HANGSTERFER'S®
Research, Development & Manufacturing of Metalworking Lubricants

Safety Data Sheet

Issue Date 01-27-2016 **Revision date** 12-19-2014 **Revision Number** 2

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier

Product name Crystal Cut 322

Other means of identification

Recommended use of the chemical and restrictions on use

Material Uses Coolant.

Uses advised against Verify Applications

Details of the supplier of the safety data sheet

Manufacturer

Hangsterfer's Laboratories, Inc., 175 Ogden Road, Mantua, NJ 08051; Phone 856-468-0216, Fax 856-468-0200, Website: www.hangsterfers.com

Emergency telephone number

Emergency telephone number Chemtrec 1-800-424-9300 in USCanutec 1-613-996-6666 in Canada For international assistance, dial Chemtrec US number 1-703-527-3887

2. Hazards Identification

Prepared according to OSHA Hazard Communication Standard (29 CFR 1910.1200) and ANSI MSDS Standard (Z400.1). Complies with Canadian Workplace Hazardous Materials Information System (WHMIS) standards.

Classification

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label Elements

EMERGENCY OVERVIEW

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance Golden **Physical state** Liquid **Odor** Mild

Hazards not otherwise classified (HNOC)

Other Information

• No known effect

3. Composition/information on Ingredients

Chemical Family Synthetic Fluid.

Chemical name	CAS-No	Weight-%
Triethanolamine	102-71-6	20.847
Benzyl alcohol	100-51-6	2.7244

4. First Aid Measures

First aid measures

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.

Skin contact Wash skin with soap and water. Consult a physician if necessary.

Inhalation Remove to fresh air. Consult a physician if necessary.

Ingestion Do NOT induce vomiting. Drink plenty of water. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms None known.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. Fire-Fighting Measures

Suitable extinguishing media
Not applicable.

Unsuitable extinguishing media Not applicable.

Specific hazards arising from the chemical
None.

Protective equipment and precautions for firefighters
Move containers from fire area if you can do it without risk.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin and eyes. Wear boots, gloves and protective suit when handling large spills. Ensure adequate ventilation.

Other Information Report spills as required to the appropriate authorities.

Environmental precautions

Environmental precautions No unusual hazard.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Dike to collect large liquid spills.

Methods for Clean-up Take up mechanically, placing in appropriate containers for disposal.

7. Handling and Storage

Precautions for safe handling

Handling Avoid contact with eyes. Keep container in a well-ventilated place. Do not puncture, crush or incinerate containers.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep away from direct sunlight. Keep away from heat.

Incompatible materials Acids and oxidizing agents.

8. Exposure Controls/Personal Protection

Control parameters

Exposure guidelines The table below lists known exposure levels for any components of this product which are considered hazardous. Keep in mind, however, that these exposure levels are for air levels of the individual ingredients as measured by specific analytical methods.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Triethanolamine 102-71-6	TWA: 5 mg/m³	-	

Appropriate engineering controls

Engineering controls Use in well ventilated area. If user operations generate an oil mist, use process enclosures, local exhaust ventilation or other engineering controls to control airborne levels below the recommended mineral oil mist exposure limits (ACGIH TLV TWA: 5 mg/m³; ACGIH TLV STEL: 10 mg/m³; OSHA PEL TWA: 5 mg/m³).

Individual protection measures, such as personal protective equipment

Eye/face protection Safety glasses with side-shields.

Skin and Body Protection Use protective gloves and clothing if contact with product is likely.

Respiratory protection If personal exposure levels cannot be maintained below accepted exposure limits, NIOSH/MSHA approved respiratory protection should be worn.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state Liquid
Appearance Golden
Color Golden

Odor Mild
Odor threshold No information available

Property	Values	Remarks • Method
pH	8.5	
Melting point / freezing point	-	May begin to solidify at 0 °C / 32 °F
Boiling point	100 °C / 212 °F	
Flash point	Not flammable	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit	No unusual hazard	
Lower flammability limit	No unusual hazard	
Vapor pressure	<0.01 mmHg @ 20 °C	
Vapor density	> 5	
Specific gravity	1.04	
Water solubility	Soluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No unusual hazard	
Decomposition temperature	No unusual hazard	
Kinematic viscosity	8 cSt @ 40°C / 52 SUS @ 100°F	
Dynamic viscosity	No information available	
VOC Content, % Vol	Request additional information	

10. Stability and Reactivity

Reactivity
No unusual hazard

Chemical stability
Stable under normal conditions.
Possibility of hazardous reactions
None under normal use conditions.
Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid
No additional remarks.
Incompatible materials
Acids and oxidizing agents.
Hazardous decomposition products
Carbon oxides.

11. Toxicological Information

Information on likely routes of exposure

Product Information Product does not present an acute toxicity hazard based on known information

Inhalation No unusual hazard.

Eye contact No unusual hazard.

Skin contact No unusual hazard.

Ingestion No unusual hazard.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Triethanolamine 102-71-6	= 4190 mg/kg (Rat)	> 20 mL/kg (Rabbit) > 16 mL/kg (Rat)	
Benzyl alcohol 100-51-6	= 1230 mg/kg (Rat)	= 2 g/kg (Rabbit)	= 8.8 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms None known.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation OECD 404 - Non-irritating and non-corrosive (rabbit).
Serious eye damage/eye irritation No unusual hazard.
Sensitization No known effect.
Mutagenic Effects No known effect.
Carcinogenicity No known effect.

Chemical name	ACGIH	IARC	NTP Carc	OSHA
Triethanolamine 102-71-6	Not Listed	Group 3		

Reproductive effects No known effect.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Chronic toxicity No known effect.
Aspiration Hazard No unusual hazard.

Numerical measures of toxicity - Product Information

Oral LD50 > 5000 mg/kg (rat)

12. Ecological Information

Ecotoxicity

No unusual hazard

Chemical name	Freshwater Algae	Fish	Microtox	Water Flea
Triethanolamine 102-71-6	216: 72 h Desmodesmus subspicatus mg/L EC50 169: 96 h Desmodesmus subspicatus mg/L EC50	450 - 1000: 96 h Lepomis macrochirus mg/L LC50 static 10600 - 13000: 96 h Pimephales promelas mg/L LC50 flow-through 1000: 96 h Pimephales promelas mg/L LC50 static		1386: 24 h Daphnia magna mg/L EC50
Benzyl alcohol 100-51-6	35: 3 h Anabaena variabilis mg/L EC50	460: 96 h Pimephales promelas mg/L LC50 static 10: 96 h Lepomis macrochirus mg/L LC50 static	EC50 = 63.7 mg/L 15 min EC50 = 63.7 mg/L 5 min EC50 = 71.4 mg/L 30 min	EC50 = 23 mg/L 48 h

Persistence/Degradability
No unusual hazard

Bioaccumulation/Accumulation
No unusual hazard.

Chemical name	Partition coefficient
Triethanolamine 102-71-6	-2.53
Benzyl alcohol 100-51-6	1.1

Other adverse effects None known

13. Disposal Considerations

Waste treatment methods

Waste Disposal Method Dispose of in accordance with federal, state and local regulations.

Contaminated packaging Do not reuse empty containers.

14. Transport Information

DOT

UN-No Not regulated
Proper shipping name Not regulated
Hazard Class Not regulated
Packing group Not regulated
Labels Not regulated
Description Not regulated

TDG

UN-No Not regulated
Proper shipping name Not regulated
Hazard Class Not regulated
Packing group Not regulated

Labels	Not regulated
Description	Not regulated

IMDG/IMO

UN-No	Not regulated
Proper shipping name	Not regulated
Hazard Class	Not regulated
Packing group	Not regulated
Labels	Not regulated
Description	Not regulated

ADR/RID

UN-No	Not regulated
Proper shipping name	Not regulated
Hazard Class	Not regulated
Packing group	Not regulated
ADR/RID-Labels	Not regulated
Description	Not regulated

IATA

UN-No	Not regulated
Proper shipping name	Not regulated
Hazard Class	Not regulated
Labels	Not regulated
Packing group	Not regulated
Description	Not regulated

PG* : Packing group

15. Regulatory Information

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40 of the Code of Federal Regulations, Part 372:

Chemical name	CAS-No	Weight-%	SARA 313 - Threshold Values %
Triethanolamine - 102-71-6	102-71-6	20.847	
Benzyl alcohol - 100-51-6	100-51-6	2.7244	

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

U.S. Regulations & Inventories

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

The table below lists any regulatory or inventory listing information found for ingredients of this product which are considered hazardous. All other components are either listed on the TSCA inventory or are exempt from listing. See Section 16 for explanation of column headings.

Chemical name	New Jersey	Massachusetts	Pennsylvania
Triethanolamine 102-71-6	X	X	X
Benzyl alcohol 100-51-6		X	X

U.S. EPA Label information
EPA Pesticide registration number Not applicable

CANADA

16. Other Information

NFPA	**HEALTH** 1	**Flammability** 0	**Instability** 0	**Physical hazard** -
HMIS	**HEALTH** 1	**Flammability** 0	**Physical Hazards** 0	**Personal Protection** -

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Revision Summary

Disclaimer
The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of SDS