

MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet complies with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910.1200.

1. Product and Supplier Identification

Product: **Grinder Coolant**

Product Use: Coolant solution for stained glass crafts.

Supplier: **Novacan Industries Ltd.**
856 Washington Drive,
Port Moody, BC Canada V3L 5B5
Emergency Telephone: (604) 986-4617

Manufacturer: As above

2. Composition

No ingredients are known to be hazardous and require disclosure.

3. Hazards Identification

Routes of Entry: (under normal conditions of use)

Skin Contact: Moderate Eye Contact: Moderate Ingestion: Minor Inhalation: Minor

Effects of Short-Term (Acute) Exposure:

Inhalation: Vapor concentrations are normally too low at room temperature (low vapor pressure) to cause observable health effects.

Skin Contact: Solution may irritate the skin and area under nails and may lead to dermatitis and sensitization. This product may cause irritation if sealed to the skin for a prolonged period by gloves, shoes or tight clothing.

Eye Contact: Solutions may cause mild irritation.

Ingestion: Ingestion is an unlikely route of entry. Ingestion may cause irritation to the gastrointestinal lining.

Effects of Long-Term (Chronic) Exposure:

The chronic effects may be mild dermatitis and skin sensitization from skin contact.

Medical Conditions Aggravated By Exposure:

Unlikely to aggravate existing medical conditions.

4. First Aid Measures

Eye Contact: Flush contaminated eye(s) with lukewarm, gently running water for 30 minutes, holding eyelids open. Seek medical attention if irritation persists.

Skin Contact: Wash affected area immediately with mild soap and water and continue for 15 minutes. If irritation persists, seek immediate medical attention. Remove any contaminated clothing and launder clothing before reuse.

Inhalation: This product is not expected to present an inhalation hazard at ambient conditions. If victim has been exposed to vapors remove to fresh air. If breathing has stopped, a trained person should perform artificial respiration. Get medical attention immediately.

Ingestion: Rinse mouth with water. Dilute contents of stomach with 1-2 glasses of water or milk. **Do not induce vomiting.** If vomiting occurs naturally have victim lean forward to reduce risk of aspiration. Seek immediate medical attention.

5. Fire Fighting Measures

Flash point:	Not Applicable
Autoignition temperature:	Not applicable. See information under "Fire Fighting Instructions"
Lower Explosive Limit:	Not established
Upper Explosion Limit:	Not established
Sensitivity to Impact:	Not sensitive.
Sensitivity to Static Discharge:	Not sensitive.

Hazardous Combustion Products: May release carbon dioxide and carbon monoxide.

Extinguishing Media: No specific recommendation. Use media to suppress surrounding fire.

Fire Fighting Instructions: Do not enter confined fire space without proper personal protection. Use approved positive pressure self-contained breathing apparatus. Do not use water except as a fog. Cool surrounding containers with water spray. Prevent runoff to sewers and waterways.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD INDEX:

HEALTH: 0 - No more hazardous than normal combustible material under fire conditions.

FLAMMABILITY: 1 - Must be preheated before ignition can occur.

REACTIVITY: 0 - Normally stable.

SPECIFIC HAZARDS: None.

6. Accidental Release Measures

Personal Protection: Evacuate unnecessary personnel from spill area. Wear appropriate personal protective equipment. Ventilate area. Do not touch spilled product without proper personal protection. See Section 8 for proper protective equipment to be worn while cleaning an accidental spill.

Accidental Release Measures, continued

Environmental Precautions: Implement spill control plan. Stop or reduce leak if safe to do so. Prevent from entering sanitary or storm sewers, waterways, or confined spaces. Use inert materials such as earth or sand to form dike.

Remedial Measures: Restrict access to area until completion of cleanup. Ensure cleanup is conducted by trained personnel only. Use all appropriate personal protective equipment. Contain spillage and mop up with absorbent material. Keep materials from spilling into sewers, storm drains, surface water, and soil. Comply with all applicable governmental regulations on spill reporting and handling and disposal of waste.

7. Handling and Storage

Handling Procedures: Ensure adequate ventilation. Have emergency equipment readily available. Keep containers closed when not in use. Wash face and hands thoroughly after handling and before eating, drinking, or using tobacco products.

Storage: Store in a cool, dry, well ventilated area, out of direct sunlight and away from heat sources. Store away from incompatible materials such as strong acids, bases, and oxidizers. Keep storage area separate from populated work areas or food.

8. Exposure Controls, Personal Protection

Engineering Controls: Use general or local exhaust ventilation to maintain exposure below the exposure limits.

Respiratory Protection: Not required under normal use. Use a NIOSH approved dust/fume respirator when appropriate.

NOTE: Air purifying respirators do not protect against oxygen deficient atmospheres.

Skin protection: For prolonged exposure wear impervious gloves and boots and/or other protective clothing according to circumstances.

Eye and Face Protection: If material is used in such a way that splashing could occur, use splash proof safety goggles. The wearing of contact lenses is not recommended.

Footwear: As required by worksite rules.

Other: Have a safety shower and eye wash station readily available in the immediate work area.

9. Physical and Chemical Properties

Appearance:	Pale yellow, slightly viscous liquid	Boiling Point:	Not determined
Odor:	No odour	Critical Temperature:	Not applicable.
Odor Threshold:	Not applicable	Relative Density:	Not determined (water = 1)
pH:	9.5	Partition Coefficient:	No data
Vapor Pressure:	Not determined	Evaporation Rate:	Not determined
Solubility:	Completely soluble in water		
Vapor Density:	Not determined		
Freezing Point	Not determined		

10. Stability and Reactivity

Chemical Stability: Stable. Avoid strong acids, bases, and oxidizers.

Incompatibility: Avoid contact with strong oxidizing agents.

Hazardous Decomposition Products: May liberate carbon dioxide and carbon monoxide.

Hazardous Polymerization: Will not occur.

11. Toxicological Information

Acute Exposure: The theoretical LD₅₀ (rat/oral) for Grinder Coolant is >5000 mg/kg

Chronic Exposure: See Section 3.

Exposure Limits: See Section 2.

Irritancy: See Section 3.

Sensitization: See Section 3.

Carcinogenicity: None reported.

Teratogenicity: No reports for ingestion or inhalation of copper compounds

Reproductive toxicity: Not conclusive.

Mutagenicity: One ingredient has been known to cause chromosome damage in a mammalian cell line. Chromosome abnormalities were seen in spermatocytes of mice following a single injection of 0.1 mL into the major body cavity.

Synergistic products: None reported.

12. Ecological Information

Environmental toxicity: No data available.

Biodegradability: No data available.

13. Disposal Considerations

Place used and contaminated material and packagings into suitable containers and dispose of in incinerator or approved landfill. Review and follow all local, state, and national regulations.

14. Transport Information

Department of Transport (49 CFR): Not regulated

International Air Transport Association (IATA): Not regulated

International Maritime Organization (IMO): Not regulated

15. Regulatory Information

UNITED STATES – FEDERAL REGULATIONS:

TOXIC SUBSTANCES CONTROL ACT (TSCA): All components are listed in the inventory.

OSHA, 29 CFR 1910, Subpart Z: Does not meet the criteria for a hazardous substance.

CERCLA, 40 CFR 302: Not listed

SARA 302, 40 CFR 355: Not listed

SARA 313, 40 CFR 372: Not listed.

SARA 311/312, 40 CFR 370: Delayed (Chronic) Health.

16. Other Information

Preparation Date: September 25, 2001

Prepared by: Kel-Ex Agencies Ltd., P.O. Box 86643, North Vancouver, BC, Canada, V7L 4L2

Comments: This Material Safety Data Sheet was prepared using information provided by Novacan Industries Ltd., and CCINFO. The information in the Material safety Data Sheet is offered for your consideration and guidance when exposed to this product. Novacan Industries Ltd., expressly disclaims all expressed or implied warranties and assumes no responsibilities for the accuracy or completeness of the data contained herein. The data in this MSDS does not apply to use with any other product or in any other process.

Revisions: None