



Safety Data Sheet - Coolube® 2200

Version 1.0 | Date: 06/01/15

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name: Coolube® 2200
Other Identifier: Mixed Esters
Recommended Use: Metal Working Lubricant

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Identified Uses: Environmentally friendly lubricant
Uses Advised Against: None known

1.3 Details of the Supplier of the Safety Data Sheet

Company Name: UNIST, Inc.
Address: 4134 36th Street SE
Grand Rapids, MI 49512
Telephone Number: (800) 253.5462 alternatively (616) 949.0853
Fax Number: (616) 949.9503
Email Address: salessupport@unist.com

1.4 Emergency Telephone Number

Emergency Number: (800) 253.5462
Hours of Operation: Monday thru Friday, 8:30 am - 5:00 pm

SDS Date of Preparation: June 1, 2015

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification: This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200
Skin irritation – Category 2
Serious eye damage – Category 1

2.2 GHS Label Elements:

Signal Word: Danger
Hazard Statement: Causes skin irritation and serious eye damage
Appearance: Clear
Physical State: Oil liquid
Odor: Mild



2.3 Precautionary Statements:**Precautionary Statements - Prevention**

Wash skin thoroughly after handling.
Wear eye protection/face protection.
Wear protective gloves.

Precautionary Statements - Response

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Skin Contact: Wash with plenty of soap and water. If skin irritation occurs get medical advise/attention. Take off contaminated clothing and wash before reuse.

Other Hazards

Slipping hazard.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Synonyms and Chemical Name:**

This product is a substance.

Chemical Name	CAS#	Weight - %	Trade Secret
Supplier Trade Secret	Proprietary	>97.0%	*
Supplier Trade Secret	Proprietary	<=3.0%	*

SECTION 4: FIRST AID MEASURES**4.1 Description of First Aid Measures****General Advice:**

First aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to section 8 for specific personal protective equipment.

Inhalation:

Move person to fresh air; if effects occur, consult a physician.

Skin Contact:

Wash off with plenty of water. Suitable emergency safety shower facility should be available in work area.

Eye contact:

Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferable from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.

Ingestion:

If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

**4.2 Most Important Symptoms/Effects,
Both Acute and Delayed:**

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

4.3 Indication of Immediate Medical Attention and Special Treatment Needed**Notes to Physical:**

Skin contact may aggravate preexisting dermatitis. Maintain adequate ventilation and oxygenation of the patient. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5: FIRE-FIGHTING MEASURES**5.1 Suitable Extinguishing Media:**

Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

5.2 Unsuitable Extinguishing Media:

Do not use direct water stream. May spread fire.

**5.3 Specific Hazards Arising
from the Chemical:**

During a fire, smoke may contain the original material in addition to combustion products or varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

5.4 Unusual Fire and Explosion Hazards:

Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

5.5 Advice for Firefighters**Fire Fighting Procedures:**

Keep people away. Isolate fire and deny unnecessary entry. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

**Protective Equipment and
Precautions for Firefighters:**

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Isolate area. Refer to section 7, Handling, for additional precautionary measures. Keep unnecessary and unprotected personnel from entering the area. Spilled material may cause a slipping hazard. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

6.2 Environmental Precautions:

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

6.3 Methods and Material for Containment and Cleaning Up:

Contain spilled material if possible. Absorb with materials such as: Sand, or dirt. Collect in suitable and properly labeled containers. Do not use water for cleanup. See Section 13, Disposal Considerations, for additional information.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling:

Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

7.2 Conditions for Safe Storage, Including any Incompatibilities:

No specific requirements Additional storage and handling information on this product may be obtained by calling your sales or customer service contact. The shelf life given is for unopened containers stored under moderate temperature conditions.

7.3 Shelf Life:

Use within 24 months.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters:

Exposure limits are listed below, if they exist.

Chemical Name	Regulation	Type of Listing	Value/Notation
Poly(ethylene oxide)	US WEEL	TWA aerosol	10 mg/m3

8.2 Exposure Controls

Engineering Controls:

Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

8.3 Individual Protection Measures, Such as Personal Protective Equipment

Eye/Face Protection: Use chemical goggles.

8.4 Skin and Body Protection

Hand Protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Chlorinated polyethylene. Natural rubber (“latex”). Neoprene. Nitrile/butadiene rubber (“nitrile” or “NBR”). Polyethylene. Ethyl vinyl alcohol laminate (“EVAL”). Polyvinyl chloride (“PVC” or “vinyl”). Viton. Examples of acceptable glove barrier materials include: Polyvinyl alcohol (“PVA”) NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Other Protection: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Respiratory Protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no application exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions, no respiratory protection should be needed; however, if material is heated or sprayed, use an approved air purifying respirator. The following should be effective types of air-purifying respirators: organic vapor cartridge with a particular pre-filter.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on Basic Physical and Chemical Properties**

Appearance:	Clear
Physical State:	Liquid
Color:	Clear
Odor:	Mild
Odor Threshold:	No data available
pH:	5.5 – 7.5 calculated. 1% aqueous solution
Melting Point/Range:	No data available
Freezing Point:	See pour point
Boiling Point/Boiling Range:	>482°F (>250°C) at 760 mmHg calculated
Flash Point:	Closed cup 367°F (186°C) ASTM D93 Open cup 441°F (227°C) ASTM D92
Evaporation Rate (Butyl Acetate = 1):	<0.01 calculated
Flammability (Solid, Gas):	No
Flammability Limit in Air:	Upper flammability limit - No data available Lower flammability limit - No data available
Vapor Pressure:	<0.01 mmHg at 68°F (20°C) calculated

Relative Vapor Density (Air=1):	>1 calculated
Relative Density (Water=1):	0.991 at 68°F (20°C) calculated
Specific Gravity:	No data available
Water Solubility:	Visual completely soluble but some compositions may form gels
Solubility in Other Solvents:	No data available
Partition Coefficient, N-Octanol/Water:	Low pow: 3.3 – 4.4 estimated
Auto-Ignition Temperature:	No data available
Decomposition Temperature:	No data available
Kinematic Viscosity:	51.5 cSt at 77°F (25°C) calculated
Dynamic Viscosity:	No data available
Explosive Properties:	No data available
Oxidizing Properties:	No data available
Molecular Weight:	508 g/mol calculated
Pour Point:	34°F (1°C) calculated

Note: The physical data presented above are typical values and should not be construed as specifications.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:	No data available.
10.2 Chemical Stability:	Thermally stable at typical use temperatures.
10.3 Hazardous Polymerization:	Hazardous polymerization does not occur.
10.4 Conditions to Avoid:	Exposure to elevated temperatures can cause product to decompose.
10.5 Incompatible Materials:	Avoid contact with: Strong acids. Strong bases. Strong oxidizers.
10.6 Hazardous Decomposition Products:	Decomposition products depend upon temperature, air supply and the presence of other materials.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological information on this product or its components appear in this section when such data is available.

11.1 Acute Toxicity

Acute Oral Toxicity:	Low toxicity if swallowed. Small amounts swallowed accidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Typical for this family of materials. LD50, Rat, >3,000 mg/kg estimated
Acute Dermal Toxicity:	Prolonged skin contact is unlikely to result in absorption of harmful amounts. Typical for this family of materials. LD50, Rabbit >2,000 mg/kg estimated.

Acute Inhalation Toxicity: No adverse effects are anticipated from single exposure to vapor. For respiratory irritation and narcotic effects; No relevant data found.

The LC50 has not been determined.

11.2 Symptoms/Routes of Exposure

Skin Corrosion/Irritation: Brief contact may cause slight skin irritation with local redness. May cause drying and flaking of the skin. Effects may be slow to heal.

Serious Eye Damage/Eye Irritation: May cause moderate eye irritation. May cause moderate corneal injury.

Sensitization: For skin sensitization; No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure): Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Specific Target Organ Systemic Toxicity (Repeated Exposure): Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Carcinogenicity: No relevant data found.

Teratogenicity: No relevant data found.

Reproductive Toxicity: No relevant data found.

Mutagenicity: No relevant data found.

Aspiration Hazard: Based on physical properties, not likely to be an aspiration hazard.

SECTION 12: ECOLOGICAL INFORMATION

Eco toxicological information on this product or its components appears in this section when such data is available.

12.1 Toxicity

Acute Toxicity to Fish: For this family of materials:
Material is moderately toxic to aquatic organisms on an acute basis.
(LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested)

For this family of materials:
LC50, pimephales promelas (fathead minnow), static test, 96 Hour, 3.5 – 4.9 mg/l, OECD test guideline 203 or equivalent

Acute Toxicity to Aquatic Invertebrates: For this family of materials:
EC50, daphnia magna (water flea), 48 Hour, 3.1 mg/l, OECD test guideline 202 or equivalent

12.2 Persistence and Degradability

Biodegradability:	For this family of materials: Material is readily biodegradable. Passes OECD test(s) for readily biodegradability. 10-day Window: Not applicable
Biodegradation:	>60%
Exposure Time:	28 d
Method:	OECD test guideline 301F or equivalent

12.3 Bioaccumulative Potential

Partial Coefficient:	N-octanol/water (log Pow): 3.3 – 4.4 estimated
Bioconcentration Factor (BCF):	15-64 fish. estimated

12.4 Mobility in Soil: No specific, relevant data available for assessment.

SECTION 13. DISPOSAL CONSIDERATIONS**13.1 Waste Treatment Methods**

Disposal Methods: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OF MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SDS SECTION: Composition information. FOR UNUSED AND UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device.

SECTION 14. TRANSPORT INFORMATION**14.1 DOT**

Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s. (Alcohol C6-C17 (Secondary) Poly (3-6) Ethoxylate)
UN Number:	UN3082
Class:	9
Packing Group:	III
Marine Pollutant:	Alcohol C6-C17 (Secondary) Poly (3-6) Ethoxylate

14.2 Classification for OCEAN Transport (IMO-IMDG)

Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s. (Alcohol C6-C17 (Secondary) Poly (3-6) Ethoxylate)
UN Number:	UN3082
Class:	9
Packing Group	III
Marine Pollutant:	Alcohol C6-C17 (Secondary) Poly (3-6) Ethoxylate
Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code:	Consult IMO regulations before transporting ocean bulk

14.3 Classification for AIR Transports (IATA/ICAO)

Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s. (Alcohol C6-C17 (Secondary) Poly (3-6) Ethoxylate)
UN Number:	UN3082
Class:	9
Packing Group:	III
Marine Pollutant:	Alcohol C6-C17 (Secondary) Poly (3-6) Ethoxylate

The information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15. REGULATORY INFORMATION**15.1 OSHA Hazard Communications Standard:**

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

15.2 Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 311 and 312:

Acute Health Hazard

15.3 Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313:

This material does not contain any chemical components with know CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

15.4 Pennsylvania Worker and Community Right-To-Know Act:

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

15.5 California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

15.6 United States TSCA Inventory (TSCA):

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

SECTION 16: OTHER INFORMATION**16.1 Other Information****Legal Disclaimer:**

The information presented herein has been compiled from sources considered by the company, in good faith, to be dependable and is accurate and reliable to the best of our knowledge and belief. However, the company cannot make any warranty or representation respecting the accuracy or completeness of the data and assumes no responsibility for any liability or damages relating thereto or for advising you regarding the protection of your employees, customers, or others. Users should make their own tests to determine the applicability of such information or suitability of any products of specific use.

HMIS Rating:

Health: 2

Flammability: 1

Physical Hazard: 0

NFPA Rating:

Health: 2

Fire: 1

Reactivity: 0

Revision History: Update to GHS format.

Date: 06/01/15