



HANGSTERFER'S®

Research, Development & Manufacturing of Metalworking Lubricants

Safety Data Sheet

Issue Date 03-26-2015

Revision date 03-26-2015

Revision Number 2

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

Product identifier

Product name

Lubricity Additive

Other means of identification

Recommended use of the chemical and restrictions on use

Material Uses

Additive.

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 US/Canada 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 Clear

Physical state Liquid

Odor Mild

Hazards not otherwise classified (HNOC)

Other Information

• No known effect

3. Composition/information on Ingredients

Chemical Family

Miscellaneous.

Chemical name	CAS-No	Weight-%
Triethanolamine	102-71-6	5

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, consult a physician if necessary.
Skin contact	Wash off immediately with soap and plenty of 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.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. Fire-fighting measures**Suitable extinguishing media**

Water spray or fog is preferred; if water not available use dry chemical, CO2 or regular foam.

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

Specific hazards arising from the chemical

May be ignited by heat, sparks or flames. Keep product and empty container away from heat and sources of ignition.

Hazardous combustion products Carbon oxides. Nitrogen oxides (NOx).

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Personal precautions	Remove all sources of ignition. Avoid contact with skin, eyes and clothing. Wear boots, gloves and protective suit when handling large spills.
Other Information	Report spills as required to the appropriate authorities.

Environmental precautions

Environmental precautions	No information available.
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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	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take all appropriate steps to avoid contamination of ground water.

7. Handling and Storage**Precautions for safe handling**

Handling	Avoid contact with skin and eyes. Keep container in a well-ventilated place. Do not puncture, crush or incinerate containers.
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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 and sources of ignition.
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/m ³	-	

Appropriate engineering controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

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	Odor	Mild
Appearance	Clear	Odor threshold	Not determined
Color	Clear		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not applicable	
Melting point / freezing point	No information available	
Boiling point	No information available	
Flash point	238 °C / 460 °F	Cleveland Open Cup
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	No information available	
Vapor density	No information available	
Specific gravity	0.90	
Water solubility	Dispersible 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	18550 cSt @ 40°C	
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

Keep away from open flames, hot surfaces and sources of ignition.

Incompatible materials

Acids and oxidizing agents.

Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx).

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)	

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 No unusual hazard.

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 > 2000 mg/kg (rat)

Dermal LD50 > 2000 mg/kg (rabbit)

12. Ecological Information

Ecotoxicity

Chemical name	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Triethanolamine 102-71-6	216: 72 h Desmodesmus subspicatus mg/L EC50 169: 96 h Desmodesmus subspicatus mg/L EC50	10600 - 13000: 96 h Pimephales promelas mg/L LC50 flow-through 450 - 1000: 96 h Lepomis macrochirus mg/L LC50 static 1000: 96 h Pimephales promelas mg/L LC50 static		1386: 24 h Daphnia magna mg/L EC50

Persistence/Degradability

Readily biodegradable

Chemical name	Log Pow
Triethanolamine 102-71-6	-2.53

Other adverse effects

No additional remarks

13. Disposal Considerations

Waste treatment methods

Waste Disposal Method

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

Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

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	5	

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	yes
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

U.S. EPA Label information

EPA Pesticide registration number Not applicable

16. Other information

<u>NFPA</u>	HEALTH 1	Flammability 1	Instability 0	Physical hazard -
<u>HMIS</u>	HEALTH 1	Flammability 1	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