Safety Data Sheet WELD



1. Identification			
Product identifier	WELD		
Product code	AEWELD500GDZ		
Other means of identification	WELD aerosol. This SDS sheet is not for the product WELD in liquid format.		
Recommended use of the chemical and restrictions on use	Waterbase anti-spatter weld for sheets metal and nozzles. Not recommended for any other use not detailed on product data sheet or label.		
Manufacturer	AEROCHEM Inc. 5977 Trans Canada Highway Pointe-Claire, QC H9R 1C1 Canada General Information: 1-888-592-5837 <u>www.aerochem.ca</u> info@aerochem.ca		
Emergency phone number	INFOTRAC [®] : 1-800-535-5053 International call collect: 1-352-323-3500 24 hours/day, 7 days/week		

2. Hazard identification

Summary Non-flammable aerosol. Content under pressure, containers may explode under fire conditions. Do not breathe vapours, mists or aerosols. Avoid contact with eyes. If medical advice is needed, have this SDS or label at hand. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved.

WHMIS 2015/GHS/OSHA HCS 2012



Serious eye damage/eye irritation (Category 2)

WARNING

H229: Pressurized container: may burst if heated

- H319: Causes serious eye irritation
- H316: Causes mild skin irritation
- P210: Keep away from heat, sparks, open flames and other ignition sources. No smoking.
- P251: Do not pierce or burn, even after use.
- P264: Wash skin thoroughly after handling.
- P280: Wear gloves and eye protection.
- P332+313: If skin irritation occurs: Get medical advice or attention.
- P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P337+313: If eye irritation persists: Get medical advice or attention.
- P410+412: Protect from sunlight. Do not expose to temperatures exceeding $50^{\circ}C/122^{\circ}F$.

Other hazards which do not result in classification

Flammable aerosols (Category 3). Skin irritation (Category 3).

3. Composition/information on ingredients		
Common name	CAS	Weight % content
1,1,1,2-Tetrafluoroethane	811-97-2	3 - 7 %
Alcohols, C11-14-iso-, C13-rich, ethoxylated 78330-21-9 1 - 5 %		

Note: The manufacturer withholds the actual concentration range of the ingredients as a trade secret.

4. First-aid	measures		
Inhalation	Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. If a problem develops or persists, seek medical attention.		
Skin contact	Wash skin with warm water and mild soap. Remove contaminated clothing and wash before reuse. If a problem develops or persists, seek medical attention.		
Eye contact	IMMEDIATELY flush with plenty of water. Remove contact lenses if easy to do. Flush with water for at least 15 minutes. Hold eyelids apart to rinse properly. If a problem develops or persists, seek medical attention.		
Ingestion	DO NOT induce vomiting, unless recommended by medical personnel. If victim is conscious wash out mouth with plenty of water. Never give anything by mouth if victim is unconscious or convulsing. If spontaneous vomiting occurs, keep head below hip level to prevent aspiration into the lungs. Seek medical attention or contact a Poison Centre immediately.		
Other	No information available.		
Symptoms	May cause redness and irritation to eyes. May cause redness and slight irritation of the skin.		
Notes to the physician	If gastric lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.		

5. Fire-fighting measures

Suitable extinguishing media	Dry chemicals, water spray, chemical foam, carbon dioxide (CO2).	
Specific hazards arising from the chemical	Non-flammable aerosol. Content under pressure, containers may explode under fire conditions.	
Special protective equipment	Firefighters must wear self contained breathing apparatus with full face mask. Firefighting suit may not be efficient against chemicals.	
Special protective actions for fire-fighters	Use water spray to cool fire-exposed containers.	

6. Accidental rel	6. Accidental release measures	
Personal precautions, protective equipment and emergency procedures	d emergency Safety Data Sheet.	
Environmental precautions	Prevent product from entering drains and release to the environment.	

Methods and materials for containment and cleaning up	Ventilate the area well. Remove sources of ignition. Allow propellant gas to evaporate. Absorb with inert material (soil, sand, vermiculite) or wipe with a cloth and place in an appropriate waste disposal container clearly identified.
••••••••••••••••••••••••••••••••••••••	

7. Handling and storage		
Precautions for safe handling	Content under pressure, do not puncture, cut, heat or throw container into the flames. Keep away from heat and open flame. Use only in well ventilated area. Do not breathe vapours, mists or aerosols. Avoid contact with skin, eyes and clothing. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved. Do not eat, do not drink and do not smoke during use. After use, wash hands with soap and water. Wash contaminated clothing before reuse.	
Conditions for safe storage, including any incompatibilities	Keep in properly labelled containers. Store away from oxidizing materials and incompatible materials (see section 10). Keep away from direct sunlight and heat.	
Storage temperature	<49°C (120.2°F)	

8 Exposure co	ntrols/personal proteo	ction	
Immediately Dangerous to Life or Health	No IDLH value is reported.		5
1,1,1,2-Tetrafluoroethar	ne TWA (8h)	1000 ppm	US AIHA
Appropriate engineering controls		ventilation (general or local exhatis, aerosols or dust below their	aust) to keep the airborne respective occupational exposure
Individual protection n	neasures		
Eye	Wear safety glasses with side shields. If there is a risk of contact with eyes, wear chemical splash goggles.		
Hands	Wear nitrile or neoprene gloves. Disposable nitrile gloves can also be used, but discard after single use.		
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Wear work clothing as required by employer code.		
Respiratory	Respiratory protection is not required for normal use. Where the conditions in the workplace require a respirator, it is necessary to follow a respiratory protection program. Moreover, respiratory protection equipment (RPE) must be selected, fitted, maintained and inspected in accordance with regulations and standard 29 CFR 1910.134 (OSHA), ANSI Z88.2 or CSA Z 94.11 (Canada) and approved by NIOSH/MSHA.		
Feet	No personal protection measur	re required.	
		The second second	
	Safet	y glasses Nitrile gloves	

9. Physical and	d chemical properties		
Physical state	Aerosol (liquid)	Flammability	Non-flammable
Colour	White	Flammability limits	N/Ap.
Odour	Odorless to faint	Flash point	N/Ap.
Odour threshold	N/Av.	Auto-ignition temperature	N/Av.
рН	N/Av.	Sensibility to electrostatic charges	
Melting point	N/Av.	Sensibility to sparks and/or friction	N.Det.
Freezing point	N/Av.	Vapour density	>1 (Air = 1)
Boiling point	100°C (212°F)	Relative density	1 kg/L (Water = 1)
Solubility	Soluble in water.	Partition coefficient n-octanol/water	N/Av.
Evaporation rate	> Butyl Acetate	Decomposition temperature	N/Av.
Vapour pressure	1124kPa (8430 mm Hg) @ 20°C (68°F)	Viscosity	30 cSt @ 40°C (104°F)
Percent Volatile	93%	Molecular mass	N/Ap.
N/Av	.: Not Available N/Ap.: Not Applicable	Und.: Undetermined	N/E: Not Established

10. Stability and reactivity	
Reactivity	No information available.
Chemical stability	Stable under recommended storage conditions. Aerosol containers are unstable at temperatures above 49 °C.
Possibility of hazardous reactions (including polymerizations)	A dangerous reaction will not occur.
Conditions to avoid	Avoid temperatures over 49 °C. Avoid contact with incompatible materials.
Incompatible materials	Strong oxidizing agents (e.g. chlorine, fluorine, nitric acid, perchloric acid, peroxides, nitrates, chlorates, chromates, permanganates and perchlorates), strong bases, strong acids.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Numerical measures of toxicity	1,1,1,2-TetrafluoroethaneInhalation >500000 ppm/4h Rat LC50Alcohols, C11-14-iso-, C13-rich, ethoxylatedIngestion >2000 mg/kgRat LD50	
Likely routes of exposure	Skin, eyes, inhalation, ingestion.	

Delayed, immediate and chronic effects	Eye contact	May cause redness and irritation to eyes. Eye Irritation/Corrosion, Rabbit (OECD TG 405): tests performed with each ingredient of this mixture gave not irritating to irritating results.
	Skin contact	May cause redness and irritation of the skin. Prolonged or repeated exposure can cause skin drying, defatting and dermatitis. Skin Irritation/Corrosion, Rabbit (OECD 404) : tests performed with each ingredient of this mixture gave not irritating to irritating results.
	Inhalation	In the workplace, the product is rapidly absorbed by respiratory tract. Inhalation in large amounts of 1,1,1,2-Tetrafluoroethane (CAS no 811-97-2) may cause asphyxiation.
	Ingestion	May cause gastrointestinal irritation with nausea and vomiting.
	Respiratory or skin sensitization IARC/NTP	Ingredients present at levels greater than or equal to 0.1% of this product are not skin or respiratory sensitizers. No ingredients listed.
	Classification	
	Carcinogenicity	Ingredients present at levels greater than or equal to 0.1% of this product are not listed as a carcinogen by IARC, ACGIH, NIOSH, NTP or OSHA.
	Mutagenicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effects.
	Reproductive toxicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effects.
	Specific target organ toxicity - single exposure	No target organ is listed.
	Specific target organ toxicity - repeated exposure	No target organ is listed.
Interactive effects	No information availa	ble.
Other information	mg/kg. Th <mark>e acute tox</mark>	ute toxicity estimates (ATE) of the mixture were calculated to be greater than 2000 icity estimate (ATE) by inhalation (aerosol/mist) of the mixture was calculated to be th. These values are not classified according to WHMIS 2015 and OSHA HCS 2012.

12. Ecological information

Ecological toxicity	Fish - Oncorhynchus mykiss - Rainbow trout Aquatic Invertebrate - Daphnia magna Algea, Pseudokirchneriella subcapitata Fish - Leuciscus idus	LC50 EC50 EC50 LC50	450 mg/L; 96h (CAS no 811-97-2) 980 mg/L; 48h (CAS no 811-97-2) 159 mg/L; 96h (CAS no 811-97-2) 1-10 mg/L; 96 h (CAS no 78330-21-9)	
Persistence	Persistent in the environment.			
Degradability	The product is a mixture of which some ingredients are readily biodegradable (> 60% in 28 days) while other ingredients are not readily biodegradable (<60% in 28 days). Degradation of tetrafluoroethane (CAS no 811-97-2) in the atmosphere is slow. The major degradation process for tetrafluoroethane in the atmosphere is oxidation. It has low reactivity towards indirect photo-oxidation by hydroxyl radicals in the troposphere, with an estimated lifetime of 14.3 years for this reaction.			
Bioaccumulative potential	The product is a mixture of which all ingredients have a low bioaccumulation potential (Log Kow of <3 and / or BCF <500). Based on the measured partition coefficient Log Kow of 1.06, Tetrafluoroethane (CAS no 811-97-2) is expected to have a low potential for bioaccumulation in the environment.			
Mobility in soil	The product is a mixture of which some ingredients evaporate very easily from the surface of the soil. Moreover, ingredients have very high to moderate mobility in soil. Tetrafluoroethane (CAS no 811-97-2) is			

	expected to mainly partition to the atmosphere when released with minor partitioning to soil.
Other adverse effects	This chemical does not deplete the ozone layer. Tetrafluoroethane (CAS no 811-97-2) does not deplete the ozone layer, but it does have a high global warming potential.

13. Disposal considerations

Container Important! Prevent waste generation. Use in full. DO NOT pierce, cut, heat, or burn the container, even after use. Depressurize empty container (empty it of its propellant). Observe all federal, state/provincial and municipal regulations. If necessary consult the Department of Environment or the relevant authorities.

14. Transport in	formation
UN Number	UN 1950
UN Proper Shipping Name	AEROSOLS, NON-FLAMMABLE
Environmental hazards	This material does not contain marine pollutant.
Special precautions for user	Permit required for transportation with proper DANGER placards displayed on vehicle. Exemption available: LTD QTY according to TDG Canada - art. 1.17; Mode of transportation: rail, sea and road, applicable for Canadian domestic shipments. Quantitative limits: applicable for aerosol cans containing =< 1L each.
TDG - Transportation o	f Dangerous Goods (Canada)
Transport hazard class(es)	Class 2.2
Packing group	
Emergency response guidebook 2016	126
IMO/IMDG - Internation	al Maritime Transport
Classification	UN 1950. AEROSOLS. Class 2.2, Emergency schedules (EmS-No) F-D, S-U
IATA - International Air	Transport Association
Classification	UN 1950. AEROSOLS, NON-FLAMMABLE. Class 2.2.
	are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper kaging. In addition, if a domestic exemption exists, it is the responsibility of the shipper to define the application of it.

15. Regulatory information

CANADA

Common name	CAS	CEPA	DSL	NDSL	NPRI
1,1,1,2-Tetrafluoroethane	811-97-2		Х		
Alcohols, C11-14-iso-, C13-rich, ethoxylated	78330-21-9		Х		

- CEPA: List of Toxic Substances Managed Under Canadian Environmental Protection Act

- DSL: Domestic Substances List Inventory

- NDSL: Non-Domestic Substances List Inventory

- NPRI: National Pollutant Release Inventory Substances

UNITED STATE OF AMERICA

Common name	CAS			EPCRA 302/304	112(b)	1177(h)	-	CWA Prio.
1,1,1,2-Tetrafluoroethane	811-97-2	Х						
Alcohols, C11-14-iso-, C13-rich, ethoxylated	78330-21-9	Х						

- TSCA: Toxic Substance Control Act

- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act list of hazardous substances

- EPCRA 313: Emergency Planning and Community Right-to-Know Act, Section 313 Toxic Chemicals

- EPCRA 302/304: Emergency Planning and Community Right-to-Know Act, Section 302/304 Extremely Hazardous Substances - CAA 112(b) HON: Clean Air Act - Hazardous Organic National Emission Standard for Hazardous Air Pollutant

- CAA 112(b) HAP: Clean Air Act Hazardous Air Pollutants lists pollutants
- CAA 112(r): Clean Air Act Regulated Chemicals for Accidental Release Prevention
- CWA 311: Clean Water Act List of Hazardous Substances

- CWA Priority: Clean Water Act - Priority Pollutant list

California Proposition 65

No ingredients listed.

Other regulations				
5	HMIS Heath Flamability Reactivity Protective Equipment 	NFPA		<

16. Other in	formation
Date (YYYY-MM-DD)	AEROCHEM Inc. 2020-03-03
Version	03
Other information	REFERENCES: - Haz-Map, Information on Hazardous Chemicals and Occupational Diseases, https://haz-map.com/ - Service du répertoire toxicologique de la Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), http://www.reptox.csst.qc.ca DATE OF FIRST VERSION OF SDS: 2017-09-20. CHANGES MADE IN THE VERSION 02: section 3. DATE OF SECOND VERSION OF SDS: 2019-08-01. CHANGES MADE IN THE VERSION 03: section 1.
	ACGIH: American Conference of Governmental Industrial Hygienists AIHA: American Industrial Hygiene Association HMIS: Hazardous Materials Identification System NFPA: National Fire Protection Association OSHA: Occupational Safety and Health Administration (USA) NIOSH: National Institute for Occupational Safety and Health NTP: National Toxicology Program

	RSST: Règlement sur la santé et la sécurité du travail (Québec) GHS: Globally Harmonized System IARC: International Agency for Research on Cancer IDLH: Immediately Dangerous to Life or Health STEL: Short Term Exposure Limit (15 min) TWA: Time Weighted Averages WHMIS: Workplace Hazardous Materials Information System
Powered by	To the best of our knowledge, the information contained herein is accurate. However, neither Prī¿½ventis System nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.
A global vision of prevention	TM/MD