

# Material Safety Data Sheet

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.

Validation Date 04-08-2013

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** Cobalt Grinder

**Product Code** 695

**Material Uses** Coolant

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

## 2. HAZARDS IDENTIFICATION

### Acute Health Effects

**Skin** Not expected to be a primary skin irritant.

**Eye** None known

**Inhalation** Not expected to present a hazard under normal use conditions.

**Ingestion** No known effect

<b>HMIS</b>	<b>Health Hazard</b>	1	<b>NFPA</b>	<b>Health Hazard</b>	1
	<b>Fire Hazard</b>	0		<b>Fire Hazard</b>	0
	<b>Physical Hazard</b>	0		<b>Reactivity</b>	0

**Chronic Health Effects** No known effect

**Chronic Toxicity** No known effect

**Carcinogenic Effects** None known

**Aggravated Medical Conditions** None known

**Miscellaneous Hazards** Avoid prolonged and/or repeated contact with skin. Prolonged and/or repeated contact with this material may produce mild skin irritation or inflammation.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

If any of the components of this product are defined as hazardous by OSHA Hazard Communication Standard 1910.1200 and are present at 1% or more (0.1% or more for carcinogens) they will be listed in this section. If no components appear in this section, no components of the product meet or exceed the reporting requirements. OSHA PELs and ACGIH TLVs refer to the concentration in air of the specific chemical as measured by specific analytical methods.

### Hazardous Components

Chemical Name	CAS-No	Weight %	OSHA PEL	Carcinogenic Lists	ACGIH TLV
Triethanolamine	102-71-6	2 - 5	Not Listed.	Not Listed	TWA: 5 mg/m <sup>3</sup>

**4. FIRST AID MEASURES**

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.
<b>Skin Contact</b>	Wash skin with soap and water. Consult a physician if necessary.
<b>Inhalation</b>	Move to fresh air. Consult a physician if necessary.
<b>Ingestion</b>	Do not induce vomiting. Drink plenty of water. Consult a physician if necessary.

**5. FIRE-FIGHTING MEASURES**

<b>Flammable Properties</b>	Not flammable
<b>Suitable Extinguishing Media</b>	Not Applicable.
<b>Hazardous Combustion Products</b>	Carbon oxides
<b>Specific Hazards Arising from the Chemical</b>	None.
<b>Protective Equipment and Precautions for Firefighters</b>	Move containers from fire area if you can do it without risk

**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions</b>	Avoid contact with the skin and the eyes. Wear boots, gloves and protective suit when handling large spills. Ensure adequate ventilation.
<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so. Dike to collect large liquid spills.
<b>Methods for Clean-up</b>	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.
<b>Other Information</b>	Report spills as required to the appropriate authorities.

**7. HANDLING AND STORAGE**

<b>Handling</b>	Avoid contact with skin and eyes. Keep in a well ventilated place. Do not puncture, crush or incinerate containers.
<b>Storage</b>	Keep container tightly closed in a dry and well ventilated place. Keep away from direct sunlight. Keep away from heat.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**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.

<b>Chemical Name</b>	<b>ACGIH TLV</b>	<b>OSHA PEL</b>	<b>Quebec OEL</b>	<b>Ontario TWA EV</b>	<b>EU OEL</b>
Triethanolamine	TWA: 5 mg/m <sup>3</sup>	Not Listed	TWA: 5 mg/m <sup>3</sup>	TWA: 0.5 ppm TWA: 3.1 mg/m <sup>3</sup>	Not Listed

<b>Engineering Controls</b>	Ensure adequate ventilation, especially in confined areas.
<b>Eye/face Protection</b>	Safety glasses with side-shields.
<b>Skin Protection</b>	Use protective gloves and clothing if contact with product is likely.
<b>Respiratory Protection</b>	If personal exposure levels cannot be maintained below accepted exposure limits, NIOSH/MSHA approved respiratory protection should be worn.
<b>General Hygiene Considerations</b>	Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	Golden.	<b>Odor</b>	Mild.
<b>Physical State</b>	Liquid.	<b>pH (10% soln/water)</b>	9.6
<b>Flash Point (COC)</b>	Not flammable	<b>Boiling Point/Range</b>	93°C / 199°F
<b>Melting Point/Range</b>	Not determined.	<b>Solubility In Water</b>	Soluble.
<b>Specific Gravity (Water=1)</b>	1.04	<b>Vapor Density (Air=1)</b>	Not determined.
<b>Vapor Pressure</b>	Not determined.	<b>Volatility</b>	No data available.
<b>VOC Content, % Vol</b>	No data available.		
<b>Viscosity</b>	SUS @ 100°F = 14 cSt @ 40°C = 3.1		

**10. STABILITY AND REACTIVITY**

<b>Chemical Stability</b>	Stable under normal conditions.
<b>Conditions to Avoid</b>	No additional remarks.
<b>Incompatible Materials</b>	Acids. Incompatible with oxidizing agents. Alkalines.
<b>Hazardous Decomposition Products</b>	Carbon oxides.
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.

**11. TOXICOLOGICAL INFORMATION**

This section relates to available toxicology information on the complete product. Information on components classified as hazardous is listed in Section 3.

**Acute Toxicity**

**LD50 Oral:** > 5000 mg/kg (rat, predicted based on data on components).

<b>Chemical Name</b>	<b>LD50 Oral</b>	<b>LD50 Dermal</b>	<b>LC50 Inhalation</b>
Triethanolamine	4190 mg/kg ( Rat )	16 mL/kg ( Rat ) 2000 mg/kg ( Rabbit )	No information available

<b>Irritation</b>	Skin Irritation - OECD 404: Non-irritating (Rabbit, predicted based on data on components). Not expected to be a primary eye irritant.
<b>Corrosivity</b>	OECD 404: Non corrosive (Rabbit, predicted based on data on components)
<b>Sensitization</b>	None known
<b>Chronic Toxicity</b>	No known effect
<b>Carcinogenicity</b>	This product contains no ingredients with a concentration of 0.1% or more which are known to be carcinogenic.

<b>Chemical Name</b>	<b>IARC</b>	<b>ACGIH</b>	<b>NTP Carc</b>	<b>OSHA</b>
Triethanolamine	Not Listed	Not Listed	Not Listed	Not Listed

**Other Adverse Effects** None known.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity** Ecotoxicity and biodegradability of this complete mixture have not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water and should not be considered readily biodegradable. If information is available on any of the individual components listed in Section 3, it will appear in a table below.

## Cobalt Grinder

Chemical Name	Freshwater Algae	Freshwater Fish Species Data	Water Flea	DOT Marine Pollutant
Triethanolamine	h EC50 72 216 mg/L h EC50 96 169 mg/L	= 11800 mg/L LC50 fathead minnow 96 h flow-through = 5000 mg/L LC50 goldfish 24 h	No information available	Not Listed

**Persistence/Degradability** No additional remarks.

### 13. DISPOSAL CONSIDERATIONS

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

### 14. TRANSPORT INFORMATION

**DOT** Not regulated.  
**TDG** Not regulated.  
**IATA** Not regulated.  
**IMDG/IMO** Not regulated.  
**ADR/RID** Not regulated.

### 15. REGULATORY INFORMATION

**U.S. Regulations & Inventories** 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	CAS-No	TSCA 12(b)	CERCLA/SARA 313 (de minimis concentration)	SARA Hazardous Substance Required Qty
Triethanolamine	102-71-6	Not Listed	Not Listed	Not Listed

**Canada Regulations & Inventories** The table below lists any regulatory information found for ingredients of this product which are considered hazardous. All other components are either listed on the inventories referenced or are exempt from listing. See Section 16 for explanation of column headings.

Chemical Name	CAS-No	WHMIS
Triethanolamine	102-71-6	D2B

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

Product Classification: Not hazardous

### 16. OTHER INFORMATION

**Regulatory Lists Searched & Other Sources of Information**

**16. OTHER INFORMATION**

- ACGIH - American Convergence of Governmental Industrial Hygienists
- ADN - European Agreement for International Carriage of Dangerous Goods by Inland Waterways
- ANSI - American National Standards Institute
- CAS - Chemical Abstract Services
- CHINA - China Inventory
- DOT - United States Department of Transportation
- EINECS - European Union (EU) European Inventory of Existing Commercial Chemical Substances
- IARC - International Agency for Research on Cancer
- ICAO - International Civil Aviation Organization
- MARTK - Massachusetts Right To Know List
- NFPA - United States National Fire Protection Association
- NJRTK - New Jersey Right To Know List
- OSHA - United States Occupational Safety & Health Administration
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- RID - European Agreement for International Carriage of Dangerous Goods by Rail
- SARA - United States Superfund Amendments & Reauthorization Act
- TSCA - US Toxic Substances Control Act
- AICS - Australian Inventory of Chemical Substances
- ADR - European Agreement for International Carriage of Dangerous Goods by Road
- CAP65 - California Proposition 65 Hazard List
- CERCLA - Comprehensive Environmental Response, Compensation & Liability Act
- CPR - Canadian Controlled Products Regulations
- DSL - Canada Domestic Substances List
- ENCS - Japan Existing and New Chemical Substances
- IATA - International Air Transport Association
- IMDG - International Maritime Dangerous Goods Code
- NDSL - Canada Non-Domestic Substances List
- NIOSH - United States National Institute for Occupational Safety & Health
- NTP - United States National Toxicology Program
- PARTK - Pennsylvania Right To Know List
- RCRA - United States Resources Conservation & Recovery Act
- RIHSL - Rhode Island Hazardous Substance List
- TDG - Canada Transportation of Dangerous Goods Act
- WHMIS - Canada Workplace Hazardous Materials Information System

**Definitions**

- EC50 - Effective Concentration (Concentration of a compound where 50% of the expected effect is observed.)
- LC50 - Lethal Concentration (The concentration in water that will kill 50% of the test animals within a specific period of time, usually 96 hours.)
- LD50 - Lethal Dose (The single dose that will kill 50% of the test animals by any route other than inhalation such as by ingestion or skin contact.)
- OEL - Occupational Exposure Limit
- PEL - Permissible Exposure Limits
- STEL - Short Term Exposure Limit
- TLV - Threshold Limit Value
- TWA - Time Weighted Average
- TWAEV - Time Weighted Average Exposure Value

The information provided on this MSDS 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.

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**End of MSDS**