



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 Water Based Anti-Spatter - Premium (Aerosol)**
Product Identifier: Anti-Spatter
Product Use: Prevents Spatter Build Up in Welding Operations
Item Code(s): 64000111
SDS Code: 042R
Supplier: Radnor
Physical Address: 259 North Radnor - Chester Road - Suite 100
Radnor, PA, 19087-5283
866-734-3438
Emergency Phone:
Date of Preparation: March 23
OSHA Regulatory Status: Regulated
WHMIS Classification: Hazardous / Regulated

Section 2: Hazards Identification

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE: This SDS has been developed for sample purposes only. Classification(s) may change after final sample approval. *** This SDS has been developed while waiting for a Flame Ignition Test to be performed. Flammability classification may change after Flame Ignition Testing has been performed.

Skin corrosion/irritation	Category 2
Carcinogenicity	Category 2
Flammable Aerosols	Category 1
Gases under pressure	Compressed Gas

Label Elements

DANGER



Hazard Statements

H315	Causes skin irritation.
H351	Suspected of causing cancer.
H222	Extremely Flammable Aerosol
H280	Contains gas under pressure; may explode if heated

Precautionary Statements - Prevention

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P280	Wear protective gloves, protective clothing, eye protection, face protection.
P264	Wash face, hands and any exposed skin thoroughly after handling.
P210	Keep away from heat, sparks, open flames, hot surfaces - No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Pressurized container: Do not pierce or burn, even after use.

Precautionary Statements - Response

P308 + P313	If exposed or concerned: Get medical advice, attention.
P321	Specific treatment (see first aid on this label).
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice, attention.
P362	Take off contaminated clothing and wash it before reuse.

Precautionary Statements - Storage

P405	Store locked up.
P410 + P403	Protect from sunlight. Store in a well-ventilated place
P412	Do not expose to temperatures exceeding 122°F (50°C)

Precautionary Statements - Disposal

P501	Dispose of contents, container to an approved waste disposal plant.
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OTHER INFORMATION: 0% of the mixture consists of ingredient(s) of unknown toxicity.

Section 3: Composition and Information on Ingredients

SUBSTANCES:

Chemical Name	CAS-No	Weight %*
DIMETHYLETHER	115-10-6	10-20
NONYLPHENOXYPOLYETHOXYETHANOL	127087-87-0	1-10
DIETHANOLAMINE	111-42-2	<1
ETHYLENE OXIDE	75-21-8	<0.0001

*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

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

EYE CONTACT: Immediately flush with plenty of water for at least 15 minutes. After initial flushing, remove any contact lenses and continue flushing. If eye irritation persists, consult a doctor.

SKIN CONTACT: Wash off with soap and plenty of water. Remove and wash contaminated clothing before re-use. If skin irritation persists, call a physician.

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

INGESTION: Call a physician or Poison Control Center immediately. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.

PROTECTION OF FIRST-AIDERS: Remove all sources of ignition.

Most important symptoms/effects, acute and delayed

MAIN SYMPTOMS: Causes skin irritation. Suspected of causing cancer.

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. Foam. 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. Keep away from sources of ignition - No smoking.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: Extremely Flammable / Flammable. Keep product and empty container away from heat and sources of ignition. In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray.

SENSITIVITY TO MECHANICAL IMPACT: none.

SENSITIVITY TO STATIC DISCHARGE: Yes

PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS: 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. In the event of fire and/or explosion do not breathe fumes.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

PERSONAL PRECAUTIONS: Use with adequate ventilation to keep the exposure levels below the OELS. Follow safe handling advice and personal protective equipment recommendations.

ENVIRONMENTAL PRECAUTIONS: Vapors can accumulate in low areas. Report spills as required by local and federal regulations. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Should not be released into the environment.

Methods and materials for containment and cleaning up

METHODS FOR CONTAINMENT: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains.

METHODS FOR CLEANING UP: Soak up with inert absorbent material. Contain liquid and collect with an inert, non-combustible material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water. Prevent product from entering drains. Take precautionary measures against static discharges.

Section 7: Handling and Storage

Precautions for safe handling

ADVICE ON SAFE HANDLING: Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Keep away from open flames, hot surfaces and sources of ignition. Contents under pressure. Do not puncture or incinerate cans. Handle in accordance with good industrial hygiene and safety practice. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

TECHNICAL MEASURES/STORAGE CONDITIONS: Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces, and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children. Store locked up.

INCOMPATIBLE PRODUCTS: Strong acids, alkalis, oxidizing agents.

AEROSOL LEVEL: 1

Section 8: Exposure Controls / Personal Protection

Control Parameters

EXPOSURE GUIDELINES:

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
DIMETHYLEETHER 115-10-6	STEL: 500 PPM TWA: 400PPM	TWX: 400 PPM TWA: 1200 mg/m ³	IDLH: 1900 PPM (10 % LEL)
DIETHANOLAMINE 111-42-2	TWA: 1 mg/m ³ inhalable fraction and vapor Skin - potential significant contribution to overall exposure by the cutaneous route	(vacated) TWA: 3 ppm (vacated) TWA: 15 mg/m ³	TWA: 3 ppm TWA: 15 mg/m ³
ETHYLENE OXIDE 75-21-8	TWA: 1 ppm	TWA: 1 ppm STEL: 5 ppm see 29 CFR 1910.1047	IDLH: 800 ppm Ceiling: 5 ppm 10 min/day Ceiling: 9 mg/m ³ 10 min/day TWA: 0.1 ppm less than stated value TWA: 0.18 mg/m ³ less than stated value

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 occupational exposure limits. Showers, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment

EYE/FACE PROTECTION: Tightly fitting safety goggles. Face-shield. Safety glasses with side-shields.

SKIN AND BODY PROTECTION: Wear protective gloves and additional protective clothing as necessary to prevent exposures.

RESPIRATORY PROTECTION: 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.

HYGIENE MEASURES: Handle in accordance with good industrial hygiene and safety practice.

Section 9: Physical and Chemical Properties

<u>PHYSICAL STATE:</u>	Aerosol
<u>COLOR:</u>	Beige
<u>ODOR:</u>	Mild
<u>pH:</u>	8.5 (+/- 0.50)
<u>MELTING/FREEZING POINT:</u>	No information available
<u>BOILING POINT/BOILING RANGE:</u>	
<u>FLASH POINT:</u>	-41.1 °C / -42 °F (Based on propellant)
<u>EVAPORATION RATE:</u>	No information available
<u>FLAMMABILITY (SOLID, GAS):</u>	No information available
<u>FLAMMABILITY LIMITS IN AIR:</u>	
upper flammability limit	
lower flammability limit	
<u>Vapor pressure:</u>	
<u>Vapor density:</u>	
<u>Specific Gravity:</u>	0.940
<u>Water solubility:</u>	No information available
<u>Partition coefficient: n-octanol/water:</u>	
<u>Autoignition temperature:</u>	No information available
<u>Decomposition temperature:</u>	
<u>Viscosity:</u>	No information available
<u>Explosive properties:</u>	
Other information	
<u>VOC Content(%):</u>	18.29

Section 10: Stability and Reactivity

REACTIVITY: Stable under recommended storage conditions.

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: Strong acids, alkalis, oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides , Hydrocarbons, Fumes.

Section 11: Toxicological Information

Information on likely routes of exposure

INHALATION: Respiratory irritation may occur if excessive exposure to product by inhalation.

EYE CONTACT: Eye irritation may occur if excessive exposure to product occurs.

SKIN CONTACT: Causes skin irritation.

INGESTION: May be harmful if swallowed .

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
DIMETHYLETHER 115-10-6	-	-	= 164000 ppm (Rat) 4 h
NONYLPHENOXYPOLYETHOXYETHANOL 127087-87-0	= 1310 mg/kg (Rat)	-	-
DIETHANOLAMINE 111-42-2	= 780 mg/kg (Rat)	= 11.9 mL/kg (Rabbit)	-
ETHYLENE OXIDE 75-21-8	= 72 mg/kg (Rat)	-	= 800 ppm (Rat) 4 h

Information on toxicological effects

SYMPTOMS: Causes skin irritation. Suspected of causing cancer.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

SKIN CORROSION/IRRITATION: Irritating to skin.

SENSITIZATION: Not a known sensitizer.

GERM CELL MUTAGENICITY: Not a germ cell mutagen.

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

Chemical Name	ACGIH	IARC	NTP	OSHA
DIETHANOLAMINE 111-42-2	-	Group 2B	-	-
ETHYLENE OXIDE 75-21-8	A2	Group 1	Known	X

IARC: (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

REPRODUCTIVE TOXICITY: This product does not contain any known or suspected reproductive hazards.

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (SINGLE EXPOSURE):

No known effect based on information supplied.

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (REPEATED EXPOSURE):

No known effect based on information supplied.

CHRONIC TOXICITY: 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.

TARGET ORGAN EFFECTS: No known effects under normal use conditions.

NEUROLOGICAL EFFECTS: Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.

ASPIRATION HAZARD: No known effect based on information supplied.

Numerical measures of toxicity - Product Information

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

Section 12: Ecological Information

Ecotoxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
DIETHANOLAMINE 111-42-2	7.8 mg/L EC50 Desmodesmus subspicatus 72h 2.1 - 2.3 mg/L EC50 Pseudokirchneriella subcapitata 96h	4460 - 4980 mg/L LC50 Pimephales promelas 96h flow-through 1200 - 1580 mg/L LC50 Pimephales promelas 96h static 600 - 1000 mg/L LC50 Lepomis macrochirus 96h static	-	55 mg/L EC50 Daphnia magna 48h
ETHYLENE OXIDE 75-21-8	-	73 - 96 mg/L LC50 Pimephales promelas 96h	-	137 - 300 mg/L LC50 Daphnia magna 48h

Bioaccumulation

Chemical Name	log Pow
DIMETHYLETHER 115-10-6	-0.18
DIETHANOLAMINE 111-42-2	-2.18
ETHYLENE OXIDE 75-21-8	-0.3

OTHER ADVERSE EFFECTS: No information available

Section 13: Disposal Considerations

WASTE DISPOSAL METHODS: This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Dispose of in accordance with federal, state, and local regulations. Dispose of contents/container in accordance with local regulation.

CONTAMINATED PACKAGING: Do not re-use empty containers.

Section 14: Transportation Information

DOT Ground	CONSUMER COMMODITY ORM-D or LIMITED QUANTITY
IATA	UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD.QTY.
IMDG	UN1950, AEROSOLS, 2.1, LTD. QTY

Section 15: Regulatory Information

INTERNATIONAL INVENTORIES

Chemical Name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
DIMETHYLETHER	X	X	X	X	X	X	X	X
NONYLPHENOXYPOLYETHOXYETHANOL	X	X	X	X	X	X	X	X
DIETHANOLAMINE	X	X	X	X	X	X	X	X
ETHYLENE OXIDE	X	X	X	X	X	X	X	X

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 does contain 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 %
NONYLPHENOXYPOLYETHOXYETHANOL	127087-87-0	1-10	1.0
DIETHANOLAMINE	111-42-2	<1	1.0
ETHYLENE OXIDE	75-21-8	<0.0001	0.1

SARA 311/312 Hazard Categories:

Acute Health Hazard	Yes
Chronic Health Star Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	Yes
Reactive Hazard	No

Clean Water Act:

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA:

This material, as supplied, does contain 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
DIETHANOLAMINE 111-42-2	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
ETHYLENE OXIDE 75-21-8	10 lb	10 lb	RQ 10 lb final RQ RQ 4.54 kg final RQ

U.S. STATE REGULATIONS**California Proposition 65:**

This product contains the following Proposition 65 chemicals:



This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Chemical Name	California Prop. 65
DIETHANOLAMINE - 111-42-2	Cancer/ <1%
ETHYLENE OXIDE - 75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive <0.0001%

U.S. State Right-to-Know Regulations:

Chemical Name	New Jersey	Massachusetts	Pennsylvania
DEIONIZED WATER 7732-18-5			X
DIMETHYLETHER 115-10-6	X	X	X
DIETHANOLAMINE 111-42-2	X	X	X
OCTADECANOIC ACID 112-80-1			X
ETHYLENE OXIDE 75-21-8	X	X	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.

Section 16: Other Information

NFPA	Health Hazard 2	Flammability 4	Instability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 2	Flammability 4	Physical Hazard 1	Personal Protection B

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association {for HMIS ratings).

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 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.