

MATERIAL SAFETY DATA SHEET

SECTION 1 — PRODUCT IDENTIFICATION

Product identifier: **Termin-8R (Aerosol)**

Product use: Aerosol corrosion inhibitor, penetrant and lubricant.

Supplier name and address:

Spectra Products Inc.

41 Horner Avenue, Unit 2
Toronto, ON, Canada
M8Z 4X4

Emergency Telephone #: 416-252-2355 (Day); 416-587-1148 (Night)

Manufacturer's name and address:

K-G Packaging
8001 Keele Street
Vaughan, ON, Canada
L4K 1Y8

WHMIS information: A, B5, D2B

SECTION 2 — CHEMICAL COMPOSITION/HAZARDOUS INGREDIENTS

<u>Ingredients</u>	<u>CAS #</u>	<u>% (weight)</u>	<u>LC₅₀(mg/m³/4hr)</u>	<u>LD₅₀ (mg/kg)</u>	
			<u>inh, rat</u>	<u>oral, rat</u>	<u>dermal, rabbit</u>
Hydrocarbon propellant	68476-86-8	10 - 30	N/Av	N/Av	N/Av
Hydrocarbon solvent	64742-81-0	3 - 7	>5000	>5000	>2000
Stoddard solvent	8052-41-3	1 - 5	>5500	>5000	>3000
Zinc dinonylnaphthalenesulfonate	28016-00-4	1 - 5	N/Av	N/Av	N/Av
Nonyl phenol ethoxylate	9016-45-9	1 - 5	N/Av	1310	2114
Calcium dinonyl-naphthalenesulfonate	57855-77-3	0.5 - 1.5	N/Av	N/Av	N/Av

SECTION 3 — PHYSICAL AND CHEMICAL PROPERTIES

Physical form, colour and odour: Red liquid aerosol, fresh scent.

Specific gravity (water = 1): 0.868

Viscosity (centistokes @ 40°C): 28.7 (liquid concentrate)

Vapour pressure: 8 mmHg @ 25°C / 77°F

Coefficient of oil/water distribution: N/Av

Volatile organic compounds (VOC's): N/Av

Evaporation rate (n-Butyl acetate = 1): <1

Odour threshold: N/Av

pH: N/Av

Melting/freezing point: N/Av

Vapour density (Air=1): >1

Solubility in water: Slightly emulsifiable.

Percent Volatile by Weight: N/Av

Boiling point: >100°C / 212°F

SECTION 4 — FIRE AND EXPLOSION DATA

Fire hazards/conditions of flammability: Flammable aerosol. This material will be ignited by heat, sparks, flames, or other sources of ignition (e.g. static electricity, pilot lights, or mechanical/electrical equipment).

Flash point (Method): >127°C (260°F) (COC) (concentrate)

Aerosol flame projection: >15 cm but <100 cm.

LFL (% by volume): 1.0 (Solvent component)

Explosion data: *Sensitivity to mechanical impact / static discharge:* May be sensitive to static discharge.

Oxidizing properties: No

Suitable extinguishing media: Use carbon dioxide, dry chemical, foam or water fog. Water may be ineffective.

Special fire-fighting procedures/equipment: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode. Move containers from fire area if it can be done without risk. Water spray may be useful in minimizing or dispersing vapours and cooling equipment exposed to heat and flame. Avoid spreading burning liquid with water spray used for cooling purposes. Shield personnel to protect from venting, rupturing or bursting cans.

Unusual Fire and Explosion Hazards: Containers are under pressure and may explode if exposed to excess heat for a prolonged period of time. Vapours are heavier than air and collect in low-lying areas. Vapours can travel to a source of ignition and flash back causing an explosion and fire. Product will float and be re-ignited at water's surface.

Hazardous combustion products: Carbon oxides, sulfur oxides, nitrogen oxides, phosphorous oxides, reactive hydrocarbons, polycyclic aromatic hydrocarbons.

SECTION 5 — REACTIVITY AND STABILITY DATA

Stability and reactivity: Stable under the recommended storage and handling conditions prescribed. Hazardous polymerization will not occur.

Conditions to avoid: Static discharge, heat, open flame, other sources of ignition and direct sunlight.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: None known. See 'Hazardous Combustion Products'.

SECTION 6 — TOXICOLOGICAL INFORMATION

Routes of exposure: Skin contact, eye contact, inhalation, and ingestion.

Toxicological data: There is no available data for the product. For individual ingredient LD₅₀ and LC₅₀ values, see Section 2.

Exposure Limits:

ACGIH-TLV: Hydrocarbon propellant – 1000 ppm (*As Aliphatic hydrocarbon gases*); Hydrocarbon solvent – 200 mg/m³; Stoddard solvent – 100 ppm.

OSHA-PEL: Hydrocarbon propellant – 1000 ppm (*As Liquefied petroleum gas*); Stoddard solvent – 500 ppm.

POTENTIAL HEALTH EFFECTS

Signs and symptoms of short-term (acute) exposure:

Inhalation: Inhalation causes nasal and respiratory tract irritation. May cause dizziness, drowsiness, fatigue, nausea, headache and other central nervous system effects. In extremely high concentrations, product may act as an asphyxiant and cause increased breathing and pulse rates, fatigue, nausea, vomiting and unconsciousness.

Skin contact: Direct skin contact may cause moderate irritation. Symptoms of frostbite may be experienced including numbness, prickling and itching.

Eye contact: May cause irritation. Direct contact could cause freezing of the eye.

Ingestion: Can cause irritation to the stomach, nausea, vomiting, diarrhea, and unconsciousness. Product may present an aspiration hazard, if ingested in large amounts, and cause life-threatening lung injury.

Effects of long-term (chronic) exposure: Repeated skin contact may cause drying and cracking of the skin (dermatitis).

Other important hazards: CNS depression may result from exposure.

Carcinogenicity: None of the hazardous ingredients listed are classified by IARC or ACGIH as carcinogenic.

Teratogenicity, mutagenicity, other reproductive effects: None known.

Sensitization to material: None known.

Synergistic materials: Not available.

Conditions aggravated by exposure: Skin, eye, respiratory, and central nervous system disorders.

SECTION 7— FIRST AID MEASURES

Inhalation: Immediately remove person to fresh air. If breathing stops, provide rescue breathing. If breathing is difficult, give oxygen. Obtain medical attention.

Skin contact: Immediately wash skin with mild soap and plenty of water, while removing contaminated clothing. Obtain medical attention. Launder clothing before re-use.

Eye contact: Immediately flush eyes with running water for at least 15 minutes. Obtain medical attention if irritation persists.

Ingestion: If swallowed, do NOT induce vomiting. Obtain medical attention immediately. Never give anything by mouth to an unconscious person.

SECTION 8 — PREVENTATIVE MEASURES

Spill, leak or release: Restrict access to area until completion of clean-up. All persons dealing with clean-up should wear the appropriate protective equipment including self-contained breathing apparatus. Keep all other personnel away from the spill/release. Ventilate area of release. Stop leak if you can do so without risk. Contain and absorb any spilled liquid with non-combustible, inert absorbent material (ie. dry clay or sand), then place absorbent material into a container for later disposal using non-sparking tools (see below). Do not flush to sewer or allow to enter drains, waterways, or confined spaces. Contaminated absorbent material may pose the same hazards as the spilled product. Notify the appropriate authorities as required.

Waste disposal: Handle waste according to recommendations below. Dispose in accordance with all applicable federal, provincial, and local regulations.

PROTECTIVE EQUIPMENT

Ventilation and engineering controls: Use with adequate general ventilation. Local exhaust ventilation is recommended if product used indoors or if exposure levels are not known.

SECTION 8 — PREVENTATIVE MEASURES Continued

Respiratory protection: Respiratory protection is required if the airborne concentration exceeds the TLV. If TLV exceeded, wear NIOSH approved respirators with organic mist / vapour cartridges. Advice should be sought from respiratory protection specialists.

Protective gloves: Gloves impervious to the material are recommended. Advice should be sought from glove suppliers.

Eye protection: Chemical goggles, to prevent mists from entering the eyes.

Other protective equipment: Not needed for consumer use. An eyewash station and safety shower should be made available in the immediate working area.

STORAGE & HANDLING

Storage and handling conditions:

Handling: This material is a flammable, harmful aerosol. Wear protective equipment during handling. Use in a well ventilated area. Do not use near sources of heat, flame, sparks, or ignition sources. Do not puncture or incinerate containers. Avoid generating vapours or mists. Ground all equipment during handling. Stand upwind of all spraying operations. Keep container closed when not in use. Assume empty containers contain residues, which are hazardous.

Storage: Store in a cool, dry, well-ventilated area away from sources of heat, ignition and sunlight. Keep away from incompatibles and flammable materials. Inspect containers periodically for damage or leaks. No smoking in the area.

Special Shipping Information:

Transportation of Dangerous Goods Regulations (TDGR):

Shipping Description: AEROSOLS, Class 2.2, UN1950.

Other Shipping Information: Limited Quantity exemption may apply. Under the CLR, refer to Section 1.17 for Limited Quantity Shipping Information, if shipping under this exemption.

Notes: Even though this product is classified as a Flammable aerosol under WHMIS rules (Class B5), it has not been classified as flammable under TDGR rules. The reason is that this product has been classified for transport according to the 11th Revised Edition of the UN Recommendations where the criteria for Division 2.1 aerosols appear in Special Provision 63. Under these UN Recommendations this product does not meet the criteria for a Flammable aerosol, Class 2.1, for transport.

SECTION 9 — PREPARATION INFORMATION

Prepared by: Spectra Product Inc.

Telephone number: 416-252-2355

Preparation date: January 1, 2010

Additional notes or references:

Legend: ACGIH – American Conference of Governmental Industrial Hygienists

CEPA – Canadian Environmental Protection Act

COC - Cleveland Open Cup

HSDB - Hazardous Substances Data Bank

IARC – International Agency for Research on Cancer

N/Ap – Not Applicable

NIOSH – National Institute for Occupational Safety and Health

OSHA – Occupational Safety and Health Act

RTECS - Registry of Toxic Effects of Chemical Substances

TSCA – Toxic Substances Control Act

WHMIS - Workplace Hazardous Material Information System

CAS - Chemical Abstract Service

DSL – Domestic Substances List

LFL - Lower Flammable Limit

Inh – Inhalation

N/Av – Not Available

UFL - Upper Flammable Limit

PEL - Permissible Exposure Limit

TLV – Threshold Limit Value

Reference: 1. ACGIH, Threshold Limit Values and Biological Exposure Indices for 2004.

2. International Agency for Research on Cancer Monographs, 2004.

3. Canadian Centre for Occupational Health and Safety, CCIInfoWeb databases, 2004 (Chempendium, HSDB and RTECs).

4. Material Safety Data Sheet from manufacturer.

CEPA information: All ingredients are listed on the DSL.

TSCA information: All ingredients are listed on the TSCA inventory.