



Z-WAY

MATERIAL SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard (29CFR 1910.1200)

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SECTION I – PRODUCT IDENTIFICATION

Product Name: Z-WAY (Aerosol)	Proper Shipping Name: CONSUMER COMMODITY
Product Number: 101010	Date Prepared: 03/03/2006
Product Description: Penetrating Lubricant	Prepared By: Paul Williams
Information Phone: (800) 334-7071	24-Hour Emergency Phone: (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 #	313-Chem	Skin	Carcinogen	PEL	TWA/TLV	Wt %
Mineral Oil	8042-47-5	NO	NO	NO	5mg/m ³	5mg/m ³	10-20
Dipropylene Glycol Monomethyl Ether	34590-94-8	NO	NO	NO	100 ppm	100 ppm	01-10
Octamethylcyclotetrasiloxane	556-67-2	NO	NO	NO	N/E	10 ppm*	01-05
Decamethylcyclopentasiloxane	541-02-6	NO	NO	NO	N/E	10 ppm*	01-05
Carbon Dioxide Propellant	124-38-9	NO	NO	NO	10,000 ppm	10,000 ppm	01-05

* Manufacturer's recommended TWA exposure limit.

SECTION III – PHYSICAL/CHEMICAL CHARACTERISTICS

*Boiling Point	>300°F	Evaporation Rate (n-Bu-Ac=1.0)	N/A
Vapor Pressure of Can (psig @ 70°F)	90	*Water Solubility	Slight
*Vapor Density (Air=1.0 @ 77°F)	>1	Molecular Weight, Avg.	N/A
*Specific Gravity (H2O=1 @ 75°F)	0.83	Viscosity, Typical (cp)	N/A
VOC (Grams/Liter @ 25°C – EPA Method 24)	N/A	*Appearance	Clear Yellowish Liquid
% Volatile by Volume	N/A	*Odor	Banana Scent
Total VOC % (Volatile Organic Compounds)	~6.5	*pH	N/A

*Data Based on Aerosol Concentrate Only.

SECTION IV – FIRE & EXPLOSION HAZARD DATA

Flash Point (Of Concentrate Only)	>200°F (T.O.C.)
Auto Ignition Temperatures	N/A
Flammability Limits in Air	
Lower Explosive Limit Estimated	N/A
Upper Explosive Limit Estimated	N/A
Extinguishing Media	Foam, CO2, Dry Media
Unusual Fire Fighting Procedures	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)	Non-Flammable Spray



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SECTION V – HEALTH HAZARD DATA & EMERGENCY FIRST AID PROCEDURES

ENTRY ROUTES	ADVERSE/CHRONIC EFFECTS	FIRST AID PROCEDURES
EYES	May cause slight irritation.	Flush with large amounts of cool running water for at least 15 minutes while holding upper and lower lids open. If irritation persists, get medical attention.
INGESTION	Can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration of material into the lungs can cause chemical pneumonitis.	DO NOT INDUCE VOMITING. Seek medical attention immediately.
INHALATION	Inhalation of mist can cause irritation of nasal and respiratory passages. Abusive or excessive inhalation can cause irritation to the upper respiratory tract, dizziness, nausea and other central nervous system effects. Prolonged exposure may affect the liver.	Remove to fresh air. Seek medical attention immediately. If breathing stops, give artificial respiration.
SKIN	Frequent or prolonged contact may cause irritation.	Wash with soap and water. If irritation persists, seek medical attention.
MEDICAL CONDITIONS TO AVOID	None Known.	

SECTION VI – REACTIVITY DATA

STABILITY	Stable – Avoid open flames and exposure to high temperatures.
HAZARDOUS POLYMERIZATION	Will not occur – No conditions known.
INCOMPATIBILITY	Strong oxidizing agents.
HAZARDOUS DECOMPOSITION	Carbon Dioxide, Carbon Monoxide.

SECTION VII – PRECAUTIONS FOR SAFE HANDLING & USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED – Allow propellant to evaporate. Maintain local exhaust and adequate ventilation. No smoking. Keep sparks, heat sources and open flame far away from spill or leak. Cover with absorbent material and sweep up. Wash area to prevent slipping. Dispose of soaked absorbent material in accordance with Federal, State and local laws.	
WASTE DISPOSAL	Aerosol cans, when emptied and depressurized through normal use, pose no disposal hazard and should be recycled. Consult Federal, State and local authorities for approved procedures.
HANDLING & STORAGE	Store in a cool, dry area away from heat or open flame. Do not store at temperatures above 120°F.
NFPA Code 30B Rating	Level 1 Aerosol
OTHER PRECAUTIONS	KEEP OUT OF REACH OF CHILDREN – For Industrial/Institutional Use Only. Read and follow label directions.

SECTION VIII – CONTROL MEASURES

RESPIRATORY PROTECTION	None needed for proper use in accordance with label directions.
VENTILATION	Provide local exhaust to keep air concentration of ingredients listed in Section II below established exposure limits.
PROTECTIVE GLOVES	Use chemical resistant gloves if skin contact will be made.
EYE PROTECTION	Always wear safety glasses or chemical proof goggles when working with chemicals.
OTHER PROTECTIVE CLOTHING/EQUIPMENT	None needed for proper use in accordance with label directions.
WORK HYGIENIC PRACTICES	Employees must practice good personal hygiene; washing exposed areas of skin several times daily and before eating, drinking, smoking, using restroom and at end of work period. Remove contaminated clothing and laundry before reuse.

SECTION IX – TRANSPORTATION DATA

PROPER SHIPPING NAME	CONSUMER COMMODITY
DOT ID NUMBER	N/A
DOT HAZARD CLASS	ORM-D

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.

N/D = Not Determined

N/E = Not Established

N/A = Not Applicable

< = Less Than

> - Greater Than

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