

U.S. Department of Labor

Occupational Safety and Health Administration (Non-Mandatory Form). Format meets ANSI Z400.1-1998, OSHA 1910.1200 and WHMIS requirements.

MATERIAL SAFETY DATA SHEET

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

Section 1: Product and Company Identification

Product Name: Radnor Solvent Based Anti-Spatter (Bulk)

Product Identifier: Anti-Spatter (Bulk)

Product Use: Prevents Spatter Build Up in Welding Operations

Item Code(s): 64000104, 64000106, 64000108

MSDS Code: 002R Supplier: Radnor

Physical Address: 259 North Radnor - Chester Road - Suite 100

Radnor, PA 19087-5283

Emergency Phone: 866-734-3438

Date of Preparation: August 24, 2007 (Revised August 10, 2012)

OSHA Regulatory Status: Regulated

WHMIS Classification: D1B, D2A, D2B, A

Section 2: Composition and Information on Ingredients

HAZARDOUS INGREDIENTS	CAS#	OSHA PEL	ACGIH TLV	LD50 (oral, rat)	LC50 (inhal, rat)	%	OTHER
Methylene Chloride	75-09-2	25ppm (8hrTWA)	50ppm (8hrTWA)	1,600 mg/kg	88,000 mg/m ³ /30 min	73-84	

See Section 16 for Definitions of Terms Used.

Section 3: Hazard Identification

EMERGENCY OVERVIEW

POISON. CONTENTS UNDER PRESSURE. STORE BELOW 120°F (49°C), OUT OF SUNLIGHT AND AWAY FROM HEAT SOURCES. DO NOT PUNCTURE OR INCINERATE. AVOID CONTACT WITH SKIN AND EYES. VAPOR HARMFUL. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MY BE HARMFUL OR FATAL.

EYE: Liquid or vapors may cause redness, burning, tearing, swelling and/or pain.

<u>SKIN</u>: Frequent or prolonged contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

<u>INGESTION</u>: Should ingestion occur, it may cause irritation to membranes of the mouth, throat and gastrointestinal tract, resulting in vomiting and/or cramps.

<u>INHALATION</u>: Prolonged or repeated overexposure is anesthetic. May cause irritation of the respiratory tract, or acute nervous system depression characterized by headache, dizziness, staggering gait, or confusion.

EFFECTS OF ACUTE EXPOSURE: Prolonged inhalation at high levels can cause unconsciousness and death.

EFFECTS OF CHRONIC EXPOSURE: Excessive exposure may cause carboxyhemoglobinemia.

OTHER IMPORTANT HAZARDS: N/Av

<u>SUGGESTED HMIS RATING</u>: Health | 2 | Flammability | 1 | Reactivity | 1 | Personal Protection | C | <u>SUGGESTED NATIONAL FIRE PROTECTION ASSOCIATION</u>: Health | 2 | Flammability | 1 | Reactivity | 1 |

Section 4: First Aid Measures

<u>INHALATION</u>: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms persist or if unconscious.

<u>INGESTION</u>: Should actual ingestion occur, do not induce vomiting! Drink a glass of water or milk to dilute. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

<u>EYE CONTACT</u>: Immediately flush with plenty of clear water for at least 15 minutes. Make sure to flush under the eyelids. Consult a physician for definitive treatment.

<u>SKIN CONTACT</u>: Remove with soap and water. Continue flushing with water for several minutes. Use skin cream to counter resulting dryness. Consult a physician if irritation continues or if large skin area is affected.

Section 5: Fire Fighting Measures

CONDITIONS OF FLAMMABILITY: Heat, sparks, flame, red hot metal.

<u>MEANS OF EXTINCTION</u>: For warehouse and storage conditions, use NFPA Class B extinguishers (CO_2 , dry chemical or universal aqueous film forming foam).

<u>SPECIAL FIRE FIGHTING PROCEDURES</u>: Wear self-contained breathing apparatus pressure demand. Use water spray to cool fire exposed aerosol containers for containers can rupture violently from heat developed pressure.

<u>UNUSUAL FIRE AND EXPLOSION HAZARDS</u>: When liquid or vapor comes into contact with flames or red hot metal, products of combustion will be created. Firemen should wear self-contained breathing apparatus.

FLASH POINT / DETERMINATION: None to boiling

UPPER FLAMMABLE LIMIT: N/Av LOWER FLAMMABLE LIMIT: N/Av AUTO-IGNITION TEMPERATURE: N/Av

HAZARDOUS COMBUSTION PRODUCTS: N/Av

EXPLOSION DATA - SENSITIVITY TO MECHANICAL IMPACT: N/AV EXPLOSION DATA - SENSITIVITY TO STATIC DISCHARGE: N/AV

Section 6: Accidental Release Measures

<u>LEAK / SPILL RESPONSE</u>: In case of rupture, released content should be contained as any other solvent spill. Spills from aerosol cans are unlikely and are generally of small volume. Large spills are therefore not normally considered a problem. In case of actual rupture, avoid breathing vapors and ventilate area well. Remove all sources of ignition and use non-sparking equipment. Soak up material with inert absorbent. Flush area with water. All rinsate should be placed in safety containers and labeled for proper disposal.

<u>SPECIAL INSTRUCTIONS</u>: In case of rupture contents are generally evacuated from the container rapidly. Area should be ventilated immediately and continuous ventilation provided until all fumes and vapors have been removed. Containers should never be incinerated or burned. See Section 13 for disposal considerations.

Section 7: Handling and Storage

HANDLING PROCEDURES / EQUIPMENT: Avoid prolonged or repeated skin contact. Avoid breathing vapors.

STORAGE REQUIREMENTS: Store in area below 120°F (49°C). Do not incinerate (burn) containers. Assure can is in a secure place to prevent knocking over and accidental rupture. Always replace overcap when not in use. For store of pallet quantities, compliance with ANSI/NFPA 30B is recommended.

Section 8: Exposure Controls / Personal Protection

<u>EYE PROTECTION</u>: Safety glasses with side shields are recommended as a minimum for any type of industrial chemical handling. Where eye contact could occur, chemical splash proof goggles are recommended.

<u>SKIN PROTECTION</u>: For brief contact, no precautions other than clean body-covering clothing should be needed. When prolonged or repeated contact could occur, use protective clothing such as Sol-Vex® gloves or other clothing impervious to the ingredient listed in Section 2.

<u>ENGINEERING CONTROLS</u>: General ventilation (typically 10 air changes for hour) should be used. Ventilation rates should be matched to conditions. Local exhaust ventilation or an enclosed handling system, may be needed to control air contamination below that of the lowest TLV/PEL rated ingredient from Section 2.

<u>EXPOSURE GUIDELINE LEVELS</u>: Since this product is a mixture, an OSHA or ACGIH exposure value is not available. In determination of any exposure procedures, protection or testing use the lowest rated ingredient in Section 2.

Section 9: Physical and Chemical Properties

PHYSICAL STATE: Liquid

ODOR and APPEARANCE: Clear to white liquid with a chloroform-like odor

ODOR THRESHOLD: SPECIFIC GRAVITY (H₂O=1): 1.32 VAPOR PRESSURE (mm HG): 390 VAPOR DENSITY (AIR=1): 2.9 **EVAPORATION RATE (BA=1):** 14.50 104°F BOILING POINT (°F): FREEZE POINT (°F): N/Av N/Av COEFFICIENT OF WATER/OIL DISTRIBUTION: N/Av DENSITY: N/Av SOLUBILITY IN WATER (% by weight): 1.3

% VOLATILE BY VOLUME: 20.0% Wt. Max

VOC'S: N/Av

Section 10: Stability and Reactivity

STABILITY: Stable

<u>CONDITIONS TO AVOID</u>: Heat, sparks, open flame, red hot metal, electrical arcs, high pressure in aluminum systems. <u>MATERIALS TO AVOID (INCOMPATIBILITIES)</u>: Strong oxidizing materials (i.e. oxygen, nitrogen, peroxide, oxidizers) and reactive metals (i.e. aluminum, potassium, sodium, etc).

CONDITIONS OF REACTIVITY: N/Av

HAZARDOUS DECOMPOSITION BY-PRODUCTS: CO, CO2, phosgene and /or HCl

HAZARDOUS POLYMERIZATION: Will not occur.

Section 11: Toxicological Information

LD50 (oral, rat) = 1600 mg/Kg

LC50 (inhalation, rat) = 88,000 mg/m³/30 min

ROUTES OF ENTRY: Inhalation [Y] Eye Contact [Y] Skin Contact [Y] Skin Absorption [Y] Ingestion [N]

EXPOSURE LIMITS: Since this product is a mixture, an OSHA or ACGIH exposure value is not available. In determination of any exposure procedures, protection or testing use the lowest rated ingredient in Section 2.

IRRITANCY OF PRODUCT: N/Av

<u>SENSITIZATION TO PRODUCT / MEDICAL CONDITIONS AGGRAVATED</u>: Prolonged contact with high concentrations can lead to serious kidney and liver damage.

CARCINOGENICITY:

This product contains Methylene Chloride which has been shown to cause cancer in certain laboratory animals when exposed to high vapor concentration over an extended period of time. While not proven to be carcinogenic to humans, if it should be found to be so, risk to health would depend on level and duration of exposure. Exposure to vapor should be minimized until risk to humans has been determined.

<u>TERATOGENICITY / MUTAGENICITY / REPRODUCTIVE TOXICITY</u>: Negative or equivocal results have been obtained in mutagenicity test using mammalian cells or animals. Results of AMES bacterial tests have generally been positive suggesting that genotoxic potential does not appear to be a significant factor in the toxicity of methylene chlorine.

TOXICOLOGICAL DATA: N/Av

Section 12: Ecological Information

ENVIRONMENTAL EFFECTS: This product has not been tested for environmental effects.

IMPORTANT ENVIRONMENTAL CHARACTERISTICS: N/Av

AQUATIC TOXICITY: N/Av

Section 13: Disposal Considerations

A container that does not contain a significant amount of liquid would meet the definition of scrap metal (40 CFR 261.1(c) (6), and would be exempt from RCRA regulation under 40 CFR 261.6(a)(3)(iv) if it is to be recycled. If containers are to be disposed of (not recycled) it must be managed under all applicable RCRA and state regulations. Collected rinsate materials from spills may be hazardous wastes, and therefore subject to local, state and federal regulations.

Section 14: Transportation Information

THIS MATERIAL IS HAZARDOUS (Per 49 CFR 172.101) BY THE U.S. DEPARTMENT OF TRANSPORTATION.

BULK SHIPMENTS:

PROPER SHIPPING NAME: RQ Dichloromethane Solution

HAZARD CLASS NUMBER and DESCRIPTION: 6.1 (Toxic Material)

UN IDENTIFICATION NUMBER: UN 1593 PACKING GROUP: PG III

DOT LABEL(S) REQUIRED: Keep Away From Food

NORTH AMERICAN EMERGENCY RESPONSE

GUIDEBOOK NUMBER, 1996: 160

SHIPMENTS:

MARINE POLLUTANT: This product does not contain any component designated by the DOT to be a Marine Pollutant (49 CFR 172.101, Appendix B).

TRANSPORT CANADATRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This material is considered as **DANGEROUS GOODS**. Use the above information for the preparation of Canadian shipments.

Section 15: Regulatory Information

US FEDERAL REGULATIONS

OSHA CLASSIFCATION: This product is classified as a "Hazardous Chemical" by definition of Hazard

Communication Standard (29 CFR 1910.1200) Occupational exposures to methylene

chloride are specifically regulated under 29 CFR 1910.1052

<u>CARCINOGEN STATUS</u>: Methylene chloride is listed by NTP as 'reasonably anticipated to be a human carcinogen' and by IARC as a Group 2B carcinogen.

<u>TOXIC SUBSTANCES CONTROL ACT (TSCA)</u>: The product on this MSDS, or all of its components, is listed under TSCA. <u>SARA TITLE III, SECTION 313</u>: The following ingredients are subject to the reporting requirements of Section 313 of Title III of the Superfund and Reauthorization Act of 1986 and 40 CFR Part 372: Methylene Chloride (90.5%).

<u>CLEAN AIR ACT (CAA)</u>: The following ingredients appear on the List of Hazardous Air Pollutants (HAP - 42 USC 7412, Title I, Part A, p112): None

<u>CLEAN WATER ACT (CWA)</u>: The following ingredients appear on the CWA List of Hazardous Substances (40 CFR 116:4): None

<u>CALIFORNIA PROPOSITION 65</u>: The following ingredients appear of the Proposition 65 list(s): Methylene Chloride (C) <u>NEW JERSEY RIGHT TO KNOW INFORMATION</u>: (5 most predominant ingredients / hazardous & non-hazardous)

Methylene Chloride CAS# 75-09-2

Soy Lecithin CAS# 8002-43-5)

<u>CANADIAN WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)</u>: This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

DOMESTIC SUBSTANCES LIST (DSL): The product on this MSDS, or all of its components, is included in the DSL.

Section 16: Other Information

N/E Not Established
N/Av Not Available
N/Ap Not Applicable

IARC International Agency for Research on Cancer

ACGIH American Conference of Governmental Industrial Hygienists
NIOSH National Institute for Occupational Health and Safety

TLV-TWA Threshold Limit, Time Weighted Average

NAERG North American Emergency Response Guidebook WHMIS Workplace Hazardous Materials Information System

This MSDS format meets ANSI Z400.1-1998, OSHA 1910.1200 and WHMIS requirements. KCI provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Product use and conditions of use are beyond the control of KCI. Warranty of materials is limited to test results of product performance as detailed in certificates of compliance. Interpretation of test results is the responsibility of end-user. No other warranties, expressed or implied, are made.