

# Safety Data Sheet

**SDS ID: Stock Code** 400-101, 400-102, 400-103, 400-104, 400-105, 400-106, 400-107  
**Revision date:** February 7, 2018

## Section 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product name:** Jomar "Gimme the Green Stuff" Thread Sealant  
**Synonyms:** None  
**Chemical family:** Pipe Thread Hydrocarbon Mixture  
**Producer:** Jomar Group  
7243 Miller Drive  
Warren, MI 48092

**Telephone:** 586-268-1220 Available during normal business hours

**Emergency:** 586-268-1220 Available during normal business hours

## Section 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

Harmful if swallowed. Prolonged or repeated skin contact may cause drying, cracking, or irritation. High vapor concentrations may cause drowsiness and result in irritation of the eyes, nose, and throat and central nervous system (CNS) depression.

#### GHS Hazard and precautionary statements

**WARNING** — Serious Eye Irritation (category 2A), H319  
Skin Irritation (category 2), H315  
Acute oral toxicity (category 4), H302  
Acute inhalation toxicity (category 4), H332  
May cause drowsiness or dizziness (category 3), H336



#### Precautionary Statements

P264: Wash skin thoroughly after handling. P280: Wear protective gloves and eye protection.  
P303 + P361: IF ON SKIN, immediately remove all contaminated clothing and wash before reuse.  
P305 + P351: IF IN EYES, Remove contact lenses if present and easy to do so, rinse with water for several minutes.  
P337 + P313: If eye or skin irritation persists – get medical advice/attention.  
P403 + P223: Store in a cool, well-ventilated place. Keep container tightly closed.

**Inhalation:** May cause irritation to mucous membranes and upper respiratory tract. In high concentrations, vapors and aerosol mists have a narcotic effect and may cause headache, central nervous system depression, fatigue, dizziness, and nausea. Severe overexposure may cause red blood cell damage.

**Chronic:** Repeated or prolonged exposure may result in blood, liver, or kidney damage. See Section 11 (Toxicological Information) for additional information.

**Ingestion:** May cause irritation of the digestive tract, stomach pain, nausea, and vomiting.

**Skin contact:** May be absorbed through the skin during prolonged or repeated contact, causing irritation, dermatitis, weakness, headache and nausea.

# Safety Data Sheet

SDS ID: Stock Code 400-403, 400-404, 400-405

Revision date: February 7, 2018

## Section 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product name:** Jomar "Hi-Temp" Anti-Seize/Thread Sealant

**Synonyms:** None

**Chemical family:** N/A

**Producer:** Jomar Group  
7243 Miller Drive  
Warren, MI 48092

**Telephone:** 586-268-1220 Available during normal business hours

**Emergency:** 586-268-1220 Available during normal business hours

## Section 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

May cause skin irritation.

**Precautionary Statements:** Prolonged and repeated contact with the product may cause a defatting of the skin, dermatitis, folliculitis and/or oil acne. Preexisting eye or skin disorders may be aggravated by prolonged contact with this product. See Section 11 for additional toxicological information.

**Inhalation:** Not an expected route of entry.

**Ingestion:** This product may be absorbed by the digestive system. Ingestion can result in both acute and chronic overexposure.

**Skin contact:** May cause irritation.

**Eye contact:** Contact with eyes may cause eye irritation.

**Carcinogenic:** N/A

## Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

### Material information:

Name	CAS No.	Weight %
Lubricating greases	74869-21-9	50-70
Copper	7440-50-8	7-13
Lime	1305-78-8	1-5

**\*Note:** The above weight percentages are represented in ranges as estimates. Due to variation among production batches, component percentages may vary.

## Section 4. FIRST AID MEASURES

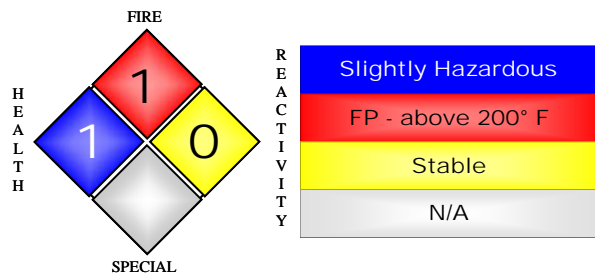
- Inhalation:** Remove from exposure. Get medical attention if experiencing cough, irritation or difficult breathing.
- Skin contact:** Wash thoroughly with soap and water. If irritation occurs, get medical attention.
- Ingestion:** Get immediate medical attention. **DO NOT INDUCE VOMITING!** Possible aspiration hazard.
- Eye contact:** Flush with copious amounts of water. Get immediate medical attention.
- Notes to Physician:** The hydrocarbons contained in this product are mild irritants of the eyes and mucous membranes, central nervous system depressants, and primary chemical irritants of the skin. Prolonged or repeated skin contact, especially with poor personal hygiene, may cause skin disorders.

## Section 5. FIREFIGHTING MEASURES

- Suitable extinguishing media:** Dry chemical, water fog, foam or carbon dioxide may be suitable for extinguishing fires involving this product.
- Specific hazards:** Combustion products are highly dependent on the combustion conditions. CO, CO<sub>2</sub>, CaO, oxygenates and unidentified organic compounds may be formed during combustion. High temperatures may produce metal fume, vapor, and/or dust. Combustion products may cause effects of overexposure as noted in Section 2 Hazards Identification. They may also cause headache; dizziness; coma; convulsion; weakness; drowsiness; tachypnea; nausea; paresthesia; dyspnea; asphyxiation; mild to severe eye, skin or respiratory tract irritation; metal fume fever; metallic taste in mouth; cough; pneumonia; pneumoconiosis; ulceration or perforation of the nasal septum and/or lung damage. Product fume and/or vapor may be irritating or toxic if inhaled. The product or its dust, can react vigorously with strong oxidizing agents.

**Special protective equipment and precautions for firefighters:** Use full-body protection and full-face, self-contained breathing apparatus operated in a positive pressure mode. Use water spray (fog) to cool containers and disperse vapors.

	NFPA rating:	HMIS rating:
Health:	1	1
Flammability:	1	1
Instability/reactivity:	0	0
Other:	N/A	B (PPE)



## Section 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions:</b>	Avoid contact with the skin and the eyes.
<b>Large Spill:</b>	Keep petroleum products out of streams and waterways. Assure conformity with applicable government regulations.
<b>Methods for Containment and Clean up</b>	Clean area with an appropriate cleanser.

## Section 7. HANDLING AND STORAGE

<b>Handling:</b>	The two major means of metal absorption are inhalation and ingestion. After use, always wash hands before smoking, eating, or drinking. Smoking, eating, and drinking should be confined to uncontaminated areas. Work clothes and equipment should remain in designated areas. Before reuse, launder contaminated clothing separate from personal clothing. Avoid skin contact and use personal protection when handling product, waste product, or contaminated equipment. Wash with soap and water after use. Prolonged and repeated contact can cause defatting action of the skin and may cause disorders such as dermatitis, folliculitis, and oil acne. This product is intended for industrial use only. Isolate from children and their environment. This product may separate. Stir well before use. The flash point of this product depends on the degree of separation.
<b>Storage:</b>	Store in a cool, dry area where accidental contact with acids is not possible. Do not store or handle near high temperature or open flame. Keep storage containers closed when not in use.

## Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Occupational Exposure Limits:

Name	CAS No.	ACGIH® TLV® Exposure Limits:	Federal OSHA PELs	OSHA PELs 1989
Copper	7440-50-8	TWA: 0.2 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	N/A	0.1
Lime	1305-78-8	TWA: 2 mg/m <sup>3</sup>	N/A	5

All exposure limits listed are 8-hour time weighted average (TWA) — except where noted otherwise.

Time Weighted Average (TWA) is an average exposure over the course of an 8-hour work shift.

A Short Term Exposure Limit TWA over the course of 15 minutes.

PEL — Permissible Exposure Limit is the maximum 8-hour TWA concentration of a chemical that a worker may be exposed to under Occupational Safety and Health Administration (OSHA) regulations.

Federal OSHA 1989 PELs were vacated but are in use and enforced by many state OSHA plans.

**Engineering measures:** No special ventilation requirements under conditions of normal use.

### PERSONAL PROTECTIVE EQUIPMENT

**Respiratory protection:** No respiratory equipment is required for normal use.

**Skin and body protection:** Clothing appropriate for an industrial environment should be worn.

**Eye protection:** Vented goggles or safety glasses with side shields.

**Hygiene measures:** When using, do not eat, drink or smoke. Avoid contact with skin, eyes and clothing. Wash hands immediately after handling the product.

## Section 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Copper-black
<b>Physical state (solid/liquid/gas):</b>	Solid
<b>Substance type (pure/mixture):</b>	Mixture
<b>Color:</b>	Copper-black
<b>Odor:</b>	Petroleum odor
<b>Molecular weight:</b>	Not available
<b>pH:</b>	Not applicable
<b>Boiling point/range (5-95%):</b>	228°C / 550°F
<b>Melting point/range:</b>	Not available
<b>Decomposition temperature:</b>	Not available
<b>Specific gravity:</b>	1.2
<b>Vapor density:</b>	(AIR = 1) >1
<b>Vapor pressure:</b>	Not available
<b>Evaporation rate (Butyl acetate= 1):</b>	<1
<b>Flash point, method used:</b>	196°C / 385°F, ASTM D 92, C.O.C.
<b>Water solubility:</b>	Negligible
<b>VOC Content:</b>	Not available
<b>Auto-ignition temperature:</b>	Not available
<b>Flammable limits in air — lower (%):</b>	Not available
<b>Flammable limits in air — upper (%):</b>	Not available

## Section 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	No data available
<b>Stability:</b>	Not applicable
<b>Possibly hazardous reactions:</b>	Not applicable
<b>Conditions to avoid:</b>	Not applicable
<b>Incompatible Materials:</b>	Strong oxidizers or acids.
<b>Hazardous decomposition products:</b>	Under normal temperatures this product will not decompose
<b>Polymerization:</b>	Will not occur.

## Section 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:** Product may cause irritation to the eyes and/or skin. Ingestion of the product may cause gastrointestinal irritation and upset.

### Product information:

Name	CAS No.	Inhalation:	Dermal:	Oral: LD <sub>50</sub>
Lubricating greases	74869-21-9			2280 mg/kg (Rat)
Lime	1305-78-8			500 mg/kg (Rat)

LD<sub>50</sub> — The concentration of the chemical in air that kills 50% of the test animals in a given time (usually four hours).

**Chronic toxicity:** Passes IP 346 Method <3% DMSO – extractable components.

## Section 12. ECOLOGICAL INFORMATION

Component	Freshwater Algae	Freshwater Fish	Water Flea
Lubricating greases		LC50> 2000 mg/L Salmo gairdneri 96h	
Copper	EC50 = 120 mg/L 72 h	LC50 .0068 -0.0156 mg/L Pimephales promelas 96 h LC50< 0.3 mg/L Pimephales promelas 96 h LC50= 0.052 mg/L Oncorhynchus mykiss 96 h LC50= 0.112 mg/L Poecilia reticulata 96 h LC50= 0.2 mg/L Pimephales promelas 96 h LC50= 0.3 mg/L Cyprinus carpio 96 h LC50= 0.8 mg/L Cyprinus carpio 96 h LC50= 1.25 mg/Lepomis macrochirus 96 h	EC50 = 0.03 mg/L 48 h
Lime		LC50= 1070 mg/L Cyprinus carpio 96 h	

## Section 13. DISPOSAL CONSIDERATIONS

**Cleanup considerations:** Discard in accordance with local, state, and federal regulations. Empty containers are exempt from RCRA Subtitle C if they contain no more than 2.5 cm of their original contents in the bottom of the container or less than 3% of the original net weight (less than 0.3% by weight for containers over 110 gallons), or if the residue is analyzed and demonstrated to be nonhazardous.

"Empty" containers retain residue and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY AND/OR DEATH. "Empty" containers should be completely drained and properly sealed. Recycle or discard plastic liner, pail or drum in accordance with local, state, and federal regulations. "Empty" drums may be sent to a drum reconditioner.

## Section 14. TRANSPORT INFORMATION

**DOT** Not regulated by Ground unless it is being shipped by vessel, then it may be classified on documentation as UN3077 Environmentally Hazardous Substance, Solid, n.o.s. (Copper Metal Powder), Class 9, PGIII, Marine Pollutant. (Prepared in compliance with IMDG).

**TDG** Not regulated by Ground unless it is being shipped by vessel, then it may be classified on documentation as UN3077 Environmentally Hazardous Substance, Solid, n.o.s. (Copper Metal Powder), Class 9, PGIII, Marine Pollutant.

**IATA** UN3077 Environmentally Hazardous Substance, Solid, n.o.s. (Copper Metal Powder), Class 9, PGIII.

**IMDG/IMO** UN3077, Environmentally Hazardous Substance, Solid, n.o.s. (Copper Metal Powder), Class 9, PGIII, Marine Pollutant.

## Section 15. REGULATORY INFORMATION

Component	TSCA	DSL	NDSL	EINECS/ELINCS	ENCS	CHINA	KECL	PICCS	AICS
Lubricating greases				278-011-7		X		X	
Copper	Present	X		231-159-6		X		X	X
Lime	Present	X		215-138-9	X	X		X	X

### U.S Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### **SARA 311/312 Hazardous Categorization**

Chronic Health Hazard	Yes
Acute Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

### CERCLA

Copper            Hazardous Substances RQs = 5000

### U.S State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

### **State Right-to-Know**

#### **Other International Regulations**

Mexico - Grade            No information available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

#### **WHMIS Hazard Class**

Non-controlled

## Section 16. OTHER INFORMATION

### **Standards and Certification Listings:**

The information and recommendations contained herein are based upon tests, data, and information resources believed to be reliable. However, the Jomar Group and its related operations or divisions do not guarantee the accuracy or completeness, nor shall any of this information constitute a warranty, whether expressed or implied, as to the safety of goods, the merchantability of the goods or the fitness of the goods for a particular purpose. Adjustment to conform to actual conditions of usage may be required. Jomar Group assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of this data. No warranty against infringement of any patent, copyright or trademark is made or implied.

# Safety Data Sheet

**SDS ID: Stock Code** 400-201, 400-202, 400-203, 400-204, 400-205, 400-206, 400-207  
**Revision date:** February 7, 2018

## Section 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product name:** Jomar "The Heavyweight" Thread Sealant  
**Synonyms:** None  
**Chemical family:** Pipe Thread Hydrocarbon Mixture  
**Producer:** Jomar Group  
7243 Miller Drive  
Warren, MI 48092

**Telephone:** 586-268-1220 Available during normal business hours

**Emergency:** 586-268-1220 Available during normal business hours

## Section 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

Harmful if swallowed. Prolonged or repeated skin contact may cause drying, cracking, or irritation. High vapor concentrations may cause drowsiness and result in irritation of the eyes, nose, and throat and central nervous system (CNS) depression.

#### GHS Hazard and precautionary statements

**WARNING** — Serious Eye Irritation (category 2A), H319  
Skin Irritation (category 2), H315  
Acute oral toxicity (category 4), H302  
Acute inhalation toxicity (category 4), H332  
May cause drowsiness or dizziness (category 3), H336



#### Precautionary Statements

P264: Wash skin thoroughly after handling. P280: Wear protective gloves and eye protection.  
P303 + P361: IF ON SKIN, immediately remove all contaminated clothing and wash before reuse. P305 + P351: IF IN EYES, Remove contact lenses if present and easy to do so, rinse with water for several minutes. P337 + P313: If eye or skin irritation persists – get medical advice/attention. P403 + P223: Store in a cool, well-ventilated place. Keep container tightly closed.

**Inhalation:** May cause irritation to mucous membranes and upper respiratory tract. In high concentrations, vapors and aerosol mists have a narcotic effect and may cause headache, central nervous system depression, fatigue, dizziness, and nausea. Severe overexposure may cause red blood cell damage.

**Chronic:** Repeated or prolonged exposure may result in blood, liver, or kidney damage. See Section 11 (Toxicological Information) for additional information.

**Ingestion:** May cause irritation of the digestive tract, stomach pain, nausea, and vomiting.

**Skin contact:** May be absorbed through the skin during prolonged or repeated contact, causing irritation, dermatitis, weakness, headache and nausea.



**Eye contact:** Exposure to vapors or liquid may cause eye irritation.

**Carcinogenic** The IARC and ACGIH designate Ethylene glycol butyl ether (2-Butoxyethanol) and Isopropyl alcohol (2-Propanol) as category 3 – confirmed animal carcinogen with unknown relevance to humans. The ACGIH designates Ethylene glycol butyl ether (2-Butoxyethanol) as category A3– confirmed animal carcinogen with unknown relevance to humans.

### Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### Material information:

Name	CAS No.	Weight %
Ethylene glycol butyl ether Synonym: 2-Butoxyethanol	111-76-2	12-17
Isopropyl alcohol Synonym: 2-Propanol	67-63-0	10-15

*\*Note: The above weight percentages are represented in ranges as estimates. Due to variation among production batches, component percentages may vary.*

### Section 4. FIRST AID MEASURES

**Inhalation:** Move exposed persons to fresh air. If the person is not breathing or breathing is irregular, provide artificial respiration or oxygen by trained personnel. Seek medical attention.

**Skin contact:** Quickly remove contaminated clothing and shoes. Wash affected skin with soap and water. Get medical attention if symptoms occur. Wash contaminated clothing before reuse.

**Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. If conscious and alert, rinse the mouth with water. Call a physician or poison control center immediately.

**Eye contact:** Check for and remove any contact lenses. Immediately consult physician after flushing eyes with tepid water for 15 minutes.

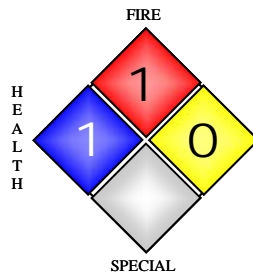
### Section 5. FIREFIGHTING MEASURES

**Suitable extinguishing media:** Small fires — Class B fire-extinguishing media including water spray, foam, CO<sub>2</sub> or dry powder. Do not use a water stream, as this will spread the fire.

**Specific hazards:** Fire or intense heat may cause violent rupture of product containers. Vapors may form explosive mixtures with air. Application of extinguishing media to hot surfaces requires special precautions. During emergency conditions, overexposure to decomposition products including carbon oxides may cause a health hazard. Symptoms may not be immediately apparent.

**Special protective equipment for firefighters:** Full protective equipment including self-contained breathing apparatus should be used. Do not allow run-off from fire-fighting to enter drains or water courses.

NFPA rating: HMIS rating:		
Health:	1	1
Flammability:	1	1
Instability/reactivity:	0	0
Other:	N/A	H (PPE)



Hazardous
FP - above 200° F
Stable
N/A

## Section 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions:</b>	Immediately contact emergency personnel. Evacuate any potentially affected area and isolate personnel from entry. Ventilate closed spaces before entering them. Vapor can collect in lower areas.
<b>Large Spill:</b>	Personnel must have appropriate training, per Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120. Do not touch damaged containers or spilled material unless wearing appropriate protective equipment (Section 8).
<b>Methods for Containment and Clean up</b>	Shut off source if possible and if safe. Eliminate all ignition sources. Prevent entry into waterways, sewers, basements or confined areas. Advise applicable authorities if material has entered sewers or water courses.

## Section 7. HANDLING AND STORAGE

<b>Handling:</b>	Use with adequate ventilation. Keep containers closed when not in use. Always open containers slowly to allow any excess pressure to vent. Avoid breathing vapors. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling. Launder soiled clothing thoroughly before re-use.
<b>Storage:</b>	Keep all containers tightly closed when not in use. Store out of direct sunlight and on an impermeable floor. Do not store with incompatible materials. See Section 10, Stability and Reactivity.

## Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Occupational Exposure Limits:

Name	CAS No.	ACGIH® TLV® Exposure Limits:	Federal OSHA PELs	OSHA PELs 1989 <sup>C</sup>
Ethylene glycol butyl ether Synonym: 2-Butoxyethanol	111-76-2	20 ppm <sup>A</sup>	50 ppm <sup>A</sup>	25 ppm <sup>A</sup>
Isopropyl alcohol Synonym: 2-Propanol	67-63-0	200 ppm <sup>A</sup> 400 ppm <sup>B</sup>	400 ppm <sup>A</sup>	400 ppm <sup>A</sup> 500 ppm <sup>B</sup>

All exposure limits listed are 8-hour time weighted average (TWA) — except where noted otherwise.

<sup>A</sup> Time Weighted Average (TWA) is an average exposure over the course of an 8-hour work shift.

<sup>B</sup> A Short Term Exposure Limit TWA over the course of 15 minutes.

PEL — Permissible Exposure Limit is the maximum 8-hour TWA concentration of a chemical that a worker may be exposed to under Occupational Safety and Health Administration (OSHA) regulations.

<sup>C</sup> Federal OSHA 1989 PELs were vacated but are in use and enforced by many state OSHA plans.

**Engineering measures:** Local exhaust ventilation is preferable. General ventilation is acceptable if exposure to materials in this section is maintained below applicable exposure limits.

## PERSONAL PROTECTIVE EQUIPMENT

- Respiratory protection:** When engineering controls are not sufficient to reduce exposure to levels below applicable exposure limits, seek professional advice prior to respirator selection and use. For concentrations less than 10 times the exposure limits, wear a properly fitted NIOSH/ MSHA-approved respirator with organic vapor cartridges.
- Skin and body protection:** Wear impervious clothing and gloves to prevent contact. Use the manufacturer's degradation and permeation data for protective material selection.
- Eye protection:** Wear safety spectacles with unperforated sideshields, or goggles.
- Hygiene measures:** Avoid repeated or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove contaminated clothing and launder before reuse.
- Other precautions:** Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

## Section 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	White paste
<b>Physical state (solid/liquid/gas):</b>	Paste
<b>Substance type (pure/mixture):</b>	Mixture
<b>Color:</b>	White
<b>Odor:</b>	Mild odor
<b>Molecular weight:</b>	Not Available
<b>pH:</b>	Not Applicable
<b>Boiling point/range (5-95%):</b>	Not Available
<b>Melting point/range:</b>	Not Available
<b>Decomposition temperature:</b>	Not Available
<b>Specific gravity:</b>	1.41
<b>Vapor density:</b>	(AIR = 1) <1
<b>Vapor pressure:</b>	0.88 mm Hg at 68°F
<b>Evaporation rate (Butyl acetate= 1):</b>	0.6
<b>Flash point, method used:</b>	Above 200 °F; UN test N.1
<b>Water solubility:</b>	Slight
<b>VOC Content:</b>	310 grams/liter (SCAQMD Rule 1168 Test Method316A)
<b>Auto-ignition temperature:</b>	921°F; 494°C
<b>Flammable limits in air — lower (%):</b>	1.1
<b>Flammable limits in air — upper (%):</b>	12.7

## Section 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	No data available
<b>Stability:</b>	Stable under recommended storage conditions.
<b>Possibly hazardous reactions:</b>	Vapors may form an explosive mixture with air
<b>Conditions to avoid:</b>	Heat, flames, sparks, temperature extremes, and direct sunlight.
<b>Incompatible Materials:</b>	Strong oxides, chlorine, acids, alkalies, peroxides.
<b>Hazardous decomposition products:</b>	By fire, Carbon dioxide, Carbon monoxide
<b>Polymerization:</b>	Will not occur.

## Section 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:** Excessive exposure leads to depression of the central nervous system. Causes eye irritation, moderate skin irritation.

### Product information:

Name	CAS No.	Inhalation:	Dermal:	Oral:
Ethylene glycol butyl ether Synonym: 2-Butoxyethanol	111-76-2	LC <sub>50</sub> (Rat): ~700 ppm, 7 hours; LC <sub>50</sub> (Guinea pig): ~932 ppm, 4 hours;	LD <sub>50</sub> (Rat) >2,000 mg/kg LD <sub>50</sub> (Guinea pig) >2,000 mg/kg	Acute LD <sub>50</sub> (Rat):1,746 mg/kg Acute LD <sub>50</sub> (Guinea pig):1,414 mg/kg
Isopropyl alcohol Synonym: 2-Propanol	67-63-0	LC <sub>50</sub> (Rat): 16,000 ppm, 8 hours	LD <sub>50</sub> (Rabbit) 12,800 mg/kg	LD <sub>50</sub> (Rat) 5,000 to 5,045 mg/kg

LC<sub>50</sub> — The concentration of the chemical in air that kills 50% of the test animals in a given time (usually four hours).

**Chronic toxicity:** The IARC and ACGIH designates Ethylene glycol butyl ether (2-Butoxyethanol) and Isopropyl alcohol (2-Propanol) as category 3 – confirmed animal carcinogen with unknown relevance to humans. Repeated or prolonged exposure in excess of exposure limits in Section 8 may cause damage to the lungs, liver, blood, and kidney.

**Sensitization:** Not known to cause sensitization in humans.

## Section 12. ECOLOGICAL INFORMATION

**Ecotoxicity effects:** LC<sub>50</sub> Harlequinfish, Red rasbora 96-hour 4,200 mg/l.  
LC<sub>50</sub> Fathead minnow 96-hour 9,640 to 10,000 mg/l.  
EC<sub>50</sub> Water flea 48-hour 1,550 mg/l.

**Persistence** The estimated half-life (2-Butoxyethanol) in groundwater ranges from 14 days to 8 weeks; and in soil 7 days to 4 weeks.

**Degradability:** Expected to be readily biodegradable.

## Section 13. DISPOSAL CONSIDERATIONS

**Cleanup considerations:** This product is not a hazardous waste as defined under RCRA 40 CFR 261. Do not incinerate a closed container. Disposal of this material must be done in accordance with federal, state and/or local regulations. The material destined for disposal must be characterized properly and may differ from the product described in this SDS if mixed with other wastes.

## Section 14. TRANSPORT INFORMATION

Please refer to DOT regulation 49 CFR 172.101:

**Transport information:** This material is not regulated under DOT when transported via U.S. commerce routes; and IATA, and IMO via international routes

**Hazardous Materials Description:** (DOT and IATA):

**UN/identification no.:** Not Applicable  
**Proper shipping name:** Not Applicable  
**Hazard class:** Not Applicable  
**Packing group:** Not Applicable  
**DOT reportable quantity (lbs.):** Not Applicable

## Section 15. REGULATORY INFORMATION

### U.S. federal regulatory information:

#### U.S. RCRA (40 CFR 261)

This product is not a hazardous waste as defined under RCRA 40 CFR 261.

### State and community right-to-know regulations:

*The following component(s) of this material are identified on the regulatory lists below:*

#### U.S. TSCA Chemical inventory Section 8(b)

**OSHA** — This product is determined to be hazardous as defined in the OSHA Hazard Communications Standard (29 CFR 1910.1200)

#### CERCLA Sections 102a/103 (40 FR 302.4):

No ingredients are listed.

Some Components of this product are listed in the following sections of **SARA**:

SARA Title III Section 302 — N/A

SARA Title III Section 304 — N/A

SARA Title III Section 313 — Ethylene glycol butyl ether (2-Butoxyethanol) 1% reporting threshold

Isopropyl alcohol (2-Propanol) 100 % reporting threshold

SARA Title III Sections 311/312 Hazardous Categories (40 CFR 370.21)

Acute health hazard: Yes

Chronic health hazard: Yes

Fire hazard: No

Reactive Hazard: No

Pressure Hazard: No

### California Proposition 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

### WHMIS (Canada)

Class D-2B: Material causing other toxic effects

***NOTE:** User must consult with applicable state and local agencies for special specifics, determinations or compliance obligations regarding this product.*

## Section 16. OTHER INFORMATION

### Standards and Certification Listings:

The information and recommendations contained herein are based upon tests, data, and information resources believed to be reliable. However, the Jomar Group and its related operations or divisions do not guarantee the accuracy or completeness, nor shall any of this information constitute a warranty, whether expressed or implied, as to the safety of goods, the merchantability of the goods or the fitness of the goods for a particular purpose. Adjustment to conform to actual conditions of usage may be required. Jomar Group assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of this data. No warranty against infringement of any patent, copyright or trademark is made or implied.

# Safety Data Sheet

**SDS ID: Stock Code** 400-302, 400-303, 400-304, 400-305, 400-306, 400-307

**Revision date:** February 7, 2018

## Section 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product name:** Jomar "WOG Plus" Thread Sealant

**Synonyms:** None

**Chemical family:** Pipe Thread Hydrocarbon Mixture

**Producer:** Jomar Group  
7243 Miller Drive  
Warren, MI 48092

**Telephone:** 586-268-1220 Available during normal business hours

**Emergency:** 586-268-1220 Available during normal business hours

## Section 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

Harmful if swallowed. Prolonged or repeated skin contact may cause drying, cracking, or irritation. High vapor concentrations may cause drowsiness and result in irritation of the eyes, nose, and throat and central nervous system (CNS) depression.

#### GHS Hazard and precautionary statements

**WARNING** — Serious Eye Irritation (category 2A), H319  
Skin Irritation (category 2), H315  
Acute oral toxicity (category 4), H302  
Acute inhalation toxicity (category 4), H332  
May cause drowsiness or dizziness (category 3), H336



**WARNING**

#### Precautionary Statements

P264: Wash skin thoroughly after handling. P280: Wear protective gloves and eye protection. P303 + P361: IF ON SKIN, immediately remove all contaminated clothing and wash before reuse. P305 + P351: IF IN EYES, Remove contact lenses if present and easy to do so, rinse with water for several minutes. P337 + P313: If eye or skin irritation persists – get medical advice/attention. P403 + P223: Store in a cool, well-ventilated place. Keep container tightly closed.

**Inhalation:** May cause irritation to mucous membranes and upper respiratory tract. In high concentrations, vapors and aerosol mists have a narcotic effect and may cause headache, central nervous system depression, fatigue, dizziness, and nausea. Severe overexposure may cause red blood cell damage.

**Chronic:** Repeated or prolonged exposure may result in blood, liver, or kidney damage. See Section 11 (Toxicological Information) for additional information.

**Ingestion:** May cause irritation of the digestive tract, stomach pain, nausea, and vomiting.

- Skin contact:** May be absorbed through the skin during prolonged or repeated contact, causing irritation, dermatitis, weakness, headache and nausea.
- Eye contact:** Exposure to vapors or liquid may cause eye irritation.
- Carcinogenic** The IARC and ACGIH designate Isopropyl alcohol (2-Propanol) as category 3 – confirmed animal carcinogen with unknown relevance to humans.

**Section 3. COMPOSITION / INFORMATION ON INGREDIENTS**

**Material information:**

Name	CAS No.	Weight %
Isopropyl alcohol Synonym: 2-Propanol	67-63-0	18-23

*\*Note: The above weight percentages are represented in ranges as estimates. Due to variation among production batches, component percentages may vary.*

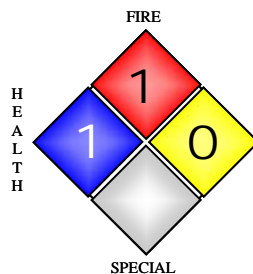
**Section 4. FIRST AID MEASURES**

- Inhalation:** Move exposed persons to fresh air. If the person is not breathing or breathing is irregular, provide artificial respiration or oxygen by trained personnel. Seek medical attention.
- Skin contact:** Quickly remove contaminated clothing and shoes. Wash affected skin with soap and water. Get medical attention if symptoms occur. Wash contaminated clothing before reuse.
- Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. If conscious and alert, rinse the mouth with water. Call a physician or poison control center immediately.
- Eye contact:** Check for and remove any contact lenses. Immediately consult physician after flushing eyes with tepid water for 15 minutes.

**Section 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media:** Small fires — Class B fire-extinguishing media including water spray, foam, CO<sub>2</sub> or dry powder. Do not use a water stream, as this will spread the fire.
- Specific hazards:** Fire or intense heat may cause violent rupture of product containers. Vapors may form explosive mixtures with air. Application of extinguishing media to hot surfaces requires special precautions. During emergency conditions, overexposure to decomposition products including carbon oxides may cause a health hazard. Symptoms may not be immediately apparent.
- Special protective equipment for firefighters:** Full protective equipment including self-contained breathing apparatus should be used. Do not allow run-off from fire-fighting to enter drains or water courses.

NFPA rating: HMIS rating:		
Health:	1	1
Flammability:	1	1
Instability/reactivity:	0	0
Other:	N/A	H (PPE)



Hazardous
FP - above 200° F
Stable
N/A

## Section 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions:</b>	Immediately contact emergency personnel. Evacuate any potentially affected area and isolate personnel from entry. Ventilate closed spaces before entering them. Vapor can collect in lower areas.
<b>Large Spill:</b>	Personnel must have appropriate training, per Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120. Do not touch damaged containers or spilled material unless wearing appropriate protective equipment (Section 8).
<b>Methods for Containment and Clean up</b>	Shut off source if possible and if safe. Eliminate all ignition sources. Prevent entry into waterways, sewers, basements or confined areas. Advise applicable authorities if material has entered sewers or water courses.

## Section 7. HANDLING AND STORAGE

<b>Handling:</b>	Use with adequate ventilation. Keep containers closed when not in use. Always open containers slowly to allow any excess pressure to vent. Avoid breathing vapors. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling. Launder soiled clothing thoroughly before re-use.
<b>Storage:</b>	Keep all containers tightly closed when not in use. Store out of direct sunlight and on an impermeable floor. Do not store with incompatible materials. See Section 10, Stability and Reactivity.

## Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Occupational Exposure Limits:

Name	CAS No.	ACGIH® TLV® Exposure Limits:	Federal OSHA PELs	OSHA PELs 1989 <sup>c</sup>
Isopropyl alcohol	67-	200 ppm <sup>A</sup>	400 ppm <sup>A</sup>	400 ppm <sup>A</sup>
Synonym: 2-Propanol	63-0	400 ppm <sup>B</sup>		500 ppm <sup>B</sup>

All exposure limits listed are 8-hour time weighted average (TWA) — except where noted otherwise.

<sup>A</sup> Time Weighted Average (TWA) is an average exposure over the course of an 8-hour work shift.

<sup>B</sup> A Short Term Exposure Limit TWA over the course of 15 minutes.

PEL — Permissible Exposure Limit is the maximum 8-hour TWA concentration of a chemical that a worker may be exposed to under Occupational Safety and Health Administration (OSHA) regulations.

**Engineering measures:** Local exhaust ventilation is preferable. General ventilation is acceptable if exposure to materials in this section is maintained below applicable exposure limits.



## PERSONAL PROTECTIVE EQUIPMENT

- Respiratory protection:** When engineering controls are not sufficient to reduce exposure to levels below applicable exposure limits, seek professional advice prior to respirator selection and use. For concentrations less than 10 times the exposure limits, wear a properly fitted NIOSH/ MSHA-approved respirator with organic vapor cartridges.
- Skin and body protection:** Wear impervious clothing and gloves to prevent contact. Use the manufacturer's degradation and permeation data for protective material selection.
- Eye protection:** Wear safety spectacles with unperforated sideshields, or goggles.
- Hygiene measures:** Avoid repeated or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove contaminated clothing and laundry before reuse.
- Other precautions:** Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

## Section 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Viscous Rust Liquid
<b>Physical state (solid/liquid/gas):</b>	Liquid
<b>Substance type (pure/mixture):</b>	Mixture
<b>Color:</b>	Rust
<b>Odor:</b>	Slight Alcohol
<b>Molecular weight:</b>	Not Available
<b>pH:</b>	Not Applicable
<b>Boiling point/range (5-95%):</b>	Not Available
<b>Melting point/range:</b>	Not Available
<b>Decomposition temperature:</b>	Not Available
<b>Specific gravity:</b>	1.30
<b>Vapor density:</b>	(AIR = 1) 1
<b>Vapor pressure:</b>	0.88 mm Hg at 68°F
<b>Evaporation rate (Butyl acetate= 1):</b>	1.9
<b>Flash point, method used:</b>	Above 200 °F; UN test N.1
<b>Water solubility:</b>	33%
<b>VOC Content:</b>	310 grams/liter (SCAQMD Rule 1168 Test Method316A)
<b>Auto-ignition temperature:</b>	921°F; 494°C
<b>Flammable limits in air — lower (%):</b>	3.3
<b>Flammable limits in air — upper (%):</b>	11.9

## Section 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	No data available
<b>Stability:</b>	Stable under recommended storage conditions.
<b>Possibly hazardous reactions:</b>	Vapors may form an explosive mixture with air
<b>Conditions to avoid:</b>	Heat, flames, sparks, temperature extremes, and direct sunlight.
<b>Incompatible Materials:</b>	Strong oxides, chlorine, acids, alkalis, peroxides, liquid oxygen systems.

**Hazardous decomposition products:** By fire, Carbon dioxide, Carbon monoxide

**Polymerization:** Will not occur.

## Section 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:** Excessive exposure leads to depression of the central nervous system. Causes eye irritation, moderate skin irritation.

### Product information:

Name	CAS No.	Inhalation:	Dermal:	Oral:
Isopropyl alcohol Synonym: 2-Propanol	67-63-0	LC <sub>50</sub> (Rat): 16,000 ppm, 8 hours	LD <sub>50</sub> (Rabbit) 12,800 mg/kg	LD <sub>50</sub> (Rat) 5,000 to 5,045 mg/kg

LC<sub>50</sub> — The concentration of the chemical in air that kills 50% of the test animals in a given time (usually four hours).

**Chronic toxicity:** The IARC and ACGIH designates Isopropyl alcohol (2-Propanol) as category 3 – confirmed animal carcinogen with unknown relevance to humans. Repeated or prolonged exposure in excess of exposure limits in Section 8 may cause damage to the lungs, liver, blood, and kidney.

**Sensitization:** Not known to cause sensitization in humans.

## Section 12. ECOLOGICAL INFORMATION

**Ecotoxicity effects:** LC<sub>50</sub> Harlequinfish, Red rasbora 96-hour 4,200 mg/l.  
LC<sub>50</sub> Fathead minnow 96-hour 9,640 to 10,000 mg/l.  
EC<sub>50</sub> Water flea 48-hour 1,550 mg/l.

**Persistence** No established.

**Degradability:** Expected to be readily biodegradable.

## Section 13. DISPOSAL CONSIDERATIONS

**Cleanup considerations:** This product is not a hazardous waste as defined under RCRA 40 CFR 261. Do not incinerate a closed container. Disposal of this material must be done in accordance with federal, state and/or local regulations. The material destined for disposal must be characterized properly and may differ from the product described in this SDS if mixed with other wastes.

## Section 14. TRANSPORT INFORMATION

Please refer to DOT regulation 49 CFR 172.101:

**Transport information:** This material is not regulated under DOT when transported via U.S. commerce routes; and IATA, and IMO via international routes

**Hazardous Materials Description:** (DOT and IATA):

**UN/identification no.:** Not Applicable  
**Proper shipping name:** Not Applicable  
**Hazard class:** Not Applicable  
**Packing group:** Not Applicable  
**DOT reportable quantity (lbs.):** Not Applicable

## Section 15. REGULATORY INFORMATION

### U.S. federal regulatory information:

#### U.S. RCRA (40 CFR 261)

This product is not a hazardous waste as defined under RCRA 40 CFR 261.

### State and community right-to-know regulations:

*The following component(s) of this material are identified on the regulatory lists below:*

#### U.S. TSCA Chemical inventory Section 8(b)

**OSHA** — This product is determined to be hazardous as defined in the OSHA Hazard Communications Standard (29 CFR 1910.1200)

#### CERCLA Sections 102a/103 (40 FR 302.4):

No ingredients are listed.

Some Components of this product are listed in the following sections of **SARA**:

SARA Title III Section 302 — N/A

SARA Title III Section 304 — N/A

SARA Title III Section 313 — Isopropyl alcohol (2-Propanol) 100 % reporting threshold

SARA Title III Sections 311/312 Hazardous Categories (40 CFR 370.21)

Acute health hazard: Yes

Chronic health hazard: Yes

Fire hazard: No

Reactive Hazard: No

Pressure Hazard: No

#### California Proposition 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

#### WHMIS (Canada)

Class D-2B: Material causing other toxic effects

**NOTE:** *User must consult with applicable state and local agencies for special specifics, determinations or compliance obligations regarding this product.*

## Section 16. OTHER INFORMATION

### Standards and Certification Listings:

The information and recommendations contained herein are based upon tests, data, and information resources believed to be reliable. However, the Jomar Group and its related operations or divisions do not guarantee the accuracy or completeness, nor shall any of this information constitute a warranty, whether expressed or implied, as to the safety of goods, the merchantability of the goods or the fitness of the goods for a particular purpose. Adjustment to conform to actual conditions of usage may be required. Jomar Group assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of this data. No warranty against infringement of any patent, copyright or trademark is made or implied.

# Safety Data Sheet

SDS ID: Stock Code 400-001, 400-002, 400-003, 400-004, 400-005, 400-006, 400-007

Revision date: February 7, 2018

## Section 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product name:** Jomar "Gimme the White Stuff" Thread Sealant

**Synonyms:** None

**Chemical family:** Pipe Thread Hydrocarbon Mixture

**Producer:** Jomar Group  
7243 Miller Drive  
Warren, MI 48092

**Telephone:** 586-268-1220 Available during normal business hours

**Emergency:** 586-268-1220 Available during normal business hours

## Section 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

Harmful if swallowed. Prolonged or repeated skin contact may cause drying, cracking, or irritation. High vapor concentrations may cause drowsiness and result in irritation of the eyes, nose, and throat and central nervous system (CNS) depression.

#### GHS Hazard and precautionary statements

**WARNING** — Serious Eye Irritation (category 2A), H319  
Skin Irritation (category 2), H315  
Acute oral toxicity (category 4), H302  
Acute inhalation toxicity (category 4), H332  
May cause drowsiness or dizziness (category 3), H336



#### Precautionary Statements

P264: Wash skin thoroughly after handling. P280: Wear protective gloves and eye protection. P303 + P361: IF ON SKIN, immediately remove all contaminated clothing and wash before reuse. P305 + P351: IF IN EYES, Remove contact lenses if present and easy to do so, rinse with water for several minutes. P337 + P313: If eye or skin irritation persists – get medical advice/attention. P403 + P223: Store in a cool, well-ventilated place. Keep container tightly closed.

**Inhalation:** May cause irritation to mucous membranes and upper respiratory tract. In high concentrations, vapors and aerosol mists have a narcotic effect and may cause headache, central nervous system depression, fatigue, dizziness, and nausea. Severe overexposure may cause red blood cell damage.

**Chronic:** Repeated or prolonged exposure may result in blood, liver, or kidney damage. See Section 11 (Toxicological Information) for additional information.

**Ingestion:** May cause irritation of the digestive tract, stomach pain, nausea, and vomiting.

**Skin contact:** May be absorbed through the skin during prolonged or repeated contact, causing irritation, dermatitis, weakness, headache and nausea.

**Eye contact:** Exposure to vapors or liquid may cause eye irritation.

**Carcinogenic** The IARC and ACGIH designate Ethylene glycol butyl ether (2-Butoxyethanol) and Isopropyl alcohol (2-Propanol) as category 3 – confirmed animal carcinogen with unknown relevance to humans. The ACGIH designates Ethylene glycol butyl ether (2-Butoxyethanol) as category A3– confirmed animal carcinogen with unknown relevance to humans.

### Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### Material information:

Name	CAS No.	Weight %
Ethylene glycol butyl ether Synonym: 2-Butoxyethanol	111-76-2	12-17
Isopropyl alcohol Synonym: 2-Propanol	67-63-0	10-15

*\*Note: The above weight percentages are represented in ranges as estimates. Due to variation among production batches, component percentages may vary.*

### Section 4. FIRST AID MEASURES

**Inhalation:** Move exposed persons to fresh air. If the person is not breathing or breathing is irregular, provide artificial respiration or oxygen by trained personnel. Seek medical attention.

**Skin contact:** Quickly remove contaminated clothing and shoes. Wash affected skin with soap and water. Get medical attention if symptoms occur. Wash contaminated clothing before reuse.

**Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. If conscious and alert, rinse the mouth with water. Call a physician or poison control center immediately.

**Eye contact:** Check for and remove any contact lenses. Immediately consult physician after flushing eyes with tepid water for 15 minutes.

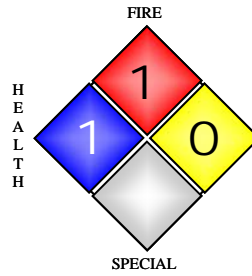
### Section 5. FIREFIGHTING MEASURES

**Suitable extinguishing media:** Small fires — Class B fire-extinguishing media including water spray, foam, CO<sub>2</sub> or dry powder. Do not use a water stream, as this will spread the fire.

**Specific hazards:** Fire or intense heat may cause violent rupture of product containers. Vapors may form explosive mixtures with air. Application of extinguishing media to hot surfaces requires special precautions. During emergency conditions, overexposure to decomposition products including carbon oxides may cause a health hazard. Symptoms may not be immediately apparent.

**Special protective equipment for firefighters:** Full protective equipment including self-contained breathing apparatus should be used. Do not allow run-off from fire-fighting to enter drains or water courses.

NFPA rating: HMIS rating:		
Health:	1	1
Flammability:	1	1
Instability/reactivity:	0	0
Other:	N/A	H (PPE)



Hazardous
FP - above 200° F
Stable
N/A

## Section 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions:</b>	Immediately contact emergency personnel. Evacuate any potentially affected area and isolate personnel from entry. Ventilate closed spaces before entering them. Vapor can collect in lower areas.
<b>Large Spill:</b>	Personnel must have appropriate training, per Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120. Do not touch damaged containers or spilled material unless wearing appropriate protective equipment (Section 8).
<b>Methods for Containment and Clean up</b>	Shut off source if possible and if safe. Eliminate all ignition sources. Prevent entry into waterways, sewers, basements or confined areas. Advise applicable authorities if material has entered sewers or water courses.

## Section 7. HANDLING AND STORAGE

<b>Handling:</b>	Use with adequate ventilation. Keep containers closed when not in use. Always open containers slowly to allow any excess pressure to vent. Avoid breathing vapors. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling. Launder soiled clothing thoroughly before re-use.
<b>Storage:</b>	Keep all containers tightly closed when not in use. Store out of direct sunlight and on an impermeable floor. Do not store with incompatible materials. See Section 10, Stability and Reactivity.

## Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Occupational Exposure Limits:

Name	CAS No.	ACGIH® TLV® Exposure Limits:	Federal OSHA PELs	OSHA PELs 1989 <sup>C</sup>
Ethylene glycol butyl ether Synonym: 2-Butoxyethanol	111-76-2	20 ppm <sup>A</sup>	50 ppm <sup>A</sup>	25 ppm <sup>A</sup>
Isopropyl alcohol Synonym: 2-Propanol	67-63-0	200 ppm <sup>A</sup> 400 ppm <sup>B</sup>	400 ppm <sup>A</sup>	400 ppm <sup>A</sup> 500 ppm <sup>B</sup>

All exposure limits listed are 8-hour time weighted average (TWA) — except where noted otherwise.

<sup>A</sup> Time Weighted Average (TWA) is an average exposure over the course of an 8-hour work shift.

<sup>B</sup> A Short Term Exposure Limit TWA over the course of 15 minutes.

PEL — Permissible Exposure Limit is the maximum 8-hour TWA concentration of a chemical that a worker may be exposed to under Occupational Safety and Health Administration (OSHA) regulations.

<sup>C</sup> Federal OSHA 1989 PELs were vacated but are in use and enforced by many state OSHA plans.

**Engineering measures:** Local exhaust ventilation is preferable. General ventilation is acceptable if exposure to materials in this section is maintained below applicable exposure limits.

## PERSONAL PROTECTIVE EQUIPMENT

- Respiratory protection:** When engineering controls are not sufficient to reduce exposure to levels below applicable exposure limits, seek professional advice prior to respirator selection and use. For concentrations less than 10 times the exposure limits, wear a properly fitted NIOSH/ MSHA-approved respirator with organic vapor cartridges.
- Skin and body protection:** Wear impervious clothing and gloves to prevent contact. Use the manufacturer's degradation and permeation data for protective material selection.
- Eye protection:** Wear safety spectacles with unperforated sideshields, or goggles.
- Hygiene measures:** Avoid repeated or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove contaminated clothing and launder before reuse.
- Other precautions:** Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

## Section 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	White paste
<b>Physical state (solid/liquid/gas):</b>	Paste
<b>Substance type (pure/mixture):</b>	Mixture
<b>Color:</b>	White
<b>Odor:</b>	Mild odor
<b>Molecular weight:</b>	Not Available
<b>pH:</b>	Not Applicable
<b>Boiling point/range (5-95%):</b>	Not Available
<b>Melting point/range:</b>	Not Available
<b>Decomposition temperature:</b>	Not Available
<b>Specific gravity:</b>	1.41
<b>Vapor density:</b>	(AIR = 1) <1
<b>Vapor pressure:</b>	0.88 mm Hg at 68°F
<b>Evaporation rate (Butyl acetate= 1):</b>	0.6
<b>Flash point, method used:</b>	Above 200 °F; UN test N.1
<b>Water solubility:</b>	Slight
<b>VOC Content:</b>	310 grams/liter (SCAQMD Rule 1168 Test Method316A)
<b>Auto-ignition temperature:</b>	921°F; 494°C
<b>Flammable limits in air — lower (%):</b>	1.1
<b>Flammable limits in air — upper (%):</b>	12.7

## Section 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	No data available
<b>Stability:</b>	Stable under recommended storage conditions.
<b>Possibly hazardous reactions:</b>	Vapors may form an explosive mixture with air
<b>Conditions to avoid:</b>	Heat, flames, sparks, temperature extremes, and direct sunlight.
<b>Incompatible Materials:</b>	Strong oxides, chlorine, acids, alkalies, peroxides.
<b>Hazardous decomposition products:</b>	By fire, Carbon dioxide, Carbon monoxide
<b>Polymerization:</b>	Will not occur.

## Section 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:** Excessive exposure leads to depression of the central nervous system. Causes eye irritation, moderate skin irritation.

### Product information:

Name	CAS No.	Inhalation:	Dermal:	Oral:
Ethylene glycol butyl ether Synonym: 2-Butoxyethanol	111-76-2	LC <sub>50</sub> (Rat): ~700 ppm, 7 hours; LC <sub>50</sub> (Guinea pig): ~932 ppm, 4 hours;	LD <sub>50</sub> (Rat) >2,000 mg/kg LD <sub>50</sub> (Guinea pig) >2,000 mg/kg	Acute LD <sub>50</sub> (Rat):1,746 mg/kg Acute LD <sub>50</sub> (Guinea pig):1,414 mg/kg
Isopropyl alcohol Synonym: 2-Propanol	67-63-0	LC <sub>50</sub> (Rat): 16,000 ppm, 8 hours	LD <sub>50</sub> (Rabbit) 12,800 mg/kg	LD <sub>50</sub> (Rat) 5,000 to 5,045 mg/kg

LC<sub>50</sub> — The concentration of the chemical in air that kills 50% of the test animals in a given time (usually four hours).

**Chronic toxicity:** The IARC and ACGIH designates Ethylene glycol butyl ether (2-Butoxyethanol) and Isopropyl alcohol (2-Propanol) as category 3 – confirmed animal carcinogen with unknown relevance to humans. Repeated or prolonged exposure in excess of exposure limits in Section 8 may cause damage to the lungs, liver, blood, and kidney.

**Sensitization:** Not known to cause sensitization in humans.

## Section 12. ECOLOGICAL INFORMATION

**Ecotoxicity effects:** LC<sub>50</sub> Harlequinfish, Red rasbora 96-hour 4,200 mg/l.  
LC<sub>50</sub> Fathead minnow 96-hour 9,640 to 10,000 mg/l.  
EC<sub>50</sub> Water flea 48-hour 1,550 mg/l.

**Persistence** The estimated half-life (2-Butoxyethanol) in groundwater ranges from 14 days to 8 weeks; and in soil 7 days to 4 weeks.

**Degradability:** Expected to be readily biodegradable.

## Section 13. DISPOSAL CONSIDERATIONS

**Cleanup considerations:** This product is not a hazardous waste as defined under RCRA 40 CFR 261. Do not incinerate a closed container. Disposal of this material must be done in accordance with federal, state and/or local regulations. The material destined for disposal must be characterized properly and may differ from the product described in this SDS if mixed with other wastes.

## Section 14. TRANSPORT INFORMATION

Please refer to DOT regulation 49 CFR 172.101:

**Transport information:** This material is not regulated under DOT when transported via U.S. commerce routes; and IATA, and IMO via international routes

**Hazardous Materials Description:** (DOT and IATA):

**UN/identification no.:** Not Applicable  
**Proper shipping name:** Not Applicable  
**Hazard class:** Not Applicable  
**Packing group:** Not Applicable  
**DOT reportable quantity (lbs.):** Not Applicable



## Section 15. REGULATORY INFORMATION

### U.S. federal regulatory information:

#### U.S. RCRA (40 CFR 261)

This product is not a hazardous waste as defined under RCRA 40 CFR 261.

### State and community right-to-know regulations:

*The following component(s) of this material are identified on the regulatory lists below:*

#### U.S. TSCA Chemical inventory Section 8(b)

**OSHA** — This product is determined to be hazardous as defined in the OSHA Hazard Communications Standard (29 CFR 1910.1200)

#### CERCLA Sections 102a/103 (40 FR 302.4):

No ingredients are listed.

Some Components of this product are listed in the following sections of **SARA**:

SARA Title III Section 302 — N/A

SARA Title III Section 304 — N/A

SARA Title III Section 313 — Ethylene glycol butyl ether (2-Butoxyethanol) 1% reporting threshold

Isopropyl alcohol (2-Propanol) 100 % reporting threshold

SARA Title III Sections 311/312 Hazardous Categories (40 CFR 370.21)

Acute health hazard: Yes

Chronic health hazard: Yes

Fire hazard: No

Reactive Hazard: No

Pressure Hazard: No

### California Proposition 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

### WHMIS (Canada)

Class D-2B: Material causing other toxic effects

***NOTE:** User must consult with applicable state and local agencies for special specifics, determinations or compliance obligations regarding this product.*

## Section 16. OTHER INFORMATION

### Standards and Certification Listings:

The information and recommendations contained herein are based upon tests, data, and information resources believed to be reliable. However, the Jomar Group and its related operations or divisions do not guarantee the accuracy or completeness, nor shall any of this information constitute a warranty, whether expressed or implied, as to the safety of goods, the merchantability of the goods or the fitness of the goods for a particular purpose. Adjustment to conform to actual conditions of usage may be required. Jomar Group assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of this data. No warranty against infringement of any patent, copyright or trademark is made or implied.

**Eye contact:** Exposure to vapors or liquid may cause eye irritation.

**Carcinogenic** The IARC and ACGIH designate Ethylene glycol butyl ether (2-Butoxyethanol) and Isopropyl alcohol (2-Propanol) as category 3 – confirmed animal carcinogen with unknown relevance to humans. The ACGIH designates Ethylene glycol butyl ether (2-Butoxyethanol) as category A3– confirmed animal carcinogen with unknown relevance to humans.

### Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### Material information:

Name	CAS No.	Weight %
Ethylene glycol butyl ether Synonym: 2-Butoxyethanol	111-76-2	12-17
Isopropyl alcohol Synonym: 2-Propanol	67-63-0	10-15

*\*Note: The above weight percentages are represented in ranges as estimates. Due to variation among production batches, component percentages may vary.*

### Section 4. FIRST AID MEASURES

**Inhalation:** Move exposed persons to fresh air. If the person is not breathing or breathing is irregular, provide artificial respiration or oxygen by trained personnel. Seek medical attention.

**Skin contact:** Quickly remove contaminated clothing and shoes. Wash affected skin with soap and water. Get medical attention if symptoms occur. Wash contaminated clothing before reuse.

**Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. If conscious and alert, rinse the mouth with water. Call a physician or poison control center immediately.

**Eye contact:** Check for and remove any contact lenses. Immediately consult physician after flushing eyes with tepid water for 15 minutes.

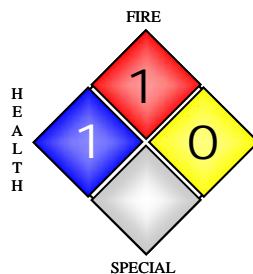
### Section 5. FIREFIGHTING MEASURES

**Suitable extinguishing media:** Small fires — Class B fire-extinguishing media including water spray, foam, CO<sub>2</sub> or dry powder. Do not use a water stream, as this will spread the fire.

**Specific hazards:** Fire or intense heat may cause violent rupture of product containers. Vapors may form explosive mixtures with air. Application of extinguishing media to hot surfaces requires special precautions. During emergency conditions, overexposure to decomposition products including carbon oxides may cause a health hazard. Symptoms may not be immediately apparent.

**Special protective equipment for firefighters:** Full protective equipment including self-contained breathing apparatus should be used. Do not allow run-off from fire-fighting to enter drains or water courses.

NFPA rating: HMIS rating:		
Health:	1	1
Flammability:	1	1
Instability/reactivity:	0	0
Other:	N/A	H (PPE)



Hazardous
FP - above 200° F
Stable
N/A

## Section 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions:</b>	Immediately contact emergency personnel. Evacuate any potentially affected area and isolate personnel from entry. Ventilate closed spaces before entering them. Vapor can collect in lower areas.
<b>Large Spill:</b>	Personnel must have appropriate training, per Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120. Do not touch damaged containers or spilled material unless wearing appropriate protective equipment (Section 8).
<b>Methods for Containment and Clean up</b>	Shut off source if possible and if safe. Eliminate all ignition sources. Prevent entry into waterways, sewers, basements or confined areas. Advise applicable authorities if material has entered sewers or water courses.

## Section 7. HANDLING AND STORAGE

<b>Handling:</b>	Use with adequate ventilation. Keep containers closed when not in use. Always open containers slowly to allow any excess pressure to vent. Avoid breathing vapors. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling. Launder soiled clothing thoroughly before re-use.
<b>Storage:</b>	Keep all containers tightly closed when not in use. Store out of direct sunlight and on an impermeable floor. Do not store with incompatible materials. See Section 10, Stability and Reactivity.

## Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Occupational Exposure Limits:

Name	CAS No.	ACGIH® TLV® Exposure Limits:	Federal OSHA PELs	OSHA PELs 1989 <sup>C</sup>
Ethylene glycol butyl ether Synonym: 2-Butoxyethanol	111-76-2	20 ppm <sup>A</sup>	50 ppm <sup>A</sup>	25 ppm <sup>A</sup>
Isopropyl alcohol Synonym: 2-Propanol	67-63-0	200 ppm <sup>A</sup> 400 ppm <sup>B</sup>	400 ppm <sup>A</sup>	400 ppm <sup>A</sup> 500 ppm <sup>B</sup>

All exposure limits listed are 8-hour time weighted average (TWA) — except where noted otherwise.

<sup>A</sup> Time Weighted Average (TWA) is an average exposure over the course of an 8-hour work shift.

<sup>B</sup> A Short Term Exposure Limit TWA over the course of 15 minutes.

PEL — Permissible Exposure Limit is the maximum 8-hour TWA concentration of a chemical that a worker may be exposed to under Occupational Safety and Health Administration (OSHA) regulations.

<sup>C</sup> Federal OSHA 1989 PELs were vacated but are in use and enforced by many state OSHA plans.

**Engineering measures:** Local exhaust ventilation is preferable. General ventilation is acceptable if exposure to materials in this section is maintained below applicable exposure limits.

## PERSONAL PROTECTIVE EQUIPMENT

- Respiratory protection:** When engineering controls are not sufficient to reduce exposure to levels below applicable exposure limits, seek professional advice prior to respirator selection and use. For concentrations less than 10 times the exposure limits, wear a properly fitted NIOSH/ MSHA-approved respirator with organic vapor cartridges.
- Skin and body protection:** Wear impervious clothing and gloves to prevent contact. Use the manufacturer's degradation and permeation data for protective material selection.
- Eye protection:** Wear safety spectacles with unperforated sideshields, or goggles.
- Hygiene measures:** Avoid repeated or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove contaminated clothing and launder before reuse.
- Other precautions:** Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

## Section 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Yellow paste
<b>Physical state (solid/liquid/gas):</b>	Paste
<b>Substance type (pure/mixture):</b>	Mixture
<b>Color:</b>	Yellow
<b>Odor:</b>	Mild odor
<b>Molecular weight:</b>	Not Available
<b>pH:</b>	Not Applicable
<b>Boiling point/range (5-95%):</b>	Not Available
<b>Melting point/range:</b>	Not Available
<b>Decomposition temperature:</b>	Not Available
<b>Specific gravity:</b>	1.41
<b>Vapor density:</b>	(AIR = 1) <1
<b>Vapor pressure:</b>	0.88 mm Hg at 68°F
<b>Evaporation rate (Butyl acetate= 1):</b>	0.6
<b>Flash point, method used:</b>	Above 200 °F; UN test N.1
<b>Water solubility:</b>	Slight
<b>VOC Content:</b>	310 grams/liter (SCAQMD Rule 1168 Test Method316A)
<b>Auto-ignition temperature:</b>	921°F; 494°C
<b>Flammable limits in air — lower (%):</b>	1.1
<b>Flammable limits in air — upper (%):</b>	12.7

## Section 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	No data available
<b>Stability:</b>	Stable under recommended storage conditions.
<b>Possibly hazardous reactions:</b>	Vapors may form an explosive mixture with air
<b>Conditions to avoid:</b>	Heat, flames, sparks, temperature extremes, and direct sunlight.
<b>Incompatible Materials:</b>	Strong oxides, chlorine, acids, alkalies, peroxides.
<b>Hazardous decomposition products:</b>	By fire, Carbon dioxide, Carbon monoxide
<b>Polymerization:</b>	Will not occur.

## Section 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:** Excessive exposure leads to depression of the central nervous system. Causes eye irritation, moderate skin irritation.

### Product information:

Name	CAS No.	Inhalation:	Dermal:	Oral:
Ethylene glycol butyl ether Synonym: 2-Butoxyethanol	111-76-2	LC <sub>50</sub> (Rat): ~700 ppm, 7 hours; LC <sub>50</sub> (Guinea pig): ~932 ppm, 4 hours;	LD <sub>50</sub> (Rat) >2,000 mg/kg LD <sub>50</sub> (Guinea pig) >2,000 mg/kg	Acute LD <sub>50</sub> (Rat):1,746 mg/kg Acute LD <sub>50</sub> (Guinea pig):1,414 mg/kg
Isopropyl alcohol Synonym: 2-Propanol	67-63-0	LC <sub>50</sub> (Rat): 16,000 ppm, 8 hours	LD <sub>50</sub> (Rabbit) 12,800 mg/kg	LD <sub>50</sub> (Rat) 5,000 to 5,045 mg/kg

LC<sub>50</sub> — The concentration of the chemical in air that kills 50% of the test animals in a given time (usually four hours).

**Chronic toxicity:** The IARC and ACGIH designates Ethylene glycol butyl ether (2-Butoxyethanol) and Isopropyl alcohol (2-Propanol) as category 3 – confirmed animal carcinogen with unknown relevance to humans. Repeated or prolonged exposure in excess of exposure limits in Section 8 may cause damage to the lungs, liver, blood, and kidney.

**Sensitization:** Not known to cause sensitization in humans.

## Section 12. ECOLOGICAL INFORMATION

**Ecotoxicity effects:** LC<sub>50</sub> Harlequinfish, Red rasbora 96-hour 4,200 mg/l.  
LC<sub>50</sub> Fathead minnow 96-hour 9,640 to 10,000 mg/l.  
EC<sub>50</sub> Water flea 48-hour 1,550 mg/l.

**Persistence** The estimated half-life (2-Butoxyethanol) in groundwater ranges from 14 days to 8 weeks; and in soil 7 days to 4 weeks.

**Degradability:** Expected to be readily biodegradable.

## Section 13. DISPOSAL CONSIDERATIONS

**Cleanup considerations:** This product is not a hazardous waste as defined under RCRA 40 CFR 261. Do not incinerate a closed container. Disposal of this material must be done in accordance with federal, state and/or local regulations. The material destined for disposal must be characterized properly and may differ from the product described in this SDS if mixed with other wastes.

## Section 14. TRANSPORT INFORMATION

Please refer to DOT regulation 49 CFR 172.101:

**Transport information:** This material is not regulated under DOT when transported via U.S. commerce routes; and IATA, and IMO via international routes

**Hazardous Materials Description:** (DOT and IATA):

**UN/identification no.:** Not Applicable  
**Proper shipping name:** Not Applicable  
**Hazard class:** Not Applicable  
**Packing group:** Not Applicable  
**DOT reportable quantity (lbs.):** Not Applicable

## Section 15. REGULATORY INFORMATION

### U.S. federal regulatory information:

#### U.S. RCRA (40 CFR 261)

This product is not a hazardous waste as defined under RCRA 40 CFR 261.

### State and community right-to-know regulations:

*The following component(s) of this material are identified on the regulatory lists below:*

#### U.S. TSCA Chemical inventory Section 8(b)

**OSHA** — This product is determined to be hazardous as defined in the OSHA Hazard Communications Standard (29 CFR 1910.1200)

#### CERCLA Sections 102a/103 (40 FR 302.4):

No ingredients are listed.

Some Components of this product are listed in the following sections of **SARA**:

SARA Title III Section 302 — N/A

SARA Title III Section 304 — N/A

SARA Title III Section 313 — Ethylene glycol butyl ether (2-Butoxyethanol) 1% reporting threshold

Isopropyl alcohol (2-Propanol) 100 % reporting threshold

SARA Title III Sections 311/312 Hazardous Categories (40 CFR 370.21)

Acute health hazard: Yes

Chronic health hazard: Yes

Fire hazard: No

Reactive Hazard: No

Pressure Hazard: No

### California Proposition 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

### WHMIS (Canada)

Class D-2B: Material causing other toxic effects

***NOTE:** User must consult with applicable state and local agencies for special specifics, determinations or compliance obligations regarding this product.*

## Section 16. OTHER INFORMATION

### Standards and Certification Listings:

The information and recommendations contained herein are based upon tests, data, and information resources believed to be reliable. However, the Jomar Group and its related operations or divisions do not guarantee the accuracy or completeness, nor shall any of this information constitute a warranty, whether expressed or implied, as to the safety of goods, the merchantability of the goods or the fitness of the goods for a particular purpose. Adjustment to conform to actual conditions of usage may be required. Jomar Group assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of this data. No warranty against infringement of any patent, copyright or trademark is made or implied.