

Safety data sheet as per Commission Regulation (EU) 2015/830

Product: Hexylene glycol



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

1.1 Product identifier

Trade name	Hexylene glycol (HG)
Chemical Name	2-methylpentane-2,4-diol
CAS Number	107-41-5
EC Number	203-489-0
Pre-Registration number (REACH)	17-2119446645-33-0000

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

Relevant identified uses Used in textile dye vehicles; as a solvent in petroleum refining; as a cement additive; as a chemical intermediate.

Uses identified against Not for use other than those specified

1.3 Details of the supplier of the safety data sheet:

Manufacturer	Prasol Chemicals Pvt. Ltd., Prasol House, Plot No.A-17/2/3, T.T.C. Indl. Area, Khairne M.I.D.C., Navi Mumbai - 400 710. Maharashtra, India.
Telephone	+91-22-27782555
Telefax	+91-22-27782430
e-mail address	sales@prasolchem.com; inquiry@prasolchem.com

1.4 Emergency telephone number

Telephone	+91-22- 27782555
Language	English

◆ SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Skin Irritation	Category 2	H315	Causes skin irritation
Eye Irritation	Category 2	H319	Causes serious eye irritation

Information concerning particular hazards for human and environment: No further information

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008 (CLP)

Hazard pictograms



GHS07

Signal word Warning

Hazard statements H315 Causes skin irritation
H319 Causes serious eye irritation

Precautionary statements

General	P103	Read label before use.
Prevention	P264	Wash hands thoroughly after handling.
	P273	Avoid release to the environment.
	P280	Use protective gloves and eye protection.
Response	P302+P352	IF ON SKIN: Wash with plenty of water.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
	P321	Specific treatment: wash with plenty of water.
	P332+P313	If skin irritation persists: Get medical attention
	P337+P313	If eye irritation persists: Get medical attention
	P362+P364	Take off contaminated clothing and wash it before reuse.
Storage	P403	Store in a well-ventilated area.
Disposal	P501	Dispose of contents and container in accordance with national regulations

2.3 Other hazards

Not a PBT, vPVB substance according to the criteria of REACH regulation

Safety data sheet as per Commission Regulation (EU) 2015/830

Product: Hexylene glycol



◆ SECTION 3: Composition/information on ingredients

3.1 Substances

Ingredient	CAS No.	EC No.	Concentration (%)
2-methylpentane-2,4-diol	107-41-5	203-489-0	99 min

Additional information:

Molecular Formula	C ₆ H ₁₄ O ₂
Molecular Weight	118.06

◆ SECTION 4: First aid measures

4.1 Description of first aid measures

General information	Take off all contaminated clothing immediately.
After inhalation	If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If unconscious, evaluate the need for artificial respiration. Get immediate medical attention
After skin contact	Wash off with plenty of water immediately, seek medical advice if necessary.
After eye contact	Rinse with plenty of water immediately and seek medical advice.
After swallowing	Do not induce vomiting and seek medical advice immediately.
4.2 Most important symptoms and effects, both acute and delayed	Irritant effects, cough, shortness of breath, dizziness, unconsciousness, headache, convulsions
4.3 Indication of any immediate medical attention and special treatment needed	Treat symptomatically and supportively

◆ SECTION 5: Firefighting measures

5.1 Extinguishing media	
Suitable extinguishing media	CO ₂ , dry powder, foam or water spray
Unsuitable extinguishing media	water jet
5.2 Special hazards arising from the substance or mixture	Combustible liquid May form toxic carbon oxides if burning. Closed container may rupture if strongly heated. Vapours can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint.
5.3 Advice for firefighters	Cool closed containers exposed to fire with water spray. Wear self-contained breathing apparatus.

◆ SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures	Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation
6.2 Environmental precautions	Do not allow to enter sewers, surface or ground water.
6.3 Methods and material for containment and cleaning up	Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Suitable binder: sand
6.4 Reference to other sections	Section 8 for information on personal protection equipment. Section 13 for disposal information

◆ SECTION 7: Handling and storage

7.1 Precautions for safe handling	If possible, use material transfer, metering and blending plants that are closed. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
7.2 Conditions for safe storage, including any incompatibilities	
Advice on protection against fire and explosion	Follow normal measures for preventive fire protection.
Storage	Store in a cool place. Keep container tightly closed in a dry and well-ventilated place. Residual vapours might explode on ignition; do not apply heat, cut, drill and grind or weld on or near the container. Mechanical exhaust required.

Safety data sheet as per Commission Regulation (EU) 2015/830

Product: Hexylene glycol



Advice on common storage	Packaging material: - Recommended: Ordinary steel, Stainless steel
Storage stability	Observe prohibition against storing together!
7.3 Specific end use(s)	Stable under recommended storage conditions No further relevant information available

◆ SECTION 8: Exposure controls/personal protection

8.1 Control parameters	Occupational Exposure Limit	25ppm TLV
8.2 Exposure controls	Appropriate engineering controls	If possible, use material transfer, metering and blending plants that are closed.
	Personal protective equipment	
	Eye/ face protection	closed goggles, face shield
	Skin protection	
	Hand protection	Type of material Thickness Breakthrough time
		Butyl-rubber 0.5 mm > 480 min
		Polychloroprene (PCP) 0.5 mm 110 min
	Body protection	Boots, body suit
	Respiratory protection	Respiratory equipment with suitable filter or a self-contained respiratory apparatus.
	Thermal hazards	Combustible liquid; possibility of decomposition on excess heating
	Industrial hygiene	Do not inhale vapours / aerosols. Avoid contact with skin and eyes. Remove immediately all contaminated clothing. Use disposable clothing if appropriate. Smoking, eating and drinking should be prohibited in the application area.

◆ SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties	
Appearance	Colourless liquid
Odour	mild sweetish
Odour threshold	50ppm
pH	6.0-8.0 at 118.2g/L at 25°C
Melting point	-50°C
Boiling point	198.5°C
Flash point	93°C (Closed cup)
Evaporation rate	0.007 (butyl acetate = 1)
Flammability (solid, gas)	not applicable (product is a liquid)
Flammability limits	
	Lower 1.0%
	Upper 9.9%
Vapour pressure	0.05mmHg at 20°C
Vapour density	4.08 (air =1)
Relative density	0.922 at 20°C
Solubility in water	68.78g/l at 25°C (very soluble)
Partition coefficient	log Pow = 0
Ignition temperature	306°C
Decomposition temperature	no data available
Viscosity at 20°C	34mPa.s
Explosive properties	no explosive properties however containers may explode in fire
Oxidizing properties	no oxidizing properties
9.2 Other information	no further data
	Heat of Combustion 29875 kJ/kg at 25°C
	Heat of Vaporization 435 kJ/kg

◆ SECTION 10: Stability and reactivity

10.1 Reactivity	No hazardous reaction when handled and stored according to provisions.
10.2 Chemical stability	Under storage at normal ambient temperatures (-40°C to +40°C), the

Safety data sheet as per Commission Regulation (EU) 2015/830
Product: Hexylene glycol



	product is stable.
10.3 Possibility of hazardous reactions	No known hazardous reactions if used as directed
10.4 Conditions to avoid	Avoid excessive heat and sources of ignition
10.5 Incompatible materials	Strong oxidizing agents, Strong acids, Acid anhydrides
10.6 Hazardous decomposition products	Thermal decomposition products- carbon oxides

◆ **SECTION 11: Toxicological information**

11.1 Information on toxicological effects

Acute toxicity

LD50	oral	rat	>2000mg/kg bw	not classified
LC50	inhalation	rat	50-60ppm	not classified
LD50	Dermal	rabbit	>2000ml/kg bw	not classified

Skin irritation

slightly irritating

Serious eye irritation

slightly irritating

Respiratory or skin sensitization

No sensitizing effects known

Germ cell mutagenicity

non mutagenic (Ames test)

Carcinogenicity

non-carcinogenic

Reproductive toxicity

no adverse effect on reproduction (rat)

STOT-single exposure

irritating to eye and skin

STOT-repeated exposure

NOAEL 450mg/Kg bw

◆ **SECTION 12: Ecological information**

12.1 Toxicity

Aquatic toxicity

Toxicity to fish	LC50	96h	8690mg/L	<i>Pimephales promelas</i>
Toxicity to aquatic invertebrates	EC50	48h	5410mg/L	<i>Daphnia magna</i>
Toxicity to aquatic algae and cyanobacteria	EC50	72h	>429mg/L	<i>Pseudokirchneriella subcapitata</i>
Toxicity to microorganisms	NOEC	10d	200mg/L	<i>Pseudomonas aeruginosa</i>

12.2 Persistence and degradability

Biodegradation

readily biodegradable (80% in 28days)

12.3 Bioaccumulative potential

very low potential for bioaccumulation

12.4 Mobility in soil

log Koc = 0; low possibility for sorption in soil

12.5 Results of PBT and vPvB assessment

Not a PBT, vPvB substance according to the REACH regulation

12.6 Other adverse effects

No further information available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Observe all federal, state, and local environmental regulations.
 Contact a licensed professional waste disposal service to dispose of this material.
 Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
 Do not dispose in sewage.

◆ **SECTION 14: Transport information**

	ADR/RID	IMDG	ICAO/IATA
14.1 UN Number	-	-	-
14.2 UN proper shipping name	not hazardous for transport		
14.3 Transport hazard class	-	-	-
14.4 Packaging group	-	-	-
14.5 Environmental hazards	not environmentally hazardous, not a marine pollutant		
14.6 Special precautions for the user	Combustible liquid; Flash point 93°C (closed cup)		
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	See regulatory information for transport approval		

SECTION 15: Regulatory information

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

Major accident hazard Seveso III no

International Chemical Inventory Status

USA (TSCA) listed
Canada (DSL) listed
Australia (AICS) listed
Japan (MITI) listed
Korea (KECL) listed
Philippines (PICCS) listed
China listed
New Zealand listed
Taiwan listed

15.2 Chemical safety assessment A Chemical Safety Assessment will be carried out at the time of REACH registration

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Further information:

Sections in which changes have been made since the last version are marked with a diamond ♦ in the left hand margin.

Abbreviations and acronyms in English language:

ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR European Agreement concerning the International Carriage of Dangerous Goods by Road
AICS Australian Inventory of Chemical Substances
CAS Chemical Abstracts Service (division of the American Chemical Society)
CLP Classification for Labeling and Packaging
DSL Domestic Substances List
EC European Commission
EC50 Half maximal effective concentration
EINECS European Inventory of Existing Commercial Chemical Substances
GHS Globally Harmonized System of Classification and Labeling of Chemicals
IATA International Air Transport Association
IBC International Bulk Chemical
ICAO International Civil Aviation Organization
IMDG International Maritime Code for Dangerous Goods
KECL Korea Existing Chemicals List
KOC Soil adsorption coefficient
KOW Partition Coefficient octanol-water
LC50 Lethal concentration, 50 percent
LD50 Lethal dose, 50 percent
MARPOL International Convention for the Prevention of Pollution from Ships
MITI Ministry of International Trade and Industry
NOEC No Observed Effect Concentration
PBT Persistent, bioaccumulative and toxic substances
PICCS Philippine Inventory of Chemicals and Chemical Substances
RID Regulations Concerning the International Transport of Dangerous Goods by Rail
STOT Specific target organ toxicity
TSCA Toxic Substances Control Act
UN United Nations
vPVB (very) Persistent, (very) Bioaccumulative

Sources

Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

ECHA <https://echa.europa.eu/registration-dossier/-/registered-dossier/14212/1>

Chemid <https://chem.nlm.nih.gov/chemidplus/rn/107-41-5>

HSDB <https://toxnet.nlm.nih.gov/cgi-bin/sis/search/a?dbs+hsdb:@term+@DOCNO+1126>