

SECTION 1: Identification

1.1. Identification

Product form	: Substance
Substance name	: Hexylene Glycol
Chemical name	: 2-Methylpentane-2,4-diol
CAS-No.	: 107-41-5
Formula	: C6H14O2
Synonyms	: 2,4-dihydroxy-2-methylpentane / 2,4-pentanediol, 2-methyl- / 2-methyl-2,4-pentanediol

1.2. Recommended use and restrictions on use

Recommended use	: Industrial use
Restrictions on use	: Food additives, medicinal products

1.3. Supplier

<u>Atlanta Branch Office</u>	<u>Ocoee Branch Office</u>	<u>Spartanburg Branch Office</u>
Whitaker Oil Company	Whitaker Oil Company	Whitaker Chemicals LLC
1557 Marietta Road NW	280 Enterprise Street	405 John Dodd Road
Atlanta, GA 30318	Ocoee, FL 34761	Spartanburg, SC 29303
404-355-8220 (t)	407-656.0088 (t)	864-578-6968 (t)
404-355-2436 (f)	407-877-8335 (f)	864-578-6864 (f)

WEBSITE: www.whitakeroil.com **EMAIL:** SDS@whitakeroil.com

1.4. Emergency telephone number

Emergency number : **CHEMTREC** 800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Flammable liquids	H227	Combustible liquid
Category 4		
Serious eye damage/eye irritation Category 2A	H319	Causes serious eye irritation

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US)	: Warning
Hazard statements (GHS-US)	: H227 - Combustible liquid H315 - Causes skin irritation H319 - Causes serious eye irritation
Precautionary statements (GHS-US)	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking P264 - Wash Skin thoroughly after handling P280 - Wear eye protection, face protection, protective gloves, protective clothing P302+P352 - IF ON SKIN: Wash with plenty of soap and 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 P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse P370+P378 - In case of fire: Use dry sand, dry chemical or alcohol resistant foam for extinction. P403+P235 - Store in a well-ventilated place. Keep cool

Hexylene Glycol

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P501 - Dispose of contents/container in accordance with local, regional, national, and/or international regulations.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	GHS-US classification
Hexylene Glycol (Main constituent)	(CAS-No.) 107-41-5	> 99	Flam. Liq. 4, H227 Eye Irrit. 2A, H319

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove the victim into fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen provided a qualified individual is present.
- First-aid measures after skin contact : Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse or discard if they cannot be thoroughly cleaned. Get medical attention.
- First-aid measures after eye contact : Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present. Get medical attention. If irritation persists, consult an eye specialist.
- First-aid measures after ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. If vomiting occurs nationally, have victim lean forward to reduce risk of aspiration. Rinse mouth with water. Never give anything by mouth to an unconscious person. Get medical attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after eye contact : Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically and supportively.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Use foam, dry chemical, carbon dioxide, water spray, or sand.
- Unsuitable extinguishing media : Do NOT use heavy water stream. Use water to cool exposed containers.

5.2. Specific hazards arising from the chemical

- Fire hazard : Containers may explode in a heat of a fire. Vapors are heavier than air and may collect in low or confined area or spread to a distant source of ignition and flash back. Prevent fire-fighting water from entering environment.
- Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Special protective equipment and precautions for fire-fighters

- Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: seal off low-lying areas. Exposure to fire/heat: have neighborhood close doors and windows.
- Firefighting instructions : Cool tanks/drums with water spray/remove them into safety.
- Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- Emergency Procedure : Wear personal protection equipment. Ensure adequate ventilation. Keep unnecessary personnel away. Avoid contact with skin and eyes. Remove all sources of ignition.

Hexylene Glycol

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Contain released product, pump into suitable containers. Plug the leak, cut off the supply.
Methods for cleaning up : Absorb spill with inert material, then place into a chemical waste container.
Large spills should be collected mechanically (remove by pumping) for disposal.
Wash off with plenty of water, and recover water for disposal.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wash thoroughly after handling. Use with adequate ventilation. Ground and bond containers when transferring material. Earth the equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. No sparking tools should be used. Ensure that eyewash stations and safety showers are close to the workstation. Avoid contact with skin, eyes and clothing. Provide good ventilation in process area to prevent formation of vapor. Ground/bond container and receiving equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Avoid contact with skin and eyes.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Keep away from heat, sparks, flame and other sources of ignition. Store tightly closed container in a cool, dry, well-ventilated area. Store contents under inert gas. Keep under nitrogen.
Storage area : Store in a dry area. Ventilation at floor level. Meet the legal requirements. Store at ambient temperature.
Packaging materials : SUITABLE MATERIAL: steel. stainless steel. carbon steel. aluminum. copper. bronze. synthetic material. glass.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hexylene Glycol (107-41-5)		
ACGIH	Local name	Hexylene glycol
ACGIH	ACGIH TWA (ppm)	25 ppm (Vapor fraction)
ACGIH	ACGIH STEL (mg/m ³)	10 mg/m ³ (Inhalable fraction, Aerosol only)
ACGIH	ACGIH STEL (ppm)	50 ppm (Vapor fraction)
ACGIH	Remark (ACGIH)	Eye & URT irr
NIOSH	NIOSH REL (TWA) (mg/m ³)	125 mg/m ³
NIOSH	NIOSH REL (TWA) (ppm)	25 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. An emergency eye wash/ shower must be accesible to the work area.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hexylene Glycol

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Materials for protective clothing:

GIVE GOOD RESISTANCE: butyl rubber. PVC. neoprene. viton. chloroprene rubber

Hand protection:

Gloves

Eye protection:

Face shield

Skin and body protection:

Protective clothing

Respiratory protection:

Full face mask with filter type A at conc. in air > exposure limit

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Color	: Clear, colorless
Odor	: Mild sweet
Odor threshold	: No data available
pH	: 6.9 – 7.0 (10% m/v)
Melting point / Freezing point	: -50 °C
Boiling point	: 197 °C (1013 hPa)
Flash point	: 93 °C
Relative evaporation rate (butyl acetate=1)	: 1
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: 0.05 mmHg (0.067 hPa) at 20 °C
Relative vapor density at 20 °C	: 4.1
Relative density	: 0.923 (20 °C)
Relative density of saturated gas/air mixture	: 1
Specific gravity / density	: 920 kg/m ³ (20 °C)
Molecular mass	: 118.2 g/mol
Solubility	: Completely miscible (water)
Log Pow	: 0.58 (QSAR)
Auto-ignition temperature	: 306 °C
Decomposition temperature	: No data available
Viscosity, kinematic	: 36.957 mm ² /s
Viscosity, dynamic	: 34 mPa.s (20 °C)
Explosion limits	: 1.30 - 9.00 vol % 52 - 490 g/m ³
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

Saturation concentration	: 0.32 g/m ³
VOC content	: 0 %

Hexylene Glycol

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal use and temperature conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Direct sunlight, extremely high or low temperature, moisture, sources of ignition.

10.5. Incompatible materials

Strong acids, and oxidizers.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Hexylene Glycol (107-41-5)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 420: Acute Oral toxicity – Acute Toxic Class Method, Rat, Male/female, Experimental value)
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male/female, Experimental value)
LD50 dermal rabbit	7890 mg/kg
LC50 inhalation rat (mg/l)	> 0.31 mg/l
LC50 inhalation rat (ppm)	> 66 ppm
ATE US (oral)	3700 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : May cause respiratory irritation.

Specific target organ toxicity – repeated exposure : Not classified

Aspiration hazard : Not classified

Viscosity, kinematic : 36.957 mm²/s

Symptoms/effects after eye contact : Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Ecology - water : Slightly harmful to crustacea. Slightly harmful to fishes. Slightly harmful to algae. Slightly harmful to bacteria.

Hexylene Glycol (107-41-5)	
LC50 fish 1	9450 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value)
EC50 Daphnia 1	5410 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
EC50 other aquatic organisms 1	> 420 mg/l Aquatic plants, 72 h, Green Algae

Hexylene Glycol

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hexylene Glycol (107-41-5)	
LC50 fish 2	12800 mg/l Fish, 96 h, Lepomis macrochirus
ErC50 (algae)	> 429 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value)
NOEC (chronic)	200 mg/l Microorganisms, 10 d, Pseudomonas putida

12.2. Persistence and degradability

Hexylene Glycol (107-41-5)	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.02 g O ₂ /g substance
Chemical oxygen demand (COD)	2.2 g O ₂ /g substance
ThOD	2.3 g O ₂ /g substance
BOD (% of ThOD)	0.01

12.3. Bioaccumulative potential

Hexylene Glycol (107-41-5)	
Log Pow	0.58 (QSAR)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

Hexylene Glycol (107-41-5)	
Surface tension	0.033 N/m
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

- Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
- Product/Packaging disposal recommendations : Do not discharge into surface water. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle by distillation. Remove to an authorized waste incinerator for solvents with energy recovery. Obtain the consent of pollution control authorities before discharging to wastewater treatment plants.

SECTION 14: Transport information

The information in this section is for reference only and should not take the place of a bill of lading specific to an order.

Department of Transportation (DOT)

In accordance with DOT

Not regulated for Transport

Transportation of Dangerous Goods

Transport by sea

Air transport

Hexylene Glycol

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 15: Regulatory information

15.1. US Federal regulations

Hexylene Glycol (107-41-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

Hexylene Glycol (107-41-5)

State or local regulations

U.S. - New Jersey - Right to Know Hazardous Substance List

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

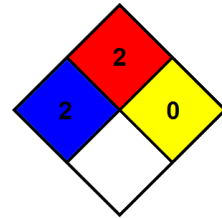
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 06/25/2018

Full text of H-phrases:

H227	Combustible liquid
H319	Causes serious eye irritation

- NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
- NFPA fire hazard : 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.
- NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



SDS US (GHS HazCom 2012)

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. Please be advised revisions to the Safety Data Sheet (SDS) may require a label update. In no event shall Whitaker Oil Company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Whitaker Oil Company has been advised of the possibility of such damages. The vendor assumes no responsibility for injury or damages resulting from the inappropriate alteration or manipulation of this SDS and its contents from that originally submitted by Whitaker Oil Company.