SAFETY DATA SHEET

Sid Harvey item # 4290-75 SDS # Z0240

1. Product and Company Identification

Product identifier **Nu-Blast, Aerosol (4290-75)**

Other means of identification Not available

Recommended use Coil Cleaner/Degreaser

Recommended restrictions None known.

Manufacturer

Nu-Calgon
2008 Altom Court
St. Louis, MO 63146 US
Phone: 314-469-7000 / 800-554-5499
Emergency Phone: 1-800-424-9300 (CHEMTREC)

2. Hazards Identification

Physical hazards	Gases under pressure	Liquefied gas
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Sensitization, skin	Category 1
	Germ cell mutagenicity	Category 2
	Carcinogenicity	Category 1
	Reproductive toxicity	Category 1
	Specific target organ toxicity, single exposure	Category 3 narcotic effects

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement

Contains gas under pressure; may explode if heated.
Causes skin irritation. May cause an allergic skin reaction.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Suspected of causing genetic defects.
May cause cancer.
May damage fertility or the unborn child.

Precautionary statement

Prevention

Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
Avoid breathing mist or vapor. Contaminated work clothing must not be allowed out of the workplace.
Use only outdoors or in a well-ventilated area.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.

Response

If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Specific treatment (see this label).
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 inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.
If exposed or concerned: Get medical advice/attention.

Storage

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

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information 3.5% of the mixture consists of component(s) of unknown acute inhalation toxicity. 3.5% of the mixture consists of component(s) of unknown acute oral toxicity.

3. Composition/Information on Ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Ethene, trichloro-		79-01-6	95 - 98
Carbon dioxide		124-38-9	2 - 5
Fragrance		Trade Secret	0.1 - 1

4. First Aid Measures

Inhalation If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

Skin contact If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Eye contact 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.

Ingestion Rinse mouth. Do not induce vomiting. Get medical attention if symptoms occur. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

Most important symptoms/effects, acute and delayed Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause an allergic skin reaction. Dermatitis. Rash. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. May cause redness and pain.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Immediate medical attention is required. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse. Wear rubber gloves and chemical splash goggles.

5. Fire Fighting Measures

Suitable extinguishing media Treat for surrounding material.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical Contents under pressure. Firefighters should wear a self-contained breathing apparatus.

Special protective equipment and precautions for firefighters Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Firefighters should wear full protective clothing including self contained breathing apparatus.

Fire-fighting equipment/instructions In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Move containers from fire area if you can do so without risk. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

Hazardous combustion products May include and are not limited to: Oxides of carbon.

Explosion data

Sensitivity to mechanical impact Not available.

Sensitivity to static discharge Not available.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep out of low areas. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors or mists. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. Stop the flow of material, if this is without risk.

Large Spills: Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and Storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only with adequate ventilation.
Avoid contact with eyes, skin and clothing. Avoid contact during pregnancy/while nursing.
Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Wear personal protective equipment. When using, do not eat, drink or smoke.
Wash thoroughly after handling.
Keep container tightly closed.
Avoid breathing vapors or mists of this product.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children.

8. Exposure Controls/Personal Protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	PEL	9000 mg/m3
		5000 ppm

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
Ethene, trichloro- (CAS 79-01-6)	Ceiling	200 ppm
	TWA	100 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	STEL	30000 ppm
	TWA	5000 ppm
Ethene, trichloro- (CAS 79-01-6)	STEL	25 ppm
	TWA	10 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	STEL	54000 mg/m3
		30000 ppm
	TWA	9000 mg/m3
		5000 ppm
Ethene, trichloro- (CAS 79-01-6)	TWA	25 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Ethene, trichloro- (CAS 79-01-6)	15 mg/l	Trichloroacetic acid	Urine	*

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
	0.5 mg/l	Trichloroethanol, without hydrolysis	Blood	*

* - For sampling details, please see the source document.

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear chemical goggles.

Skin protection

Hand protection Rubber gloves. Confirm with a reputable supplier first.

Other Wear appropriate chemical resistant clothing. As required by employer code.

Respiratory protection Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

Thermal hazards Not applicable.

General hygiene considerations When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and Chemical Properties

Appearance Clear

Physical state Gas.

Form Spray

Color Colorless

Odor Solvent

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Pour point Not available.

Specific gravity 1.46

Partition coefficient (n-octanol/water) Not available.

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 50-85 psig @ 70°F

Vapor density Not available.

Relative density Not available.

Solubility(ies) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity < 20.5 mm^2/s

Other information

Flame projection	< 18 in
Flammability (flash back)	No
Heat of combustion	6.95 kJ/g

10. Stability and Reactivity

Reactivity	This product may react with oxidizing agents.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Strong oxidizing agents. Soft metals.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Phosgene.

11. Toxicological Information

Routes of exposure Eye, Skin contact, Inhalation, Ingestion.

Information on likely routes of exposure

Ingestion	Expected to be a low ingestion hazard.
Inhalation	Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Rash. Skin irritation. May cause redness and pain. Dermatitis. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Information on toxicological effects

Acute toxicity Narcotic effects. May cause an allergic skin reaction.

Components	Species	Test Results
Carbon dioxide (CAS 124-38-9)		
Acute		
Inhalation		
LC50	Not available	
Oral		
LD50	Not available	
Ethene, trichloro- (CAS 79-01-6)		
Acute		
Dermal		
LD50	Rabbit	20000 mg/kg
Inhalation		
LC50	Mouse	8450 ppm, 4 Hours
	Rat	8000 mg/l/4h
LD50	Mouse	49000 ppm, 30 Minutes
		5500 ppm, 10 Hours
Oral		
LD50	Dog	5680 mg/kg
	Mouse	2402 mg/kg
	Rat	4290 mg/kg
Fragrance (CAS Trade Secret)		
Acute		
Inhalation		
LC50	Not available	
Oral		
LD50	Not available	

Skin corrosion/irritation Causes skin irritation.

Exposure minutes	Not available.
Erythema value	Not available.
Oedema value	Not available.
Serious eye damage/eye irritation	Causes serious eye irritation.
Corneal opacity value	Not available.
Iris lesion value	Not available.
Conjunctival reddening value	Not available.
Conjunctival oedema value	Not available.
Recover days	Not available.
Respiratory or skin sensitization	
Respiratory sensitization	Not available.
Skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	Suspected of causing genetic defects.
Mutagenicity	Suspected of causing genetic defects.
Carcinogenicity	May cause cancer.

ACGIH Carcinogens

Ethene, trichloro- (CAS 79-01-6)	A2 Suspected human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Ethene, trichloro- (CAS 79-01-6)	Volume 63, Volume 106 - 1 Carcinogenic to humans.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Ethene, trichloro- (CAS 79-01-6)	Carcinogenic.

US NTP Report on Carcinogens: Anticipated carcinogen

Ethene, trichloro- (CAS 79-01-6)	Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity	May damage fertility or the unborn child.
Teratogenicity	Non-hazardous by WHMIS/OSHA criteria.
Specific target organ toxicity - single exposure	Narcotic effects.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not available.
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. Chronic exposure to trichloroethylene may cause liver, kidney, central nervous system and peripheral nervous system effects.
Further information	Not available.
Name of Toxicologically Synergistic Products	Not available.

12. Ecological Information

Ecotoxicity See below

Components		Species	Test Results
Ethene, trichloro- (CAS 79-01-6)			
Crustacea	EC50	Daphnia	2.2 mg/L, 48 Hours
Aquatic			
Fish	LC50	Flagfish (Jordanella floridae)	3.1 mg/l, 96 hours

Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Mobility in general	Not available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal Considerations

Disposal instructions	Consult authorities before disposal. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

US RCRA Hazardous Waste U List: Reference

Ethene, trichloro- (CAS 79-01-6) U228

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

U.S. Department of Transportation (DOT)

Basic shipping requirements:

UN number UN1950
Proper shipping name Aerosols, poison, Packing Group III (each not exceeding 1 L capacity)
Hazard class Limited Quantity - US

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

UN number UN1950
Proper shipping name AEROSOLS, non-flammable, containing substances in Class 6.1, packing group III
Hazard class Limited Quantity - Canada
Special provisions 80

IATA/ICAO (Air)

Basic shipping requirements:

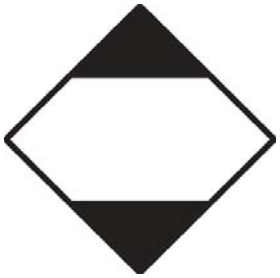
UN number UN1950
Proper shipping name Aerosols, non-flammable, containing substances in Class 6.1, packing group III
Hazard class Limited Quantity - IATA

IMDG (Marine Transport)

Basic shipping requirements:

UN number UN1950
Proper shipping name AEROSOLS
Hazard class Limited Quantity - US

DOT; IMDG; TDG



IATA

15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Canada CEPA Schedule I: Listed substance

Carbon dioxide (CAS 124-38-9) Listed.
Ethene, trichloro- (CAS 79-01-6) Listed.

Canada WHMIS Ingredient Disclosure: Threshold limits

Carbon dioxide (CAS 124-38-9)	1 %
Ethene, trichloro- (CAS 79-01-6)	1 %

WHMIS status Controlled

WHMIS classification Class A - Compressed Gas, Class D - Division 1B, 2A, 2B

WHMIS labeling

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Ethene, trichloro- (CAS 79-01-6)	0.1 %

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Ethene, trichloro- (CAS 79-01-6)	Listed.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US CWA Section 311 Hazardous Substances: Listed substance

Ethene, trichloro- (CAS 79-01-6)	Listed.

US CWA Section 307(a)(1) Toxic Pollutants: Listed substance

Ethene, trichloro- (CAS 79-01-6)	Listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Ethene, trichloro- (CAS 79-01-6)	Listed.

US – CAA Mandatory Reporting of GHGs: Global warming potential (100 year)

Carbon dioxide (CAS 124-38-9)	1

US CAA Section 111 Volatile Organic Compounds: Listed substance

Ethene, trichloro- (CAS 79-01-6)	Listed.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Ethene, trichloro- (CAS 79-01-6)	Listed.

US CAA Section 612 SNAP Program: Listed substance

Carbon dioxide (CAS 124-38-9)	Listed.
Ethene, trichloro- (CAS 79-01-6)	Listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Ethene, trichloro-	79-01-6	95 - 98

Other federal regulations

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

US state regulations WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Hazardous Substances (Director's): Listed substance

Carbon dioxide (CAS 124-38-9)	Listed.
Ethene, trichloro- (CAS 79-01-6)	Listed.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Ethene, trichloro- (CAS 79-01-6)	Listed.

US - Illinois Chemical Safety Act: Listed substance

Ethene, trichloro- (CAS 79-01-6)	Listed.

US - Louisiana Spill Reporting: Listed substance

Ethene, trichloro- (CAS 79-01-6)	Listed.

US - Michigan Critical Materials Register: Parameter number

Ethene, trichloro- (CAS 79-01-6)	00079-01-6 Listed.

US - Minnesota Haz Subs: Listed substance

Carbon dioxide (CAS 124-38-9)	Listed.
Ethene, trichloro- (CAS 79-01-6)	Listed.

US - New Jersey RTK - Substances: Listed substance

Carbon dioxide (CAS 124-38-9)	Listed.
Ethene, trichloro- (CAS 79-01-6)	Listed.

US - New York Release Reporting: Hazardous Substances: Listed substance

Ethene, trichloro- (CAS 79-01-6)	Listed.

US - North Carolina Toxic Air Pollutants: Listed substance

Ethene, trichloro- (CAS 79-01-6)	Listed.

US - Texas Effects Screening Levels: Listed substance

Carbon dioxide (CAS 124-38-9)	Listed.
Ethene, trichloro- (CAS 79-01-6)	Listed.

US. Massachusetts RTK - Substance List

Carbon dioxide (CAS 124-38-9)	Listed.
Ethene, trichloro- (CAS 79-01-6)	Listed.

US. Pennsylvania RTK - Hazardous Substances

Carbon dioxide (CAS 124-38-9)	Listed.
Ethene, trichloro- (CAS 79-01-6)	Listed.

US. Rhode Island RTK

Ethene, trichloro- (CAS 79-01-6)	Listed.

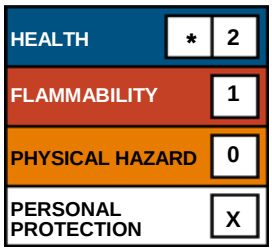
Inventory status

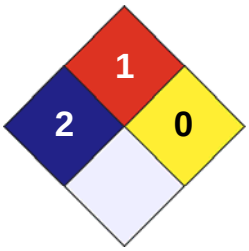
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0





Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

Issue date 22-December-2014

Effective date 15-December-2014

Expiry date 15-December-2017

Further information For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.

Prepared by Nu-Calgon Technical Service Phone: (314) 469-7000

Other information This Safety Data Sheet was prepared to comply with the current OSHA Hazard Communication Standard (HCS) adoption of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Name	Phone Number			CHEMTREC
Nu-Calgon Wholesaler, Inc.	(314) 469-7000 / (800) 554-5499			(800) 424-9300
Street Address	**City**	**State**	**Postal Code**	**Last Update**
2008 Altom Court	St. Louis	MO	63146-4151	11/7/2006
Product Name	**Product Number**	**Product Use**		**EPA Registration #**
Nu-blast, Aerosol	4290-75	Condenser Coil Cleaner		N/A

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	% By Wt.	CAS Number	TLV	PEL
Trichloroethylene	90 - 98	79-01-6	50 ppm	50 ppm
Carbon dioxide	< 5	124-38-9	5000 ppm	5000 ppm

SECTION 3 – HAZARD IDENTIFICATION

Emergency Overview: Warning. Ensure adequate ventilation. Avoid breathing vapors or mists. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 122ºF (50°C). Do not pierce or burn, even after use. Do not spray on naked flame or any incandescent material KEEP OUT OF REACH OF CHILDREN

Potential Health Effects

Eyes: Irritating to eyes.

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

Ingestion: Aspiration may cause pulmonary oedema and pneumonitis. nausea.

Inhalation: Inhalation of high vapour concentrations may cause nasal & respiratory irritation and symptoms like headache, dizziness, tiredness, nausea, vomiting and possible unconsciousness.

Chronic Exposure: Prolonged exposure may cause chronic effects such as. Liver disorders. Kidney disorders. Lung damage. cardiac irregularities. Repeated and prolonged exposure to solvents may cause brain and nervous system damage. May cause disorder and damage to the spleen. In chronic inhalation tests with rats and mice, Trichloroethylene caused an increased incidence of tumours of a type which is routinely observed in these species.

Carcinogenicity: CA Prop 65 carcinogen - Trichloroethylene

Medical Conditions Aggravated be Exposure: May aggravate existing eye, skin, or upper respiratory conditions

SECTION 4 – FIRST AID MEASURES

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

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

Ingestion: DO NOT INDUCE VOMITING. Aspiration hazard. Clean mouth with water and afterwards drink plenty of water. Immediate medical attention is required

Inhalation: Move to fresh air. If not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth. Obtain medical attention

SECTION 5 – FIREFIGHTING MEASURES

Flash Point: No Data.°F

Autoignition Temp: No Data.°C/No Data.°F

Hazardous Products of Combustion: Carbon oxides , Hydrogen chloride (trace amounts), Phosgene (trace amounts) or Chlorine (trace amounts).

Flammable Limits in Air: No Data.

Extinguishing Media: Foamy spray. Dry chemical. Carbon dioxide (CO2).

Fire and Explosion Hazards: Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 122ºF (50°C).

Special Firefighting Procedures: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill or Leak: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container . Dispose of in accordance with local regulations.

SECTION 7 – HANDLING AND STORAGE

Handling Procedures and Equipment: Wear personal protective equipment. Do not pierce or burn, even after use. Do not spray on naked flame or any incandescent material.

Storage Requirements: KEEP OUT OF REACH OF CHILDREN. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 122ºF (50°C).

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Eye Protection: Safety glasses with side-shields.

Protective Clothing: Neoprene gloves

Exposure Guidelines: See Section 2

Specific Engineering Controls (such as ventilation, enclosed process): Ensure adequate ventilation, especially in confined areas

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Aerosol	**Freezing Point:** No Data.°C/No Data.°F	**% Volatile by Weight:** 96.5 %
Color: Clear	**Vapor Density [air =1]:** No Data.	**Evaporation Rate:** 2.1 (concentrate only) (n-butyl acetate = 1)
Odor: Ethereal	**Vapor Pressure:** PSIG @ 70ºF (Aerosols): 85-100.	**Specific Gravity:** 1.45
Boiling Point: No Data.°C/No Data.°F	**Solubility in Water:** Insoluble.	**pH (concentrate):** No Data.

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability: Stable

Hazardous Polymerization: Hazardous polymerization does not occur

Incompatibilities: Reactive metals. Magnesium. Strong oxidizing agents. Product may react with aluminum if immersed in liquid concentrate trichloroethylene for extended periods.

Reactive Conditions to avoid: Heat, flames and sparks. Extremes of temperature and direct sunlight. Do not expose to temperatures above 54°C .

Decomposition Products: Carbon oxides , Hydrogen chloride (trace amounts), Phosgene (trace amounts) or Chlorine (trace amounts)

SECTION 11 – TOXICOLOGICAL INFORMATION

Hazardous Ingredients	CAS #	EINECS #	LD 50 of Ingredient (Specify Species)	LC50 of Ingredient (Specify Species)
Trichloroethylene	79-01-6	N/D	Oral LD50 Rat: 5650 mg/kg; Dermal LD50 Rabbit: >20 g/kg	Inhalation LC50 Mouse: 8450 ppm/4H;
Carbon dioxide	124-38-9	N/D	No Data.	No Data.

SECTION 12 – ECOLOGICAL INFORMATION

Hazardous Ingredients	Aquatic Toxicity Data
Trichloroethylene	96 Hr LC50 fathead minnow: 44.1 mg/L (flow-through)
Carbon dioxide	No Data.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal: Should not be released into the environment. Dispose of in accordance with local regulations.

SECTION 14 – TRANSPORTATION INFORMATION

Special Shipping Information: No Data.

Purview	Proper Shipping Name	UN Number	Packing Group	Hazard Class
DOT (Land)	Consumer Commodity ORM-D	No Data.	No Data.	No Data.
IMO (Water)	No Data.	No Data.	No Data.	No Data.
ICAO (Air)	Aerosols, Non-Flammable	UN1950	No Data.	2.2

SECTION 15 – REGULATORY INFORMATION

WHMIS Classification: (Workplace Hazardous Material Information System)	D1B, D2A, D2B
SARA Title III: (Superfund Amendments & Reauthorization Act)	Yes - Trichloroethylene
OSHA: (Occupational Safety & Health Administration)	See Section 2
TSCA: (Toxic Substance Control Act)	Present
VOC: (volatile Organic Compounds)	96.5 %
CPR: (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
EINECS: (European Inventory of Existing Commercial Chemical Substances)	No Data.
DSL / NDSL: (Canadian Domestic Substance List)(Non-Domestic Substance List)	Present
CERCLA: (Comprehensive Response Compensation & Liability Act)	Trichloroethylene - 100 lb RQ
IDL: (Canadian Ingredient Disclosure List)	No Data.
NFPA (HMIS) Rating: (Hazardous Materials Identification System)	Health=2; Fire=0; Reactivity=0 Personal protective equipment = B

SECTION 16 – OTHER INFORMATION

No Data.