

SAFETY DATA SHEET

SECTION 1) IDENTIFICATION

Product Name: Aero 2015
Synonym: N/A
Product Code: AE2015500GDZ
Revision Date: Nov 22, 2021
Version: 1.0
Manufacturer's Name: Canada-AEROCHEM INC.
Address: 5977 Trans Canada Highway West Pointe-Claire, QC, CA, H9R 1C1 Pointe-Claire, CA, H9R 1C1
Emergency Phone: INFOTRAC® 1-800-535-5053. International call collect: 1-352-323-3500 24 hours/day, 7 days/week.
Information Phone Number: 1-888-592-5837
Fax:
Product/Recommended Uses:

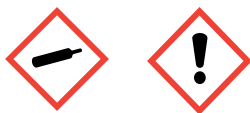
Date Printed: Jul 12, 2022
Supersedes Date: N.A.

SECTION 2) HAZARDS IDENTIFICATION

Classification

Acute toxicity Inhalation Vapor - Category 4
Eye Irritation - Category 2
Gases Under Pressure Liquefied Gas

Pictograms



Signal Word

Warning

Hazardous Statements - Health

H332 - Harmful if inhaled
H319 - Causes serious eye irritation

Hazardous Statements - Physical

H280 - Contains gas under pressure; may explode if heated

Precautionary Statements - General

P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read label before use.

Precautionary Statements - Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P271 - Use only outdoors or in a well-ventilated area.
P264 - Wash thoroughly after handling.

P280 - Wear protective gloves,protective clothing,eye protection/face protection.

Precautionary Statements - Response

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 - Call a POISON CENTER/doctor if you feel unwell.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical advice/attention.

Precautionary Statements - Storage

P410 + P403 - Protect from sunlight. Store in a well-ventilated place.

Precautionary Statements - Disposal

No precautionary statement available.

Hazards Not Otherwise Classified (HNOC) (Physical & Health)

no data available

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0000156-60-5	1,2-DICHLOROETHYLENE	65.00% - 85.00%
0138495-42-8	1,1,1,2,3,4,4,5,5,5-DECAFLUOROPENTANE	7.00% - 13.00%
0000124-38-9	CO2	1.00% - 5.00%
Proprietary	METHOXYTRIDECAFLUOROHEPTENE ISOMERS	1.00% - 5.00%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

Inhalation

Remove source of exposure or move person to fresh air and keep comfortable for breathing.

If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor.

Immediately call a POISON CENTER or doctor.

Specific treatment is urgent (see First-Aid on this label).

Eye Contact

If eye irritation persists:

Get medical advice/attention.

Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open.

Remove contact lenses, if present and easy to do.

Continue rinsing for a duration of 15-20 minutes.

Take care not to rinse contaminated water into the unaffected eye or onto the face.

Remove source of exposure.

Immediately call a POISON CENTER/doctor and follow their advice.

Specific treatment is urgent (see First-Aid on this label).

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts).

Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes or until medical aid is available.

Wash contaminated clothing before reuse.

Remove source of exposure.

For brief contact with a small amount: Rewarm with body heat.

Get immediate medical advice/attention.

For extensive contact or a large amount: Immediately call a POISON CENTER/doctor and follow their advice.

Specific treatment is urgent (see First-Aid on this label).

Ingestion

If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Never give anything by mouth to an unconscious person. Rinse mouth. Immediately call a POISON CENTER or doctor.

Most important symptoms and effects, both acute and delayed

OVER-EXPOSURE SIGNS/SYMPTOMS

Eye Contact: Adverse symptoms may include pain or irritation, watering, redness. No data available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. No specific treatment. Treat according to symptoms (decontamination, vital functions), no known specific antidote. Treatment should be supportive and based on the judgement of the physician in response to the reaction of the patient.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Small Fire : Dry chemical, foam, carbon dioxide, water-spray or alcohol-resistant foam. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Large Fire : Water spray, fog or alcohol-resistant foam.

Unsuitable Extinguishing Media

Do not use straight stream of water.

Specific Hazards in Case of Fire

Fire will produce irritating and toxic gases. Contents under pressure. Containers can explode in a fire. Containers exposed to heat and flames may rupture with violent force. Cylinders exposed to fire may vent and release gas through pressure relief devices. Vapors from liquefied gas are initially heavier than air and spread along the ground. Vapors may travel to source of ignition and flash back.

Fire-fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Cool containers with flooding quantities of water until well after fire is out. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Stay uphill and/or upstream.

Ventilate closed spaces before entering.

Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Evacuate and isolate hazard area and keep unauthorized personnel away.

A vapor-suppressing foam may be used to reduce vapors.

Recommended Equipment

Breathing protection is required.

Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA).

Wear thermal protective clothing when handling refrigerated/cryogenic liquids.

Personal Precautions

Do not breathe vapor or mist.

Avoid contact with skin, eye or clothing.

Environmental Precautions

Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

Stop spill/release if it can be done safely.

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Dike far ahead of liquid spill for later disposal.

Methods and Materials for Containment and Cleaning up

Ventilate area after clean-up is complete. Dispose of contaminated materials according to federal, state and local regulations. Allow substance to evaporate. Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Contaminated absorbent material may pose the same hazard as the spilled product. Absorb Liquids in vermiculite, dry sand, earth, or similar inert material and deposit in sealed containers for disposal.

SECTION 7) HANDLING AND STORAGE

General

Wash hands after use.

Avoid contact with skin, eye or clothing.

Do not breathe vapor or mist.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

All containers must be properly labelled.

Eyewash stations and showers should be available in areas where this material is used and stored

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits.

The use of local ventilation is recommended to control emissions near the source.

Report ventilation failures immediately.

Storage Room Requirements

Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored. Keep containers securely sealed when not in use. Containers that have been opened must be carefully resealed to prevent leakage. Indoor storage should meet OSHA standards and appropriate fire codes. Empty containers retain residue and may be dangerous. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and strong oxidizers. Store in approved containers and protect against physical damage. Take precautionary measures against electrostatic discharge. To avoid fire or explosion, dissipate static electricity during transfer by ground and bonding containers and equipment before transferring material.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids.

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	ACGIH TWA (mg/m3)	ACGIH TWA (ppm)	ACGIH STEL (mg/m3)	ACGIH STEL (ppm)	ACGIH Carcinogen	VLE Alteracion	VLE Connotacion	ACGIH TLV Basis
---------------	-------------------	-----------------	--------------------	------------------	------------------	----------------	-----------------	-----------------

						Efecto a la Salud		
1,1,1,2,3,4,4,5,5,5-DECAFLUORO PENTANE	2.5				A4	Daño a hueso; fluorosis	A4, IBE	Bone dam; fluorosis
1,2-DICHLOROET HYLENE		200				Daño a sistema nervioso central; irritación de ojos		CNS impair; eye irr
CO2		5000		30000		Asfixia		Asphyxia
METHOXYTRI DECAFLUORO HEPTENE ISOMERS		200						

Chemical Name	ACGIH Notations	VLE CToP (mg/m3)	VLE CToP (ppm)	OSHA TWA (mg/m3)	OSHA TWA (ppm)	VLE PPT (mg/m3)	VLE PPT (ppm)	OSHA STEL (mg/m3)
1,1,1,2,3,4,4,5,5,5-DECAFLUORO PENTANE	A4; BEI			2.5		2.5		
1,2-DICHLOROET HYLENE							200	
CO2			30 000	9000	5000		5 000	
METHOXYTRI DECAFLUORO HEPTENE ISOMERS								

Chemical Name	OSHA STEL (ppm)	OSHA Carcinogen	OSHA Tables (Z1, Z2, Z3)	OSHA Skin designation	CAN_ONtmg	CAN_ONtppm	CAN_ONsmg	CAN_ONsppm
1,1,1,2,3,4,4,5,5,5-DECAFLUORO PENTANE			1					
1,2-DICHLOROET HYLENE								
CO2			1					
METHOXYTRI DECAFLUORO HEPTENE ISOMERS								

Chemical Name	BR_NR_15_Annex_XI - Brazil_NR 15 - Annex 11 of NR 15 (Tolerance Limits for Chemical Agents and Inspections in the Workplace)
1,1,1,2,3,4,4,5,5,5-DECAFLUORO PENTANE	
1,2-DICHLOROET	

HYLENE	
CO2	1
METHOXYTRI DECAFLUORO HEPTENE ISOMERS	

(C) - Ceiling limit, A4 - Not Classifiable as a Human Carcinogen, BEI - Substances for which there is a Biological Exposure Index or Indices, CNS - Central nervous system, dam - Damage, impair - Impairment, irr - Irritation

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Density	1.32 g/cm3
Specific Gravity	N/A
% VOC	100%
Density VOC	N/A
Vapor Pressure	440.00 hPa
Appearance	Colourless
Odor Threshold	N/A
Odor Description	Slight
pH	7.00
Water Solubility	N/A
Flammability	
Flash Point Symbol	N/A
Flash Point	N/A
Viscosity	N/A
Lower Explosion Level	N/A
Upper Explosion Level	N/A
Vapor Density	N/A
Freezing Point	N/A
Melting Point	N/A
Low Boiling Point	N/A
High Boiling Point	N/A
Auto Ignition Temp	N/A
Evaporation Rate	> Butyl Acetate
Coefficient Water/Oil	N/A

SECTION 10) STABILITY AND REACTIVITY

Stability

Stable under normal storage and handling conditions.

Conditions To Avoid

Avoid heat, sparks, flame, high temperature and contact with incompatible materials.

Hazardous Reactions/Polymerization

Will not occur.

Incompatible Materials

Strong bases, acids, and oxidizing agents.

Hazardous Decomposition Products

SECTION 11) TOXICOLOGICAL INFORMATION

Acute Toxicity

Harmful if inhaled The Acute Toxicity Estimate (ATE) for an oral exposure to this mixture is >5000 mg/kg body weight The Acute Toxicity Estimate (ATE) for a dermal exposure to this mixture is >5000 mg/kg body weight The Acute Toxicity Estimate (ATE) for an inhalation (vapour) exposure to this mixture is 13.2108 mg/l

Aspiration Hazard

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

Based on available data, the classification criteria are not met.

Reproductive Toxicity

Based on available data, the classification criteria are not met.

Respiratory/Skin Sensitization

Based on available data, the classification criteria are not met.

Serious Eye Damage/Irritation

OVER-EXPOSURE SIGNS/SYMPTOMS: Adverse symptoms may include pain or irritation, watering, redness. Causes serious eye irritation

Skin Corrosion/Irritation

Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Repeated Exposure

Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Single Exposure

Based on available data, the classification criteria are not met.

Likely Routes of Exposure

Inhalation, Ingestion, Skin contact, Eye contact

0000156-60-5 1,2-DICHLOROETHYLENE

Acute oral toxicity:

LD50(Rat): 7,902 mg/kg

Method: OECD Test Guideline 420

Acute inhalation toxicity: LC50(Rat): 95.5 mg/l

Exposure time: 4 h

Test atmosphere: vapor

Method: OECD Test Guideline 403

Lowest observed adverse effect concentration (Dog): 250000 ppm

Test atmosphere: gas

Cardiac sensitisation threshold limit (Dog): 991,309 mg/m³

Test atmosphere: gas

Acute dermal toxicity:

LD50 (Rabbit): > 5,000 mg/kg

Method: OECD Test Guideline 402

Acute oral toxicity
: LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 420

Acute inhalation toxicity
: LC50 (Rat): > 222.15 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Method: OECD Test Guideline 403

Acute dermal toxicity
: LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 402

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

Based on available data, the classification criteria are not met.

0000156-60-5 1,2-DICHLOROETHYLENE

LC50 (Lepomis macrochirus (Bluegill sunfish)): 135 mg/l
Exposure time: 96 h
Remarks: Based on data from similar materials
EC50 (Daphnia magna (Water flea)): 220 mg/l
Exposure time: 48 h
Method: EPA-660/3-75-009

Proprietary Methoxytridecafluoroheptene isomers

LC50 (Oryzias latipes (Japanese medaka)): > 0.096 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: No toxicity at the limit of solubility.
EC50 (Daphnia magna (Water flea)): > 0.157 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: No toxicity at the limit of solubility.

Persistence and Degradability

No data available.

Bioaccumulative Potential

No data available.

Mobility in Soil

No data available.

Other Adverse Effects

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, state and local laws. Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes.

SECTION 14) TRANSPORT INFORMATION

	IATA Information	IMDG Information	U.S. DOT Information	Canada TDG Information
UN number:	UN1950	UN1950	UN1950	UN1950
Proper shipping name:	Aerosols, non-flammable, (each not exceeding 1 L capacity)	Aerosols, non-flammable, (each not exceeding 1 L capacity)	Aerosols, non-flammable, (each not exceeding 1 L capacity)	Aerosols, non-flammable, (each not exceeding 1 L capacity)
Hazard class:				
Hazard class:	2.2	2.2	2.2	
Packaging group:	NA	NA	NA	NA
Hazardous substance (RQ):			No Data Available	
Marine Pollutant:	Yes	Yes	Yes	Yes
Note / Special Provision:	No Data Available	No Data Available	No Data Available	No Data Available
Toxic-Inhalation Hazard:	NA	NA	No Data Available	No Data Available

SECTION 15) REGULATORY INFORMATION

Error: Subreport could not be shown.

SECTION 16) OTHER INFORMATION

Glossary

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG- Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center(US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self Contained Breathing Apparatus; STEL-Short Term Exposure Limit; TCEQ Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System. ACGIH - American Conference of Governmental Industrial Hygienists; CAS - Chemical Abstracts Service ; Chemtrec - Chemical Transportation Emergency Center; DSL - Domestic Substances List; ESL- Effects screening levels; GHS - "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations; HMIS - Hazardous Material Information Service; IATA - Dangerous Goods Regulations (DGR) for the air transport (IATA); IMDG - International Maritime Dangerous Goods Code; LC - Lethal Concentration; LD - Lethal Dose; NFPA - National Fire Protection Association; OEL - Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL - Permissible Exposure Limit; SARA 313 - Superfund Amendments and Reauthorization Act, Section 313; SCBA - Self Contained Breathing Apparatus; ppm - parts per million; STEL - Short-term exposure limit; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act Public Law 94-469; TWA - Time-weighted average; US DOT- US Department of Transportation.

Version 1.0:

Revision Date: Nov 22, 2021

First Edition.; First Edition.; First Edition.; First Edition.; First Edition.

DISCLAIMER

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier 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. The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.