1 . Identification of the substance/preparation and company/undertaking

1.1 Identification of the substance or mixture

Product name Hysol G

SDS no. 453604

1.2 Use of the substance/ mixture

Metalworking fluid - soluble.
For specific application advice see appropriate Technical Data Sheet or consult our company representative.

1.3 Company/undertaking identification

Supplier

BP Petrolleri A.Ş.
Sarı Kanarya Sokak No:14 K2 Plaza
34742 Kozyatağı, İstanbul
TURKEY

Telephone: 0216 5712800
Fax: 0216 5712950

E-mail address MSDSadvice@bp.com

1.4 Emergency telephone number

EMERGENCY TELEPHONE NUMBER

CASTROL DIRECT 0212 473 77 37
Carechem: +44 (0) 1235 239 670 (24 hours)

2. Composition/information on ingredients

Substance/preparation

Highly refined mineral oil, emulsifiers and additives.

Chemical name	CAS no.	%	EINECS / ELINCS.	Classification	
Fatty acids, reaction products with ethanolamine and EO	Proprietary	5 - 10		Xi; R36	[1]
Amine neutralised carboxylic acids	Not available.	5 - 10		Xi; R36/38	[1]
N,N'-Methylenebismorpholine	5625-90-1	1 - 5	227-062-3	Xn; R22 C; R34	[1]
ethanediol	107-21-1	1 - 5	203-473-3	Xn; R22	[1] [2]
Mixed carboxymethyl polyethylene glycol alkyl ethers	Proprietary	1 - 5		Xi; R41, R38	[1]
Boric acid	10043-35-3	1 - 5	233-139-2	Repr. Cat. 2; R60, R61	[1] [2]
1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole	35554-44-0	0.1 - 1	252-615-0	Xn; R20/22 Xi; R41 N; R50/53	[1]
Alcohols, C11-14-iso-,C13-rich	68526-86-3	0.1 - 1	271-235-6	N; R50	[1]

See Section 16 for the full text of the R-phrases declared above.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] PBT-substance

[4] vPvB-substance

Occupational exposure limits, if available, are listed in Section 8.

3 . Hazards identification

This preparation is classified as dangerous according to Directive 1999/45/EC as amended and adapted.

Human health hazards Irritating to eyes.

Environmental hazards Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Additional hazards Defatting to the skin.

See sections 11 and 12 for more detailed information on health effects and symptoms and environmental hazards.

4 . First-aid measures

Eye contact
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.

Skin contact
Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.

Inhalation
If inhaled, remove to fresh air. Get medical attention if symptoms appear. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Ingestion
Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Get medical attention if symptoms occur. Wash out mouth with water if person is conscious.

Notes to physician
In case of inhalation of decomposition products in a fire, symptoms may be delayed.
The exposed person may need to be kept under medical surveillance for 48 hours.
Treatment should in general be symptomatic and directed to relieving any effects.

5 . Fire-fighting measures

Extinguishing media

Suitable
In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray.

Not suitable
Do not use water jet.

Hazardous decomposition products
Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

Unusual fire/explosion hazards
In a fire or if heated, a pressure increase will occur and the container may burst.

Special fire-fighting procedures
Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. This material is harmful to aquatic organisms.

Protection of fire-fighters
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

6 . Accidental release measures

Personal precautions - For non-emergency personnel
Contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Floors may be slippery; use care to avoid falling. Do not breathe vapour or mist. Ensure good ventilation. Put on appropriate personal protective equipment.

Personal precautions - For emergency responders
Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".

Environmental precautions
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material.

Large spill
Immediately contact emergency personnel. Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Contaminated absorbent material may pose the same hazard as the spilt product. Dispose of via a licensed waste disposal contractor.

Small spill
Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Reference to other sections
See Section 1 for emergency contact information.
See Section 5 for firefighting measures.
See Section 8 for information on appropriate personal protective equipment.
See Section 12 for environmental precautions.
See Section 13 for additional waste treatment information.

7 . Handling and storage

7.1 Handling

Put on appropriate personal protective equipment. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container. Empty containers retain product residue and can be hazardous. During metal working, solid particles from workpieces or tools will contaminate the fluid and may cause abrasions of the skin. Where such abrasions result in a penetration of the skin, first aid treatment should be applied as soon as reasonably possible. The presence of certain metals in the workpiece or tool, such as chromium, cobalt and nickel, can contaminate the metalworking fluid and as a result may induce allergic skin reactions. Avoid prolonged or repeated contact with skin. Evaporation of water from soluble cutting fluids during use may lead to an increase in concentration which may result in the development of skin conditions due to irritation and defatting. It is important to monitor fluid strength on a regular basis with a refractometer and maintain it at the recommended concentration. Lubricants from other sources and other contaminants should be minimised. Swarf and other debris should be removed. To maintain optimum performance and minimise bacterial spoilage, machine tool coolant systems should be cleaned on a regular basis.

Handling - Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Storage

Store and use only in equipment/containers designed for use with this product. Keep away from heat and direct sunlight. Protect from freezing. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10).

7.3 Specific uses

For specific application advice see appropriate Technical Data Sheet or consult our company representative.

8 . Exposure controls/personal protection

8.1 Occupational exposure limits

Ingredient name	Occupational exposure limits
Base oil - unspecified	**ACGIH TLV (United States).** TWA: 5 mg/m³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction
ethanediol	**TR ISGGM OEL (Turkey). Absorbed through skin.** TWA: 52 mg/m³ 8 hours. Issued/Revised: 12/2003 TWA: 20 ppm 8 hours. Issued/Revised: 12/2003 STEL: 104 mg/m³ 15 minutes. Issued/Revised: 12/2003 STEL: 40 ppm 15 minutes. Issued/Revised: 12/2003
Boric acid	**ACGIH TLV (United States).** STEL: 6 mg/m³ 15 minutes. Issued/Revised: 1/2005 Form: Inhalable fraction TWA: 2 mg/m³ 8 hours. Issued/Revised: 1/2005 Form: Inhalable fraction

ACGIH TLVs

Base oil - unspecified	**ACGIH TLV (United States).** TWA: 5 mg/m³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction
ethanediol	**ACGIH TLV (United States).** C: 100 mg/m³ Issued/Revised: 5/1995 Form: Aerosol
Boric acid	**ACGIH TLV (United States).** STEL: 6 mg/m³ 15 minutes. Issued/Revised: 1/2005 Form: Inhalable fraction TWA: 2 mg/m³ 8 hours. Issued/Revised: 1/2005 Form: Inhalable fraction

For information and guidance, the ACGIH values are included. For further information on these please consult your supplier.

Whilst specific OELs for certain components may be shown in this section, other components may be present in any mist, vapour or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

This product contains a preservative that may release trace amounts of formaldehyde during use.

8.2 Exposure controls

8.2.1 Occupational exposure controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits.
All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.
Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.
The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

8.2.1.1	**Respiratory protection**	Respiratory protective equipment is not normally required where there is adequate natural or local exhaust ventilation to control exposure. In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
8.2.1.2	**Hand protection**	Wear protective gloves if prolonged or repeated contact is likely. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
8.2.1.3	**Eye protection**	Safety glasses with side shields.
8.2.1.4	**Skin protection**	Use of protective clothing is good industrial practice. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.
8.2.2	**Environmental exposure controls**	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

9.1	**General information**	
9.1.1	**Appearance**	
	Physical state	Liquid.
	Colour	Amber.
9.1.2	**Odour**	Mild
9.2	**Important health, safety and environmental information**	
	Flash point	Closed cup: >100°C (>212°F) [Estimated. Water content interferes with flash point determination.]
	pH	9.3 [Conc. (% w/w): 3%]
	Boiling point / range	>100°C (>212°F)
	Pour point	<0 °C
	Density	>1000 kg/m³ (>1 g/cm³) at 20°C
	Solubility	Emulsifies in water.
9.3	**Other information**	Not available.

10 . Stability and reactivity

	Stability	The product is stable.
10.1	**Conditions to avoid**	High temperatures
	Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
10.2	**Materials to avoid**	Reactive or incompatible with the following materials: oxidising materials. Slightly reactive or incompatible with the following materials: acids.
10.3	**Hazardous decomposition products**	Combustion products may include the following: carbon oxides (CO, CO_2) (carbon monoxide, carbon dioxide) nitrogen oxides (NO, NO_2 etc.) Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 . Toxicological information

Chronic toxicity

Chronic effects Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Effects and symptoms

Eyes Irritating to eyes.

Skin Defatting to the skin. May cause skin dryness and irritation.

Inhalation Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. May cause irritation to eyes, nose and throat due to exposure to vapour, mists or fumes.

Ingestion Ingestion of large quantities may cause nausea and diarrhoea.

12 . Ecological information

12.1 Ecotoxicity

12.2 Environmental hazards Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.3 Mobility Liquid. Emulsifies in water.

12.4 Persistence/degradability Expected to be biodegradable.

12.5 Bioaccumulative potential

Other ecological information Not available.

13 . Disposal considerations

Disposal considerations / Waste information The generation of waste should be avoided or minimised wherever possible. Waste product residues should not be disposed of via the sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Special precautions Diluted Fluid The spent diluted fluid comprises a relatively stable emulsion. Dispose of via an authorised person/ licensed waste disposal contractor or by other suitable waste treatment techniques (e.g. emulsion splitting, coagulation and filtration) approved by the local authority. Spent fluid should never be disposed of down the drain. The aqueous phase should not be discharged into sewage systems unless provided for by local regulations; the non-aqueous phase should be disposed of as undiluted fluid. Note that separated aqueous solutions or effluents may contain metal salts as well as traces of oil and must be checked for conformity in these respects against consents given by the authorities before disposal. Further treatment may be required.

Refer to all national, regional, and local regulations for disposal requirements

14 . Transport information

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

15 . Regulatory information

Classification and labelling have been performed according to EU directive 1999/45/EC as amended and adapted and Regulation on classification, packaging and labelling of Hazardous materials and preparations (26.12.2008-27092).

Label requirements

Hazard symbol or symbols

Indication of danger Irritant

Risk phrases R36- Irritating to eyes.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.
S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

Other regulations

Conforms to the regulation on preparation and distribution of safety data sheets on hazardous materials and preparations 26.12.2008 – 27092.

REACH Status	For the REACH status of this product please consult your company contact, as identified in Section 1.
United States inventory (TSCA 8b)	At least one component is not listed.
Australia inventory (AICS)	At least one component is not listed.
Canada inventory	At least one component is not listed.
China inventory (IECSC)	Not determined.
Japan inventory (ENCS)	At least one component is not listed.
Korea inventory (KECI)	At least one component is not listed.
Philippines inventory (PICCS)	At least one component is not listed.

16 . Other information

Full text of R-phrases referred to in sections 2 and 3

R60- May impair fertility.
R61- May cause harm to the unborn child.
R22- Also harmful if swallowed.
R20/22- Also harmful by inhalation and if swallowed.
R34- Causes burns.
R41- Risk of serious damage to eyes.
R36- Irritating to eyes.
R38- Irritating to skin.
R36/38- Irritating to eyes and skin.
R50- Very toxic to aquatic organisms.
R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

History

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Prepared by	Product Stewardship

Notice to reader

Indicates information that has changed from previously issued version.

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

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