: Causes serious eye damage
H302	: Harmful if swallowed.
H361d	: Suspected of damaging the unborn child.

Full text of other abbreviations

Eye Dam. : Eye Damage
Akut Tox. : Acute Toxicity
STOT RE 2 : Specific Target Organ Toxicity - Repeat exposure
Eye Irrit. : Eye Irritation
Regulation of reprotoxicity : Regulation of reprotoxicity

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