



Material Safety Data Sheet

UNIHIB O

HEALTH	*	2
FLAMMABILITY		2
PHYSICAL HAZARD		0
PERSONAL PROTECTION		

1. Product and Company Identification

Material name	UNIHIB O
Patent Number	Not available
Version No.	3
CAS #	Mixture
Product use	Organic Acid Corrosion Inhibitor
Manufacturer information	Clearwater International L.L.C. 100 Leetsdale Industrial Drive Leetsdale, PA 15056 US CHEMTREC 1-800-424-9300/703-527-3887
Emergency	CHEMTREC 1-800-424-9300/703-527-3887
Supplier information	Universal Well Services, Inc. 18360 Technology Drive Meadville, PA 16335 US

2. Hazards Identification

Emergency overview	Health injuries are not known or expected under normal use. Prolonged exposure may cause chronic effects. Components of the product may be absorbed into the body by inhalation, ingestion and through the skin.
OSHA regulatory status	This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects	
Eyes	Do not get this material in contact with eyes.
Skin	Do not get this material in contact with skin.
Inhalation	Do not breathe dust/fume/gas/mist/vapors/spray.
Ingestion	Do not ingest. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Components of the product may be absorbed into the body by ingestion.
Target organs	Central nervous system. Eyes. Lungs. Respiratory system. Skin.
Potential environmental effects	May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Ethylene Glycol	107-21-1	65 - 100
Isopropyl alcohol	67-63-0	3 - 7





4. First Aid Measures

First aid procedures

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.

Skin contact

Wash off with soap and water. Get medical attention if irritation develops or persists.

Inhalation

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately.

Ingestion

If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice.

General advice

If you feel unwell, seek medical advice (show the label where possible).

5. Fire Fighting Measures

Flammable properties

Combustible by OSHA criteria. Containers may explode when heated. Runoff to sewer may cause fire or explosion hazard.

Extinguishing media**Suitable extinguishing media**

Water fog. Alcohol foam. Polymer foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

Protection of firefighters**Protective equipment and precautions for firefighters**

In the event of fire and/or explosion do not breathe fumes. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Move containers from fire area if you can do it without risk. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

6. Accidental Release Measures

Personal precautions

Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Keep unnecessary personnel away. Stay upwind. Keep out of low areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

Methods for containment

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.



**Methods for cleaning up**

Should not be released into the environment.

Large Spills: Dike far ahead of liquid spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly.

Never return spills in original containers for re-use.

7. Handling and Storage**Handling**

Do not handle or store near an open flame, heat or other sources of ignition. Use only with adequate ventilation. Wash thoroughly after handling. Avoid prolonged exposure.

Storage

Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a closed container away from incompatible materials.

8. Exposure Controls / Personal Protection**Exposure limits****ACGIH****Components****CAS #****TWA****STEL****Ceiling**

Ethylene Glycol

107-21-1

Not established

Not established

100 mg/m³

Isopropyl alcohol

67-63-0

200 ppm

400 ppm

Not established

OSHA**Components****CAS #****TWA****STEL****Ceiling**

Isopropyl alcohol

67-63-0

400 ppm

Not established

Not established

Engineering controls

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Personal protective equipment**Respiratory protection**

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General hygiene considerations

When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties**Appearance**

Liquid.

Color

dark red or purple

Odor

Not available.

Odor threshold

Not available

Physical state

Liquid.

Form

Liquid.

pH

5.5 - 8.5

Melting point

5 °F (-15.45 °C) estimated





Freezing point	Not available
Boiling point	370.4 °F (188 °C) estimated
Flash point	150 °F (65.6 °C)
Evaporation rate	Not available
Flammability	Not available.
Flammability limits in air, upper, % by volume	Not available
Flammability limits in air, lower, % by volume	Not available
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	1.07 - 1.1
Relative density	1.0849 g/cm ³ estimated
Solubility (water)	Not available
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	748.4 °F (398 °C) estimated
Decomposition temperature	Not available
VOC	55.95 % estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Amines. Isocyanates. Strong oxidizing agents. Strong acids. Caustics.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Acute effects	Acute LD50: 2968 mg/kg estimated, Rat, Oral Acute LC50: 1837 mg/l/4h estimated, Rat, Inhalation
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Component analysis - LD50

Toxicology Data - Selected LD50s and LC50s

Ethylene Glycol	107-21-1	Oral LD50 Rat: 4000 mg/kg; Dermal LD50 Rabbit: 9530 µL/kg
Isopropyl alcohol	67-63-0	Inhalation LC50 Rat: 72.6 mg/L/4H; Oral LD50 Rat: 4396 mg/kg; Dermal LD50 Rat: 12800 mg/kg; Dermal LD50 Rabbit: 12870 mg/kg

Sensitization	Not expected to be hazardous by OSHA criteria.
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Carcinogenicity	Not expected to be hazardous by OSHA criteria.
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ACGIH - Threshold Limits Values - Carcinogens

Ethylene Glycol	107-21-1	A4 - Not Classifiable as a Human Carcinogen
Isopropyl alcohol	67-63-0	A4 - Not Classifiable as a Human Carcinogen

Neurological effects	Not expected to be hazardous by OSHA criteria.
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Further information	This product has no known adverse effect on human health.
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12. Ecological Information

Ecotoxicity LC50 6.56 mg/L estimated, Fish, 96.00 Hours,
EC50 1.85 mg/L estimated, Daphnia, 48.00 Hours,
IC50 25329 mg/L estimated, Algae, 72.00 Hours,
Components of this product have been identified as having potential environmental concerns.

Ecotoxicity - Freshwater Algae Data

Ethylene Glycol	107-21-1	96 Hr EC50 Selenastrum capricornutum: 6500-1300 mg/L
Isopropyl alcohol	67-63-0	96 Hr EC50 Scenedesmus subspicatus: >1000 mg/L; 72 Hr EC50 Scenedesmus subspicatus: >1000 mg/L

Ecotoxicity - Freshwater Fish Species Data

Ethylene Glycol	107-21-1	96 Hr LC50 Oncorhynchus mykiss: 41000 mg/L; 96 Hr LC50 Lepomis macrochirus: 27500 mg/L; 96 Hr LC50 Oncorhynchus mykiss: 40761 mg/L [static]; 96 Hr LC50 Pimephales promelas: 49000 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 16000 mg/L [static]
Isopropyl alcohol	67-63-0	96 Hr LC50 Pimephales promelas: 9640 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 94900 mg/L [flow-through] (29 days old); 96 Hr LC50 Pimephales promelas: 61200 mg/L [flow-through] (31 days old)

Ecotoxicity - Microtox Data

Ethylene Glycol	107-21-1	30 min EC50 Photobacterium phosphoreum: 620.0 mg/L; 30 min EC50 Photobacterium phosphoreum: 620 mg/L; 16 Hr EC50 Pseudomonas putida: 10000 mg/L
Isopropyl alcohol	67-63-0	5 min EC50 Photobacterium phosphoreum: 35390 mg/L

Ecotoxicity - Water Flea Data

Ethylene Glycol	107-21-1	48 Hr EC50 water flea: 46300 mg/L
Isopropyl alcohol	67-63-0	48 Hr EC50 Daphnia magna: 13299 mg/L

Environmental effects

Ecotoxicity - Freshwater Algae Data

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13. Disposal Considerations

Disposal instructions

Do not allow this material to drain into sewers/water supplies. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Not regulated as hazardous goods.

Department of Transportation (DOT) Requirements**Bulk****Basic shipping requirements:**

Proper shipping name Combustible Liquid, n.o.s.

Hazard class 3

UN number 1993

Packing group III

Additional information:

Packaging non bulk 202

Packaging bulk 243

**Canadian Transportation of Dangerous Goods (TDG) Requirements**

Not regulated as hazardous goods.

IMDG

Not regulated as hazardous goods.

IATA

Not regulated as hazardous goods.

15. Regulatory Information

Labelling

Contains Ethylene Glycol, Isopropyl alcohol

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

FEMA (Flavor and Extract Manufacturers Association) - FEMA Numbers

Isopropyl alcohol 67-63-0 2929

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

Ethylene Glycol 107-21-1 1.0 % de minimis concentration

Isopropyl alcohol 67-63-0 1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)

U.S. - FDA - Color Additives Conditionally Approved for Use in Foods

Isopropyl alcohol 67-63-0 21 CFR 73.1

U.S. - FDA - Direct Food Additives

Isopropyl alcohol 67-63-0 21 CFR 172.515, 21 CFR 173.240, 21 CFR 173.340



**Occupational Safety and Health Administration (OSHA)**

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

Ethylene Glycol: 5000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

International regulations**Canada - WHMIS - Ingredient Disclosure List**

Ethylene Glycol	107-21-1	1 %
Isopropyl alcohol	67-63-0	1 %



**State regulations**

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

U.S. - Massachusetts - Right To Know List

Ethylene Glycol	107-21-1	Present
Isopropyl alcohol	67-63-0	Present

U.S. - Minnesota - Hazardous Substance List

Ethylene Glycol	107-21-1	Present (particulate and vapor)
Isopropyl alcohol	67-63-0	Present

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

Ethylene Glycol	107-21-1	sn 0878
Isopropyl alcohol	67-63-0	sn 1076; sn 2381 (strong-acid process manufacture)

U.S. - Pennsylvania - RTK (Right to Know) List

Ethylene Glycol	107-21-1	Environmental hazard
Isopropyl alcohol	67-63-0	Environmental hazard

U.S. - Rhode Island - Hazardous Substance List

Ethylene Glycol	107-21-1	Toxic; Flammable
Isopropyl alcohol	67-63-0	Toxic; Flammable

U.S. - Texas - Effects Screening Levels - Long Term

Ethylene Glycol	107-21-1	10 ppb ESL (46% Ethylene glycol); 26 µg/m ³ ESL (46% Ethylene glycol)
Isopropyl alcohol	67-63-0	320 ppb ESL (odor); 785 µg/m ³ ESL (odor)

U.S. - Texas - Effects Screening Levels - Short Term

Ethylene Glycol	107-21-1	100 ppb ESL (46% ethylene glycol); 260 µg/m ³ ESL (46% ethylene glycol)
Isopropyl alcohol	67-63-0	3200 ppb ESL (odor); 7850 µg/m ³ ESL (odor)

16. Other Information**HMIS® ratings**

Health: 2*
Flammability: 2
Physical hazard: 0

NFPA ratings

Health: 2
Flammability: 2
Instability: 0

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Disclaimer

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MSDS sections updated

Product and Company Identification: Product and Company Identification

