

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.

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: Product Identifier: Product Use: Item Code(s): SDS Code: Supplier: Physical Address:

Emergency Phone: Date of Preparation: OSHA Regulatory Status: WHMIS Classification:

Radnor Cleaner Remover Standard Grade (Aerosol)

NDT STD Cleaner Metal cleaner and degreaser 64000215 014R Radnor 259 North Radnor - Chester Road - Suite 100 Radnor, PA 19087-5283 866-734-3438 March 21, 2019 Regulated D2B, A

Section 2: Hazard Identification

Classification of the Substance or Mixture:

Acute Toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Gases under pressure	Compressed Gas

Emergency Overview

DANGER

Hazard Statements

Harmful if swallowed
Causes skin irritation
Causes serious eye irritation
Suspected of causing cancer
May cause drowsiness or dizziness
May cause damage to organs (Central Nervous System, Liver, and Respiratory System), through prolonged or repeated
exposure.
May be fatal if swallowed and enters airways
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Contains gas under pressure; may explode if heated



Appearance: Clear

Physical State: Aerosol

Odor: Light Vanilla Scent

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wash hands and face thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF EXPOSED OR CONCERNED: Get medical advice/attention

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF EYE IRRITATION PERSISTS: Get medical advice/attention

IF ON SKIN: Wash with plenty of soap and water.

IF SKIN IRRITATION OCCURS: Get medical advice/attention

Take off contaminated clothing and wash it before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up Protect from sunlight. Store in a well-ventilated place Keep container tightly closed.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC): None

OTHER INFORMATION:

Toxic to aquatic life with long lasting effects

• 0% of the mixture consists of ingredient(s) of unknown toxicity

Section 3: Composition and Information on Ingredients

Chemical Name	CAS-No	Weight %*
DICHLOROMETHANE	75-09-2	90-99
CARBON DIOXIDE	124-38-9	1-10

*The exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4: First Aid Measures

First Aid Measures for Different Exposure Routes

<u>GENERAL ADVICE</u>: Avoid contact with eyes, skin, and clothing. Avoid breathing, vapors, mist, or gas.

EYE CONTACT: In the case of contact with eyes, rinse immediately with plenty of water for 15 minutes and seek medical advice.

SKIN CONTACT: Rinse with plenty of water. Consult a physician if irritation persists.

<u>INHALATION</u>: Move to fresh air. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately.

<u>INGESTION</u>: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician immediately. Risk of product entering the lungs on vomiting after ingestion.

Most Important Symptoms/Effects, Acute and Delayed

MAIN SYMPTOMS: May cause skin irritation. Inhalation causing Central Nervous System effects. Ingestion causing lung damage.

Indication of Immediate Medical Attention and Special Treatment Needed, if Necessary

NOTES TO PHYSICIAN: Treat symptomatically.

Section 5: Fire Fighting Measures

SUITABLE EXTINGUISHING MEDIA: Water fog, dry chemical, Carbon dioxide (CO2). Cool containers / tanks with water spray.

UNSUITABLE EXTINGUISHING MEDIA: Do not use a solid water stream as it may scatter and spread fire.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: Keep product and empty container away from heat and sources of ignition.

Explosion Data

SENSITIVITY TO MECHANICAL IMPACT: none.

SENSITIVITY TO STATIC DISCHARGE: Yes.

<u>PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS</u>: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use shielding to protect fire-fighters from bursting containers.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

<u>PERSONAL PRECAUTIONS</u>: Absorb with sand, clay, or other suitable material. Hard surfaces may be mopped with water. Keep people away from and upwind of spill/leak. Use with adequate ventilation to keep the exposure levels below the OELS.

Environmental Precautions

ENVIRONMENTAL PRECAUTIONS: Report spills as required by local and federal regulations.

Methods and Materials for Containment and Cleaning Up

<u>METHODS FOR CONTAINMENT</u>: Prevent further leakage or spillage if safe to do so.

<u>METHODS FOR CLEANING UP</u>: Contain liquid and collect with an inert, non-combustible material.

Section 7: Handling and Storage

Precautions for Safe Handling

<u>ADVICE ON SAFE HANDLING</u>: Avoid contact with eyes. Avoid skin contact. Use with adequate ventilation. Keep container away from heat, flames, and all other sources of ignition. Keep can away from all sources of electricity such as electric motors and batteries. Do not spray on hot surfaces.

Conditions for Safe Storage, Including Any Incompatibilities

<u>TECHNICAL MEASURES/STORAGE CONDITIONS</u>: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

INCOMPATIBLE PRODUCTS: Store away from strong oxidizers and acids.

AEROSOL LEVEL: 1

Section 8: Exposure Controls / Personal Protection

Control Parameters

EXPOSURE GUIDELINES

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
DICHLOROMETHANE 75-09-2	TWA: 50 ppm	TWA: 25 ppm (vacated) TWA: 500 ppm (vacated) STEL: 2000 ppm 5 min in any 3 h (vacated) Ceiling: 1000 ppm STEL: 125 ppm see 29 CFR 1910.1052	IDLH: 2300 ppm
CARBON DIOXIDE 124-38-9	STEL: 30000 ppm TWA: 5000 ppm	TWA: 5000 ppm TWA: 9000 mg/m ³ (vacated) TWA: 10000 ppm (vacated) TWA: 18000 mg/m ³ (vacated) STEL: 30000 ppm (vacated) STEL: 54000 mg/m ³	IDLH: 40000 ppm TWA: 5000 ppm TWA: 9000 mg/m ³ STEL: 30000 ppm STEL: 54000 mg/m ³

ACGIH: (American Conference of Governmental Industrial Hygienists) **OSHA**: (Occupational Safety & Health Administration) **NIOSH IDLH**: Immediately Dangerous to Life or Health

OTHER EXPOSURE GUIDELINES: Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure Controls

ENGINEERING MEASURES: Ventilation systems. Use adequate ventilation to keep the exposure levels below the OELs.

Individual Protection Measures, Such as Personal Protective Equipment

EYE/FACE PROTECTION: Tightly fitting safety goggles.

SKIN AND BODY PROTECTION: Chemical resistant apron. Protective gloves.

<u>RESPIRATORY PROTECTION</u>: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

<u>HYGIENE MEASURES</u>: When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs.

Section 9: Physical and Chemical Properties

PHYSICAL STATE:	Aerosol	
APPEARANCE:	Clear	
COLOR:	Clear	
ODOR:	Light Vanilla Scent	
ODOR THRESHOLD:	No information available	
<u>Property</u>	Values	Remarks · Methods
pH:	No information available	Not applicable
MELTING/FREEZING POINT:	No information available	
BOILING POINT/BOILING RANGE:	No information available	
FLASH POINT:	No information available	Not flammable
EVAPORATION RATE:	No information available	
FLAMMABILITY (SOLID, GAS):	No information available	
FLAMMABILITY LIMITS IN AIR:		
Upper Flammability Limit	No information available	
Lower Flammability Limit	No information available	
VAPOR PRESSURE:	No information available	
VAPOR DENSITY:	No information available	
SPECIFIC GRAVITY:	1.350	
WATER SOLUBILITY:	Practically insoluble	
PARTITION COEFFICIENT: n-octanol/water	No information available	
AUTO-IGNITION TEMPERATURE:	No information available	Not applicable
DECOMPOSITION TEMPERATURE:	No information available	
VISCOSITY:	No information available	
EXPLOSIVE PROPERTIES:	No information available	
Other Information		
VOC CONTENT (%):	0.48	

Section 10: Stability and Reactivity

REACTIVITY: No data available.

CHEMICAL STABILITY: Stable under recommended storage conditions.

POSSIBILITY OF HAZARDOUS REACTIONS: None under normal processing.

CONDITIONS TO AVOID: Extremes of temperature and direct sunlight.

INCOMPATIBLE MATERIALS: Store away from strong oxidizers and acids.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides. Fumes. Hydrocarbons.

Section 11: Toxicological Information

Information on Likely Routes of Exposure

PRODUCT INFORMATION: Product does not present an acute toxicity hazard based on known information

<u>INHALATION</u>: Exposure to high vapor concentrations may cause nervous systems effects such as headache, nausea, and dizziness.

EYE CONTACT: May cause slight irritation.

SKIN CONTACT: Irritating to skin. Prolonged skin contact may defat the skin and produce dermatitis.

<u>INGESTION</u>: Not acutely toxic. Aspiration into the lungs during swallowing may cause serious lung damage which may be fatal.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
DICHLOROMETHANE	= 1600 mg/kg (Rat)	-	= 53 mg/L (Rat) 6 h
75-09-2			

Information on Toxicological Effects

<u>SYMPTOMS</u>: Symptoms of overexposure may be headache, dizziness, tiredness, nausea, and vomiting. May cause mild irritation. Irritating to skin. Prolonged or repeated exposure may cause dermatitis. Not acutely toxic. Aspiration into the lungs during swallowing may cause serious lung damage which may be fatal.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure

SKIN CORROSION/IRRITATION: Irritating to skin.

EYE DAMAGE/IRRITATION: Irritating to eyes.

<u>SENSITIZATION</u>: No information available.

GERM CELL MUTAGENICITY: No information available.

CARCINOGENICITY: The table below indicates whether each agency has evaluated a listed ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
DICHLOROMETHANE	A3	Group 2A	Reasonably	Х
75-09-2			Anticipated	

ACGIH: (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

NTP: (National Toxicity Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

<u>REPRODUCTIVE TOXICITY</u>: The ingredients are not reproductive hazards.

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (SINGLE EXPOSURE): May cause drowsiness and dizziness.

<u>SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (REPEATED EXPOSURE)</u>: May cause damage to organs through prolonged or repeated exposure.

<u>CHRONIC TOXICITY</u>: Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest. Prolonged skin contact may defat the skin and produce dermatitis.

TARGET ORGAN EFFECTS: Central Nervous System, Central Vascular System (CVS), Eyes, Liver, Lungs, Respiratory

System, Skin.

ASPIRATION HAZARD: May be fatal if swallowed and enters airways.

Numerical Measures of Toxicity - Product Information

UNKNOWN ACUTE TOXICITY: 0% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document :

ATEmix (oral): 2078 mg/kg

Section 12: Ecological Information

Ecotoxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
DICHLOROMETHANE 75-09-2	500 mg/L EC50 Pseudokirchneriella subcapitata 96h 500 mg/L EC50 Pseudokirchneriella subcapitata 72h	140.8 - 277.8 mg/L LC50 Pimephales promelas 96h flow-through 262 - 855 mg/L LC50 Pimephales promelas 96h static 193 mg/L LC50 Lepomis macrochirus 96h flow-through 193 mg/L LC50 Lepomis macrochirus 96h static	-	1532 - 1847 mg/L EC50 Daphnia magna 48h Static 190 mg/L EC50 Daphnia magna 48h

<u>PERSISTENCE AND DEGRADABILITY:</u> No information available.

BIOACCUMULATION: No information available.

Chemical Name	log Pow
DICHLOROMETHANE	1.25
75-09-2	

OTHER ADVERSE EFFECTS: No information available

Section 13: Disposal Considerations

Waste Treatment

WASTE DISPOSAL METHODS: Dispose of in accordance with federal, state, and local regulations.

CONTAMINATED PACKAGING: Do not re-use empty containers.

Section 14:	Transportation	Information
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DOT GROUND:	CONSUMER COMMODITY ORM-D or LIMITED QUANTITY
IATA:	UN1950, AEROSOLS, NON-FLAMMABLE, CONTAINING SUBSTANCES IN DIVISION 6.1, PACKING GROUP III, 2.2 (6.1), LTD. QTY
IMDG:	UN1950, AEROSOLS, 2.2 (6.1), LTD. QTY.

Section 15: Regulatory Information

INTERNATIONAL INVENTORIES

Chemical Name	TSCA	DSL/NDSL	EINECS/ ELINCS	ENCS	IECSC	KECL	PICCS	AICS
DICHLOROMETHANE	Х	Х	Х	Х	Х	Х	Х	Х
CARBON DIOXIDE	Х	Х	Х	Х	Х	Х	Х	Х

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. FEDERAL REGULATIONS

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %*	SARA 313 - Threshold Values %
DICHLOROMETHANE 75-09-2	75-09-2	90 - 99	0.1

SARA 311/312 Hazard Categories

ACUTE HEALTH HAZARD: Yes

CHRONIC HEALTH HAZARD: Yes

FIRE HAZARD: No

SUDDEN RELEASE OF PRESSURE HAZARD: Yes

REACTIVE HAZARD: No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA	CWA	CWA	CWA
	Reportable Quantities	Toxic Pollutants	Priority Pollutants	Hazardous Substances
DICHLOROMETHANE 75-09-2		Х	Х	

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
DICHLOROMETHANE 75-09-2	1000 lb 1 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
			RQ 1 lb final RQ
			RQ 0.454 kg final RQ

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65	
DICHLOROMETHANE 75-09-2	Carcinogen	
PROPYLENE OXIDE 75-56-9	Carcinogen	

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
DICHLOROMETHANE 75-09-2	Х	Х	Х
CARBON DIOXIDE 124-38-9	Х	Х	X

EPA PESTICIDE REGISTRATION NUMBER: Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

WHMIS Hazard Class:

Α	Compressed Gasses
D2B	Toxic Materials

Section 16: Other Information

NFPA:	Health Hazard 2	Flammability 1	Instability 0	Physical and Chemical Hazards 1 - I
HMIS:	Health Hazard 2	Flammability 1	Physical Hazard 1	Personal Protection B

This SDS format meets ANSI Z400.1-1998, OSHA 1910.1200 and WHMIS requirements. Radnor 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 Radnor. 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.