



Z-WAY

MATERIAL SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard (29CFR 1910.1200)

Manufactured For: RAMCO SPECIALTY PRODUCTS, Inc. ♦ 5956 State Road ♦ Bakersfield, CA 93308-3022
 Phone: (800) 334-7071 ♦ Fax: (714) 375-1225 ♦ Website: www.ramcospec.com

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME	Z-WAY (Bulk)	PROPER SHIPPING NAME	Oils, Lubricating, N.O.I.
PRODUCT NUMBER	1119	DATE PREPARED	02/01/2003
PRODUCT DESCRIPTION	Penetrant Lubricant Demoisturant	PREPARED BY	WARREN SQUYRES
Information Phone	(800) 334-7071	24-Hour Emergency Phone No.	(800) 255-3924

NFPA - HMIS CODES

Health	1	Flammability	1	Corrosive	0	Reactivity	0	Personal Protection	B
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SECTION II - MATERIAL IDENTIFICATION AND INFORMATION

Description	CAS Number	SARA III LIST	OSHA PEL (ppm)	ACGIH TLV (ppm)	VOC Grams/Liter	Wt %
Isoparaffinic Hydrocarbon	64742-46-7	NO	200	200	--	--
Mineral Oil	8042-47-5	NO	5mg/M3	5mg/M3	--	--
Dipropylene Glycol Monomethyl Ether	34590-94-8	NO	100	100	--	--

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	~500°F	Evaporation Rate (n-Bu-Ac=1.0)	N/E
Vapor Pressure for Product (psig @ 70°F)	N/A	Freezing Point	N/E
Vapor Density for Product (Air = 1.0)	>1	Molecular Weight, Avg.	N/E
Specific Gravity (H2O=1 @ 75°F)	0.830	Viscosity, Typical (cp)	N/E
VOC (Grams/Liter @ 25°C - EPA Method 24)	N/E	Appearance	Brownish Liquid
Volatiles, % by Volume @ 100°C	N/E	Odor	Mild Solvent Odor
Total VOC %	~3%	Water Solubility (Wt %)	Slight

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (of concentrate only)	>200°F (T.O.C.)
Auto Ignition Temperatures	N/E
Flammability Limits in Air	
Lower Explosive Limit Estimated	N/E
Upper Explosive Limit Estimated	N/E
Extinguishing Media	Water Fog, Foam, CO2, Dry Media
Unusual Fire and Explosion Hazards	Exposure to temperatures above 120°F may cause bursting.
Special Fire Fighting Procedures	Wear self-contained breathing apparatus and protective clothing. Cool fire-exposed containers to prevent rupturing.
FLAMMABILITY as per USA FLAME PROJECTION TEST (Aerosols)	N/A



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SECTION V - HEALTH HAZARD DATA AND EMERGENCY FIRST AID PROCEDURES

ENTRY ROUTES	ADVERSE/CHRONIC EFFECTS	FIRST AID PROCEDURES
EYES	Causes pain, redness and irritation.	Flush eyes with large amounts of cool running water using eyecup or fountain for at least 15 minutes while lifting upper and lower lids open. Get medical attention immediately.
INGESTION	Can cause nausea, gastrointestinal irritation, diarrhea, and vomiting. Aspiration into lungs can cause chemical pneumonitis.	Get immediate medical attention.
INHALATION	Mist can cause irritation of nasal and respiratory passages. Abusive or excessive inhalation may cause irritation to the upper respiratory tract.	Remove to fresh air. If continued difficulty is experienced, seek immediate medical attention. If breathing stops, give artificial respiration.
SKIN	Frequent or prolonged contact may cause irritation.	Remove contaminated clothing. Wash exposed area with soap and water. Seek medical attention if irritation persists.
CARCINOGEN	NONE	MEDICAL CONDITIONS TO AVOID
		None known.

SECTION VI - REACTIVITY DATA

STABILITY	Stable - Do not expose to temperatures above 120°F.
HAZARDOUS POLYMERIZATION	Will not occur - No conditions known.
INCOMPATIBILITY	Avoid contact with strong oxidizing agents.
HAZARDOUS DECOMPOSITION	Carbon Dioxide, Carbon Monoxide

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED - Maintain local exhaust and adequate ventilation. Extinguish all ignition and combustion sources. Cover with absorbent material and sweep up. Wash area to prevent slipping. Dispose of soaked absorbent material in accordance with Local, State and Federal Regulations.	
WASTE DISPOSAL	Consult Federal, State and Local Authorities for approved procedures.
HANDLING & STORAGE	Do not puncture or incinerate containers. Do not store at temperatures above 120°F. Keep away from heat, open flame, sparks, or electrical arcs.
OTHER PRECAUTIONS	KEEP OUT OF REACH OF CHILDREN. Read and follow label directions. For Industrial/Institutional use only.
NFPA CODE 30B RATING	N/A

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION	Not needed for normal use in accordance with label directions. If ventilation is not adequate to reduce vapors below TLV levels, use a NIOSH/MSHA Approved air-purifying respirator equipped with an organic vapor cartridge.
VENTILATION	Provide local exhaust to keep TLV of Section II ingredients below acceptable limits.
PROTECTIVE GLOVES	Use chemical resistant gloves if contact will be made.
EYE PROTECTION	Wear chemical proof splash goggles or face shield with safety glasses for splash protection.
OTHER PROTECTIVE CLOTHING/EQUIPMENT	None usually required, but long sleeves should be worn.
WORK HYGIENIC PRACTICES	Employees must practice good personal hygiene; washing exposed areas of skin several times daily and before eating, drinking or smoking. Launder contaminated clothing before reuse.

SECTION IX - TRANSPORTATION DATA

PROPER SHIPPING NAME	Oils, Lubricating, N.O.I.
DOT ID NUMBER	N/A
DOT HAZARD CLASS	(Not regulated under 49 CFR by DOT)

The information and recommendations set forth herein are presented in good faith and believed to be correct and reliable. RAMCO SPECIALTY PRODUCTS, Inc. makes no representation as to the completeness or accuracy thereof and supplies information upon the condition that the persons receiving same will make their own determination as to its suitability for their purpose prior to use.