

MATERIAL SAFETY DATA SHEET
VOC-Compliant Nail Polish Remover – California Version
 SECTION I-IDENTIFICATION

CHEMTREC Emergency: 800-424-9300
Manufacturer: Mad River Science
 2736 Clay Road
 Mckinleyville, CA 95519
Product Type: Nail Polish Remover
Chemical Name: Mixture of low-molecular weight non-VOC solvents and emulsifiers
Identification Code: MRS158003
Chemical Family: Water-soluble organics
CAS No: Mixture/Not Hazardous/Flammable
Date Prepared: December 8, 2005

This MSDS is provided for use by trained personnel who, in the course of handling and/or discharging very large quantities of this product during manufacturing, processing or repackaging, would be exposed intentionally or inadvertently to massive volumes of vapor or liquid. It is incorrect to imply in any way that the hazards and procedures described here are at all applicable to the small amounts of material which might be contained in the packaged product or to which the consumer may be exposed. However, when handling quantities in the size range of quarts and gallons, it is vital to consult and closely follow the fire and explosive safety guidelines detailed in Sections V, VII and IX. This material is flammable.

SECTION II(A) – HAZARDOUS (TOXIC) INGREDIENTS

Components	Endnotes	CAS Number	Exposure Limits	MAX %
None			None	00.00

SECTION II(B) – NON-HAZARDOUS INGREDIENTS

Methyl Acetate		79-20-9	OSHA PEL 200ppmTWA	50.00
Butoxydiglycol		112-34-5	OSHA VPEL 200ppm TWA (skin)	44.00
			OSHA VPEL 250ppm STEL (skin)	
			ACGIH TLV 200 ppm TWA (skin)	
			ACGIH TLV 250 ppm STEL (skin)	
Nonionic Surfactants	5,7	Non-hazardous mixture		5.00
Emollients	5,7	Non-hazardous mixture		00.60
Decolorizers	5,7	Non-hazardous mixture		00.40

Section II(C) endnotes:

1. Ingredient listed on the California List of Substances Known to Cause Cancer.
2. A MA Extraordinarily Hazardous Substance above the 1 ppm threshold.
3. A PA Non-Hazardous Substance above 5%.
4. SARA Title III requirements apply when the Threshold Planning Quantity or Reportable Quantity is exceeded (see Sections 302, 304, 311, 312).
5. A proprietary ingredient which is not on the Massachusetts Substance List (MSL) and which does not contain any MSL components.
6. A SARA Title III ingredient, which is, listed in Section 313 above de minimis concentrations.
7. Any material listed as "Non-hazardous mixture" in the "CAS Number" column is a trade secret under the provisions of the Pennsylvania Worker and Community Right-to-know Act.
8. A Special Hazardous Substance above the 0.01% threshold (PA).

Section II(D) abbreviations:

PEL=Permissible Exposure Limit
STEL=Short Term Exposure Limit
Skin=Dermal contact contributes as a significant exposure route
AL=Action Level
TWA=Time Weighted Average
TLV=Threshold Limit Value
A2=Suspected Human Carcinogen

SECTION III - PHYSICAL/CHEMICAL PROPERTIES.

This product, a mixture of solvents and emulsifiers, has low odor and is clear and colorless with a water-like viscosity. It is readily diluted with water.

SECTION IV - HEALTH HAZARD INFORMATION

The major components of this product do not present undue health hazards. Those several minor components, which would normally present a nuisance under certain conditions of massive exposures, are present in this product in very small amounts.

WARNING!. Vapor may cause flash fire. See Sections V, VII and IX.

Effects of Overexposure

General: This product has shown very few toxic symptoms in humans. The most common when repeatedly exposed to high concentrations of material are nausea and skin rashes. Vapors or direct eye contact may cause irritation. Acute and repeated overexposure to vapors as may occur when heated or burned may cause nausea, dizziness or flu-like symptoms. Accidental ingestion may cause discomfort in the throat and stomach.

Inhalation: High vapor concentrations may cause headache, dizziness, and sedation.

Eyes: Low hazard for usual industrial/commercial handling by trained personnel. May cause mild eye irritation with accompanying stinging, tearing, and redness.

Skin: May cause mild skin irritation. Prolonged or repeated contact may cause redness, burning, drying and cracking of the skin.

Ingestion: Swallowing this material may be harmful. Aspiration into lungs may produce severe lung damage.

Primary Routes of Exposure: Eye/skin contact. Inhalation. Skin Absorption.

Conditions Aggravated by Exposure: Persons with pre-existing skin disorders, eye problems, impaired respiratory function or central nervous system conditions may be more susceptible to the effects of this substance.

Chronic Exposure: Repeated contact with the liquid may cause dryness, cracking, and skin irritation. Affects the central nervous system. Optic nerve damage is the predominant chronic hazard.

First Aid Procedures:

Eye Contact: Flush eyes with large amounts of running water until water runs clear. Consult a doctor if irritation develops.

Skin Contact: May cause loss of natural oils and skin irritation. Wash with soap and water. Remove and wash contaminated clothing. Consult a doctor if irritation develops.

Inhalation: If vapor or mist is inhaled, remove to fresh air. Treat symptoms of irritation if necessary.

Ingestion: Do not induce vomiting. Seek immediate medical care.

SECTION V- FIRE AND EXPLOSION HAZARDS

Flash Point and Method: 40 degree C (104 degree F), CC

Auto-ignition Temperature:: 300 deg C (572 degree F)

Lower Explosive Limit: 1.50% by volume

Upper Explosive Limit: 21.0 % by volume

Extinguishing Agents: Foam, carbon dioxide, dry powder.

Fire Fighting Instructions: Water may be ineffective but may be used to keep fire-exposed containers cool until fire is out. Wear self-contained breathing apparatus when fighting fires in enclosed areas or when exposure to smoke and gases could

occur (including cleanup/salvage operations). The apparatus should consist of a full face-piece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

Fire and Explosion Hazards: Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drums-even empty drums-because product or its residue can ignite explosively.

SECTION VI - STABILITY AND REACTIVITY

Stability: This material is considered stable

Conditions to avoid: Storage temperatures exceeding 30 deg C and resulting excessive head pressure.

Incompatibility: Avoid contact with calcium hypochlorite (bleach), sodium, strong acids, strong oxidizing agents and zinc.

Hazardous Decomposition Products: Carbon dioxide and carbon monoxide

Hazardous Polymerization: This product will not undergo polymerization.

SECTION VII - SPILL/DISPOSAL PROCEDURES

Small spill: Absorb liquid on vermiculite, floor absorbent or other absorbent material. Store used absorbent in air-tight containers away from ignition sources.

Large spill: Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks, non spark-proof electrical outlets and switches). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required that a spill has occurred.

SECTION VIII - SPECIAL PROTECTION INFORMATION

Ventilation: Good general ventilation (typically 10 air changes per hour) to maintain exposure levels below TLV should be used. Ventilation rates should be matched to conditions. Use process enclosures, local exhaust ventilation, or other engineering controls to maintain ventilation.

Respiratory Protection: If workplace exposure limits of product or any component is exceeded (see exposure limits, Section IIB), a NIOSH/MSHA approved air supplied respirator is advised in the absence of proper ventilation. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see you industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure. Disposable, paper masks provide no protection.

Eye Protection: Safety glasses. Use tightly fitting chemical safety goggles if splashing could occur.

Skin Protection: Butyl rubber or nitrile (NBR) rubber gloves. Wear impervious clothing and boots to prevent repeated or prolonged skin contact.

Recommended Decontamination Facilities: Eye bath, water-washing facilities.

SECTION IX – HANDLING AND STORAGE

Handling: Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions, especially those pertaining to spark and fire hazard must be observed. All one-gallon and larger containers should be grounded and/or bonded when material is transferred to prevent static discharge. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

Normal Processing: Suitable controls should be used to control process emissions. Employees should wash before eating or smoking. If clothing or shoes become contaminated, wash before reuse. Avoid breathing high vapor concentrations. Keep container closed. Use with adequate ventilation and proper protective equipment given elsewhere in this MSDS.

Storage: Store at temperatures between 50-100 deg F away from sources of ignition and light. No Smoking. Do not breathe vapor or mist. Avoid contact with skin, eyes, or clothing.

SECTION X - TRANSPORTATION

DOT Proper Shipping Name: Not Regulated
DOT Primary Hazard Classification: NA
UN/NA Hazard No.: NA
EPA/DOT Reportable Quantity: NA
DOT Labels: None Required

SECTION XI - HAZARD CODES

NFPA 704 (*):		HMIS(**):	
Health	1	Health	1
Flammability	2	Flammability	2
Reactivity	0	Reactivity	0
Special	None	Personal Protection	B (Gloves, goggles)

* NFPA=National Fire Protection Association hazard rating system based on severity of hazard under fire conditions.

** HMIS=Hazardous Materials Identification System based on National Paint and Coatings Association criteria for the product as delivered.

SECTION XII - STATE RIGHT TO KNOW LABELING

California Proposition 65: none
New Jersey RTK Label Information: none
Pennsylvania RTK Label Information: none

SECTION XIII – REGULATORY INFORMATION

Occupational Safety and Health Administration (OSHA) hazardous chemical: None
Materials known to the State of California to cause cancer: None
Materials known to the State of California to cause adverse reproductive effects: None
Materials known to violate the regulatory requirements of the State of California Air Resources Board codified in sections 94507-94517 of Title 17 of the California Code of Regulations which defines the maximum content of volatile organic compounds (VOC): None
Massachusetts Substance List: None
New Jersey Workplace Hazardous Substance List: None
Pennsylvania Hazardous Substance List: None
WHMIS (Canada) Ingredient Disclosure List: Listed
WHMIS9 (Canada) Status: Regulated
WHMIS (Canada) Hazard Classification: None
IARC (International Agency for Research on Cancer Carcinogenicity) Classification (components present at 0.1% or more): Not listed
NTP (National Toxicology Program): Listed
Reporting requirements of Section 313 or Title III of the superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372: None
SARA (U.S.A.) Sections 311 and 312 hazard classifications: Fire hazard
TSCA (US Toxic Substances Control Act): This product is listed on the TSCA inventory.
CEPA/DSL (Canadian Environmental Protection Act/Domestic Substances List): Listed
EINECS (European Inventory of Existing Commercial Chemical Substances): Listed
AICS/NICNAS (Australian Inventory of Chemical Substances/National Industrial Chemical Notification and Assessment Scheme): Listed on AICS
Japanese Handbook of Existing and New Chemical Substances: Listed
EC Classification and User Label Information (Council Directive 67/548/EEC): Hazard symbols and Risk Phrases: None
ICH (International Council on Harmonization): Class III – Solvent with low toxic potential.

SECTION XIV- MISCELLANEOUS

User's Responsibility: This bulletin cannot cover all possible situations that the user may experience during processing. Each aspect of your operation must be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin must be provided to your employees or customers. It is your responsibility to use this information to develop appropriate work practice guidelines and employee instructional programs for your operation.

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