

Material Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Cimtech 100
Metalworking Fluid Concentrate

Distributor Name: Radiac Abrasives Inc.
1015 S. College Avenue
Salem, IL 62881

Telephone: 618-548-4200

Date: 1/9/2006

2. EMERGENCY INFORMATION

Product is alkaline. Product is a primary eye irritant. Product is corrosive to aluminum. Highway spills could result in slippery conditions. No other significant health effects are associated with this material.

3. POTENTIAL HEALTH EFFECTS OF DIRECT EXPOSURE

Inhalation:	Not applicable	Extended exposure to mists may cause upper respiratory irritation.
Eye Contact:	Product is primary eye irritant.	Will cause stinging sensation in the eye.
Skin Contact:	Product is not a primary skin irritant.	Not irritating to the skin when used as directed and good personal hygiene is practiced.
Ingestion:	Not orally toxic.	Swallowing small quantities may cause diarrhea, nausea or vomiting.

Medical Conditions Generally Aggravated By Exposure:

May aggravate existing skin irritation where further defatting of skin penetration could occur.

Mild skin irritation (redness and dryness of hands) may be experienced when the diluted product has been contaminated by certain oils and dissolved metals, or when mixing ratio is too strong. When problems occur, use of water-resistant barrier creams may be a temporary control measure.

When used in applications generating high levels of mist, operator exposure can be minimized by proper ventilation, use of mist collectors or splash guards, as appropriate. If there is doubt about actual mist levels present, monitoring should be conducted.

Repeated excessive exposures to high amounts of triethanolamine may cause liver and kidney effects.

Carcinogen Listings: NTP: No IARC: No OSHA: No

Signs and symptoms of exposure

Acute: Eye injury may result from contact with product. Skin irritation can result from improper use and handling of product.

4. EMERGENCY AND FIRST AID PROCEDURES

Eyes: In case of eye contact, flush immediately with running water for at least 15 minutes, and get prompt medical attention.

Skin Contact: Diluted product is not irritating to the skin when used as recommended and good personal hygiene is practiced. For skin contact, flush with large amounts of water while removing contaminated clothing. Remove contaminated shoes and clothing and launder before reuse. If irritation persists, get medical attention.

Ingestion: Swallowing small quantities of diluted product may cause nausea, diarrhea or abdominal distress. If the material is swallowed, get immediate medical attention or advice. **DO NOT INDUCE VOMITING.** Give two glasses of water or milk. Immediately contact a physician and obtain treatment.

Inhalation: Inhalation can occur in applications where high mist levels are generated. OSHA has set a PEL of 15 mg/m³ for any airborne particulate as a nuisance level of exposure. NIOSH has set a REL of 0.5 mg/m³ for metalworking fluid mist. If symptoms are experienced, remove source of contamination or move victim to fresh air. If symptoms persist, get medical attention.

5. CONTROL MEASURES

Respiratory Protection:

Product is not volatile.

In applications where time-weighted exposures are 0.5 to 5 mg/m³, mist reduction through improved ventilation, mist collection or process modification is recommended by NIOSH. Where it is not possible, NIOSH recommends the use of air purifying, half-mask respirator including a disposable respirator, equipped with any P- or R-series particulate filter. If the average exposure will exceed 5 mg/m³, NIOSH recommends use of a powered, air-purifying respirator equipped with a hood or helmet and a HEPA filter. If respiratory problems are present

when mist levels are $< 0.5 \text{ mg/m}^3$, respiratory protection should be based on the individual recommendation of a qualified health care provider.

Caution: The appropriate use and type of respirator is dependent upon use of the product and local operating conditions.

Ventilation:

For most applications, normal shop ventilation is adequate. However, when high mist levels are generated or where machines are close together or ventilation is inadequate, operators may experience respiratory irritation. For such applications, use of splash guards or mist collectors is recommended.

Eye Protection:

Proper metalworking plant eye protection required when handling product concentrate.

Other Protective Clothing or Equipment:

Use effective metalworking plant protective clothing as appropriate.

Work / Hygiene Practices:

Good personal hygiene should always be followed.

Protective Gloves:

Impervious gloves, such as nitrile gloves, are recommended when handling product concentrate.

6. HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

These ingredients may contribute to the acute product hazards listed under the Potential Health Effects section. Other substances, not hazardous under the OSHA Hazard Communication Standard, may be present. Further composition information may be available to health professionals as provided in the Standard.

Component	CAS#	Percent
Triethanolamine	102-71-6	3 – 7
Ethanolamine	141-43-5	3 – 7
Neodecanoic acid	26896-20-8	1 – 5
Nonanoic acid	112-05-0	1 – 5

7. FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media: Not applicable

Hazardous Combustion Products: Smoke, fumes, oxides of nitrogen and oxides of carbon

Flash Point: Not applicable

HMIS Ratings:

Health	1
Flammability Classification	0
Physical	0

NFPA Ratings:

Health	1
Flammability Classification	0
Instability	0

8. ACCIDENTAL RELEASE MEASURES

Contain the spill, collect on absorbent material, and discard as dictated by Federal, state and local regulations that may apply. Flush area thoroughly with water.

Reportable Quantity: None

9. WASTE DISPOSAL

For Used Product: Disposal procedures must comply with local, county, state and Federal regulations. If pre-treatment is needed, ultrafiltration, emulsion breaking or evaporation may be used.

For Unused Product: Product is not a hazardous waste as defined under 40CFR261.

Empty Containers: Empty containers will contain a residue which is not considered a hazardous waste under RCRA regulations. Drums can be drained to a "drip dry" condition by inversion and can be offered for recycling or scrap.

10. HANDLING AND STORAGE

If frozen, thaw completely at room temperature prior to use. Avoid all contact of product with eyes or skin. Wash thoroughly after handling. Do not swallow. Do not store product concentrate in direct sunlight or elevated temperatures.

Other Precautions: Contains amines. Do not add sodium nitrite or other nitrosating agents to this product because suspected cancer-causing nitrosamines may be formed.

11. PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point:	212°F
Specific Gravity:	1.047
Evaporation Rate:	Like water when diluted
Solubility (H₂O):	100% Miscible
Volatile Organic Content:	9.36%
pH (Concentrate):	10
pH (Mix):	9.1 @ 5%
Recommended Use Dilution Rate:	5%
Appearance / Odor:	Clear/Chemical

12. REACTIVITY

Stability: Stable under normal conditions.

Conditions To Avoid: Use as directed.

Materials To Avoid: Avoid contact with strong acids or oxidizers to product.

Hazardous Polymerization: Will not occur.

Combustion Products: Smoke, fumes, oxides of nitrogen, and oxides of carbon.

13. TRANSPORTATION INFORMATION

By Land:

Hazardous Materials Description and Proper Shipping Name (49CFR172.101)
Not a hazardous material

U.S. Harmonized Tariff Code: 3403.99.0000

By Air or Vessel:

Hazardous Materials Description and Proper Shipping Name (49CFR172.101)

Corrosive liquid, acidic, organic, n.o.s.

Hazard Class (49CFR172.101): 8

Identification Number: UN3265

Packing Group: III

14. REGULATORY INFORMATION

Exposure Guidelines Regulated Material	NIOSH REL	OSHA PEL	OSHA STEL	ACGIH TLV	ACGIH STEL
Triethanolamine				5 mg/m ³	
Ethanolamine		3 ppm	6 ppm	3 ppm	6 ppm
Metalworking Fluid Mist	0.5 mg/m ³				

CERCLA: No components of this product are present at levels which require reporting under 40CFR302.4.

EPCRA (SARA) Title III Extremely Hazardous Substances (302): None

Hazardous Substances (311/312): Product is a hazardous substance as defined under the OSHA Hazard Communication Standard and may be reportable under the provisions of SARA 311 and 312.

Hazard Categories:

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

RCRA: Product concentrate does not meet the definition of a hazardous waste as defined under 40 CFR 261. It is possible that in use, the product may be contaminated by metals or by chlorinated solvents and the final waste may meet the TCLP definition. Each facility should assess each waste stream to determine if the used fluid should be treated as a hazardous waste.

TSCA: The ingredients of this product are on the TSCA inventory.

State Right To Know: May states have enacted Community Right To Know laws which require information beyond that mandated by federal laws. Since some of these laws are inconsistent with the federal laws, the information in this sheet may not fully meet the requirements of every state.

Toxic Substances (313)		Max. %
Component	CAS#	
None		

GLOSSARY OF ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
COC	Cleveland Open Cup
DOT	Department of Transportation
EPCRA	Emergency Planning and Community Right-To-Know Act (aka SARA)
IARC	International Agency for Research on Cancer
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation and Recovery Act
REC	Recommended
REL	Recommended Exposure Limit
SARA	Superfund Amendments and Reauthorization Act
STEL	Short-Term Exposure Limit
TCLP	Toxicity Characteristics Leaching Procedure
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
VOC	Volatile Organic Compounds

Disclaimer

We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and of these opinions and the condition and use of the product are not within our control, it is the user's obligation to determine the conditions of safe use of the product.