



MATERIAL SAFETY DATA SHEET

Metal Kleener 0001

Concentrate, Ready-to-Use (RTU)

EMERGENCY TELEPHONE NUMBER (607) 425-2882 (24 Hours)

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : **Metal Kleener 0001**
APPLICATION : Metal Cleaner/Degreaser
COMPANY IDENTIFICATION : Enviro-Safe Services, Inc.
8 Denison Parkway, Corning, NY 14830
EMERGENCY TELEPHONE NUMBER : (607) 425-2882 (24 Hours)

NFPA 704M/HMIS RATING

HEALTH : 2 / 2 FLAMMABILITY : 1 / 1 REACTIVITY : 0 / 0 OTHER :
0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme

2. COMPOSITION/INFORMATION ON INGREDIENTS

Our hazard evaluation has identified the following chemical substance(s) as hazardous. Consult Section 15 for the nature of the hazard(s).

Hazardous Substances(s)	CAS #	% (w/w)
Diethylene Glycol Monobutyl Ether	112-34-5	5.0 - 11.0
Dipropylene Glycol Monomethyl Ether	34590-94-8	1.0 - 5.0
Sodium Carbonate	497-19-8	1.0 - 5.0
Sodium Tripolyphosphate	7758-29-4	1.0 - 5.0
Ethoxylated Octylphenol	9002-93-1	1.0 - 5.0

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING

Irritating to eyes.
Do not get in eyes, on skin or clothing. Do not take internally. Keep container tightly closed. In case of contact with eyes, rinse immediately with plenty of water.
Wear suitable protective clothing, gloves and eye/face protection.
Use with adequate ventilation.
May evolve oxides of carbon (COx), oxides of phosphorus (POx) and oxides of sulfur (SOx) under fire conditions.

PRIMARY ROUTES OF EXPOSURE :

Eye, Skin

SKIN CONTACT :

May cause irritation with prolonged contact.

HUMAN HEALTH HAZARDS - ACUTE :

INHALATION :

Not a likely route of exposure. Aerosols or product mist may irritate the upper respiratory tract. May cause narcosis.

EYE CONTACT :

May cause moderate irritation.

INGESTION :

Not a likely route of exposure. There may be irritation to the gastrointestinal tract with nausea and vomiting.

SYMPTOMS OF EXPOSURE :

Acute : A review of available data does not identify any symptoms from exposure not previously mentioned.
Chronic : Ethylene Glycol. Ingestion of large amounts causes kidney damage.



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AGGRAVATION OF EXISTING CONDITIONS :

A review of available data does not identify any worsening of existing conditions.

HUMAN HEALTH HAZARDS- CHRONIC:

Prolonged exposure to ethylene glycol may cause central nervous system, kidney and liver effects.

4. FIRST AID MEASURES

EYE & SKIN CONTACT :

Immediately flush affected area with water for at least 15 minutes while holding eyelids open. If irritation persists, repeat flushing. Get medical attention.

INGESTION :

Do not induce vomiting without medical advice. If conscious, washout mouth and give water to drink. If symptoms develop seek medical attention.

INHALATION :

Remove to fresh air, treat symptomatically. If symptoms develop, seek medical advice.

NOTE TO PHYSICIAN :

Based on the individual reactions of the patient, the physician's judgement should be used to control symptoms and clinical condition.

5. FIRE FIGHTING MEASURES

FLASH POINT : >200 F (> 93.3 C)

EXTINGUISHING MEDIA :

Water spray, carbon dioxide, foam.

This product would not be expected to burn unless all the water is boiled away. The remaining organics may be ignitable. Use extinguishing media appropriate for surrounding fire. Keep containers cool by spraying with water. Use extinguishing medium appropriate for surrounding fire.

FIRE AND EXPLOSION HAZARD :

May evolve oxides of carbon (COx) and oxides of nitrogen (NOx) under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTING :

In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Restrict access to area as appropriate until clean-up operations are complete. Ensure clean-up is conducted by trained personnel only. Ventilate spill area if possible. Do not touch spilled material. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Stop or reduce any leaks if it is safe to do so. Ventilate spill area if possible.

METHODS FOR CLEANING UP:

SMALL SPILLS: Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area. LARGE SPILLS: Contain liquid using absorbent material, by digging trenches or by diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of material in compliance with regulations indicated in Section 13 (Disposal Considerations).

ENVIRONMENTAL PRECAUTIONS:

Do not contaminate surface water.



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7. HANDLING AND STORAGE

HANDLING :

Avoid eye and skin contact. Do not take internally. Do not get into eyes, on skin, or clothing. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Ensure all containers are labeled. Keep the containers closed when not in use. Use with adequate ventilation.

STORAGE CONDITIONS :

Store the containers tightly closed. Store in suitable labelled containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<p>OCCUPATIONAL EXPOSURE LIMITS : Exposure guidelines have not been established for this product. Available exposure limits for the substance(s) are shown below:</p> <p>ACGIH/TLV :</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">Substance(s)</td> <td style="width: 40%;"></td> </tr> <tr> <td>Respirable Nuisance Particulates</td> <td>TWA: 3 mg/m³</td> </tr> <tr> <td>Inhalable (Total Dust) Nuisance Particulates</td> <td>TWA: 10 mg/m³</td> </tr> <tr> <td>Tetrasodium Pyrophosphate</td> <td>TWA: 5 mg/m³</td> </tr> <tr> <td>Dipropylene Glycol</td> <td>TWA: 100 ppm , 606 mg/m³ (Skin)</td> </tr> <tr> <td>Monomethyl Ether</td> <td>STEL: 150 ppm , 909 mg/m³ (Skin)</td> </tr> </table> <p>OSHA/PEL :</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">Substance(s)</td> <td style="width: 40%;"></td> </tr> <tr> <td>Respirable Nuisance Particulates</td> <td>TWA: 5 mg/m³</td> </tr> <tr> <td>Inhalable (Total Dust) Nuisance Particulates</td> <td>TWA: 15 mg/m³</td> </tr> <tr> <td>Tetrasodium Pyrophosphate</td> <td>TWA: 5 mg/m³</td> </tr> <tr> <td>Dipropylene Glycol</td> <td>TWA: 100 ppm , 600 mg/m³ (Skin)</td> </tr> <tr> <td>Monomethyl Ether</td> <td>STEL: 150 ppm , 900 mg/m³ (Skin)</td> </tr> </table>	Substance(s)		Respirable Nuisance Particulates	TWA: 3 mg/m ³	Inhalable (Total Dust) Nuisance Particulates	TWA: 10 mg/m ³	Tetrasodium Pyrophosphate	TWA: 5 mg/m ³	Dipropylene Glycol	TWA: 100 ppm , 606 mg/m ³ (Skin)	Monomethyl Ether	STEL: 150 ppm , 909 mg/m ³ (Skin)	Substance(s)		Respirable Nuisance Particulates	TWA: 5 mg/m ³	Inhalable (Total Dust) Nuisance Particulates	TWA: 15 mg/m ³	Tetrasodium Pyrophosphate	TWA: 5 mg/m ³	Dipropylene Glycol	TWA: 100 ppm , 600 mg/m ³ (Skin)	Monomethyl Ether	STEL: 150 ppm , 900 mg/m ³ (Skin)	<p>ENGINEERING MEASURES : General ventilation is recommended.</p> <p>RESPIRATORY PROTECTION : If significant mists, vapors or aerosols are generated an approved respirator is recommended. An organic vapor cartridge with dust/mist prefilter or supplied air may be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.</p> <p>HAND PROTECTION : Neoprene, Nitrile, Butyl, PVC, or Natural Rubber gloves.SKIN</p> <p>PROTECTION : Wear standard protective clothing.</p> <p>EYE PROTECTION : Wear chemical splash goggles.</p> <p>HYGIENE RECOMMENDATIONS : Keep an eye wash fountain available. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.</p>
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9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Liquid	pH (100 %)	<12.0
APPEARANCE	White	VAPOR PRESSURE	Same as water
ODOR	Mild	EVAPORATION RATE	<1 (BuAc = 1)
SPECIFIC GRAVITY	1.09	VAPOR DENSITY	0.6 (Air = 1)
DENSITY	9.9 lb/gal	VOC CONTENT	0.86 lb/gal
SOLUBILITY IN WATER	Complete		

Note: These physical properties are typical values for this product and are subject to change.



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10. STABILITY AND REACTIVITY

STABILITY :

Stable under normal conditions.

CONDITIONS TO AVOID :

Freezing temperatures.

HAZARDOUS POLYMERIZATION :

Hazardous polymerization will not occur.

MATERIALS TO AVOID :

Strong acids. Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS :

Under fire conditions: Oxides of carbon, sulfur and nitrogen

11. TOXICOLOGICAL INFORMATION

No toxicity studies have been conducted on this product.

SENSITIZATION:

This product is not expected to be a sensitizer.

CARCINOGENICITY:

None of the substances in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the American Conference of Governmental Industrial Hygienists (ACGIH).

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL EFFECTS :

No toxicity studies have been conducted on this product.

If release into the environment, see CERCLA/SUPERFUND in Section 15.

13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it could meet the criteria of a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Before disposal, it should be determined if the waste meets the criteria of a hazardous waste.

Hazardous Waste: D002

Hazardous wastes must be transported by a licensed hazardous waste transporter and disposed of or treated in a properly licensed hazardous waste treatment, storage, and disposal or recycling facility. Consult local, state, and federal regulations for specific requirements.



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14. TRANSPORT INFORMATION

The information in this section is for reference only and should not take the place of a shipping paper (bill of lading) specific to an order. Please note that the proper Shipping Name / Hazard Class may vary by packaging, properties, and mode of transportation. Typical Proper Shipping Names for this product are:

LAND TRANSPORT :

Proper Shipping Name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

AIR TRANSPORT (ICAO/IATA) :

Proper Shipping Name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

MARINE TRANSPORT (IMDG/IMO) :

Proper Shipping Name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

15. REGULATORY INFORMATION

NATIONAL REGULATIONS, USA :

OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200 :

Based on our hazard evaluation, the following substance(s) in this product is/are hazardous and the reason(s) is/are shown below.

Diethylene Glycol Monobutyl Ether : Eye irritant, Exposure Limit
Dipropylene Glycol Monomethyl Ether : Eye irritant, Respiratory irritant
Sodium Carbonate : Irritant
Sodium Tripolyphosphate : Exposure Limit
Ethoxylated Octylphenol : Eye irritant

CERCLA/SUPERFUND, 40 CFR 117, 302:

Notification of spills of this product is not required.

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (TITLE III) - SECTIONS 302, 311, 312, AND 313.

SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):

This product does not contain substances listed in Appendix A and B as an Extremely Hazardous Substance.

SECTIONS 311 AND 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370) :

Our hazard evaluation has found this product to be hazardous. The product should be reported under the following indicated EPA hazard categories:

- X Immediate (Acute) Health Hazard
- Delayed (Chronic) Health Hazard
- Fire Hazard
- Sudden Release of Pressure Hazard
- Reactive Hazard

Under SARA 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals.

The current thresholds are: 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372) :

This product does not contain substances on the List of Toxic Chemicals.

TOXIC SUBSTANCES CONTROL ACT (TSCA):

The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)



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FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15 / formerly Sec. 307, 40 CFR 116.4 / formerly Sec. 311 :

This product contains the following substances listed in the regulation:

Substance(s)	Citations
Sodium Tripolyphosphate	Sec. 311

CLEAN AIR ACT, Sec. 111 (40 CFR 60, Volatile Organic Compounds), Sec. 112 (40 CFR 61, Hazardous Air Pollutants), Sec. 602 (40 CFR 82, Class I and II Ozone Depleting Substances):

Substance(s)	Citations
Diethylene Glycol Monobutyl Ether	Sec. 111
Glycol Ethers	Sec. 112

CALIFORNIA PROPOSITION 65:

This product does not contain substances which require warning under California Proposition 65.

MICHIGAN CRITICAL MATERIALS:

None of the substances are specifically listed in the regulation.

STATE RIGHT TO KNOW LAWS:

Sodium Tripolyphosphate	7758-29-4
Dipropylene Glycol Monomethyl Ether	34590-94-8
Diethylene Glycol Monobutyl Ether	112-34-5

NATIONAL REGULATIONS, CANADA:

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS):

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

WHMIS CLASSIFICATION:

D2B- Materials causing other toxic effects – Toxic Material.

16. OTHER INFORMATION

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to insure safe workplace operations. Please consult your local sales representative for any further information.

REFERENCES

Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, American Conference of Governmental Industrial Hygienists, OH., (Ariel Insight# CD-ROM Version), Ariel Research Corp., Bethesda, MD.

Hazardous Substances Data Bank, National Library of Medicine, Bethesda, Maryland (TOMES CPS# CD-ROM Version), Micromedex, Inc., Englewood, CO.

IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man, Geneva: World Health Organization, International Agency for Research on Cancer.

Integrated Risk Information System, U.S. Environmental Protection Agency, Washington, D.C. (TOMES CPS# CDROM Version), Micromedex, Inc., Englewood, CO.

Annual Report on Carcinogens, National Toxicology Program, U.S. Department of Health and Human Services, Public Health Service.

Title 29 Code of Federal Regulations, Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA), (Ariel Insight# CD-ROM Version), Ariel Research Corp., Bethesda, MD.



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Registry of Toxic Effects of Chemical Substances, National Institute for Occupational Safety and Health, Cincinnati, OH, (TOMES CPS# CD-ROM Version), Micromedex, Inc., Englewood, CO.

Ariel Insight# (An integrated guide to industrial chemicals covered under major regulatory and advisory programs),

North American Module, Western European Module, Chemical Inventories Module and the Generics Module (Ariel Insight# CD-ROM Version), Ariel Research Corp., Bethesda, MD.

The Teratogen Information System, University of Washington, Seattle, WA (TOMES CPS# CD-ROM Version), Micromedex, Inc., Englewood, CO.

Prepared By: Product Safety Department Date issued: 02/26/2004 Version Number: 1.3
