






SAFETY DATA SHEET

1. Product and Company Identification

PRODUCT NUMBER:	1616	COMPANY PHONE:	1-800-241-8180
PRODUCT NAME:	ELECTRO SOLV	EMERGENCY TELEPHONE:	1-800-241-8180
PRODUCT DESCRIPTION:	Aerosol Safety Solvent	INFOTRAC:	1-800-535-5053
COMPANY INFORMATION:	PRO CHEM, INC. 1475 Bluegrass Lakes Parkway Alpharetta, GA 30004		

2. Hazards Identification

HAZARD CLASSIFICATION: Physical Hazards: Gases under pressure: Compressed gas. Health Hazards: Skin corrosion/irritation: Category 2 Serious eye damage/eye irritation: Category 2A Germ cell mutagenicity: Category 2 Carcinogenicity: Category 1A Specific target organ toxicity, single exposure: Category 3 narcotic effects Environmental Hazards: Acute hazards to the aquatic environment: Category 3	SIGNAL WORD: DANGER	SYMBOL:			
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HAZARD STATEMENTS:

Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. Suspected of causing genetic defects. May cause cancer. May cause drowsiness or dizziness. Harmful to aquatic life.

PRECAUTIONARY STATEMENTS:

Prevention: Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Keep container tightly closed.

Response: IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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 water. If skin irritation occurs: Get medical advice/attention. Call a POISON CENTER/doctor if you feel unwell. Specific treatment (see on this label). Take off contaminated clothing.

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

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

HAZARDS NOT OTHERWISE SPECIFIED:

None.

3. Composition / Information on Ingredients

CHEMICAL NAME	CAS	Concentration % by Weight
Ethene, 1,1,2-trichloro-	79-01-6	50 - <100%
Carbon Dioxide	124-38-9	1 - <5%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
The exact concentration has been withheld as a trade secret.

4. First Aid Measures

EMERGENCY OVERVIEW

EYES: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

SKIN: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Get medical attention.

INHALATION:

Move to fresh air.

INGESTION:

Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

PERSONAL PROTECTION FOR FIRST-AID RESPONDERS:

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED:

Symptoms: No data available.

Hazards: No data available.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

Treatment: Symptoms may be delayed.

5. Fire Fighting Measures

GENERAL FIRE HAZARDS:

No unusual fire or explosion hazards noted.

SUITABLE FIRE EXTINGUISHING MEDIA:

Use fire-extinguishing media appropriate for surrounding materials.

UNSUITABLE FIRE EXTINGUISHING MEDIA:

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

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:

During fire, gases hazardous to health may be formed.

SPECIFIC FIRE-FIGHTING METHODS:

No data available.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental Release Measures

PERSONAL PRECAUTIONS:

See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

ACCIDENTAL RELEASE MEASURES:

Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:

Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

ENVIRONMENTAL PRECAUTIONS:

Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment.

7. Handling and Storage

HANDLING:

Technical measures (e.g. Local and general ventilation): No data available.

Safe Handling Advice:

Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with eyes. Wash hands thoroughly after handling. Avoid contact with skin.

Contact Avoidance Measures: No data available.

STORAGE:

Safe Storage Conditions: Store locked up. Aerosol Level 1

Safe Packaging Materials: No data available.

Storage Temperature: No data available.

8. Exposure Controls / Personal Protection

CONTROL PARAMETERS

Occupational Exposure Limits:

Chemical Identity	Type	Exposure Limit Values	Source
Ethene, 1,1,2-trichloro-	TWA	10 ppm	US. ACGIH Threshold Limit Values, as amended
	STEL	200 ppm 1,080 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	25 ppm	US. ACGIH Threshold Limit Values, as amended
	TWA	100 ppm	US. OSHA Table Z-2 (29 CFR 1910.1000), as amended
	MAX. CONC	300 ppm	US. OSHA Table Z-2 (29 CFR 1910.1000), as amended
	TWA	50 ppm 270 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Carbon dioxide	Ceiling	200 ppm	US. OSHA Table Z-2 (29 CFR 1910.1000), as amended
	REL	25 ppm	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	Ceil Time	2 ppm	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	TWA	5,000 ppm	US. ACGIH Threshold Limit Values, as amended
	STEL	30,000 ppm	US. ACGIH Threshold Limit Values, as amended
	STEL	30,000 ppm 54,000 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	REL	5,000 ppm 9,000 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	PEL	5,000 ppm 9,000 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	10,000 ppm 18,000 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	30,000 ppm 54,000 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended

BIOLOGICAL LIMIT VALUES:

Chemical Identity	Exposure Limit Values	Source
Ethene, 1,1,2-trichloro- (Trichloroacetic acid: Sampling time: End of shift at end of work week.)	15 mg/l (Urine)	ACGIH BEL
Ethene, 1,1,2-trichloro- (trichloroethylene: Sampling time: End of shift at end of work week.)	(Blood)	ACGIH BEL
	(End-exhaled air)	ACGIH BEL
Ethene, 1,1,2-trichloro- (Trichloroethanol, without hydrolysis: Sampling time: End of shift at end of work week.)	0.5 mg/l (Blood)	ACGIH BEL

APPROPRIATE ENGINEERING CONTROLS:

No data available.

INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:

Eye/Face Protection: Wear safety glasses with side shields (or goggles).

Skin Protection:

Hand Protection: No data available.

Skin/ Body Protection: Wear suitable protective clothing. Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

Hygiene Measures: Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Avoid contact with eyes. Wash contaminated clothing before reuse. Avoid contact with skin.

9. Physical & Chemical Properties

Appearance:		Flammability (solid, gas):	No data available.
Physical State:	Liquid.	Explosive Limit – lower (%):	No data available.
Form:	Spray Aerosol.	Explosive Limit – upper (%):	Estimated 52%(V)
Color:	No data available.	Vapor Pressure:	No data available.
Odor:	No data available.	Vapor Density (air=1):	No data available.
Odor Threshold:	No data available.	Density:	No data available.
pH:	No data available.	Relative Density:	No data available.
Freezing Point:	No data available.	Solubility in Water:	No data available.
Boiling Point:	No data available.	Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.	Self-Ignition Temperature:	No data available.
Flash Point:	No data available.	Decomposition Temperature:	No data available.
Kinematic Viscosity:	No data available.	Evaporation Rate:	No data available.
Dynamic Viscosity:	No data available.	Explosive Properties:	No data available.
Oxidizing Properties:	No data available.		

10. Stability & Reactivity Information**REACTIVITY:**

No data available.

CHEMICAL STABILITY:

Material is stable under normal conditions.

POSSIBILITY OF HAZARDOUS REACTIONS:

Hazardous polymerization does not occur.

INCOMPATIBLE MATERIALS:

No data available.

CONDITIONS TO AVOID:

Avoid heat or contamination.

HAZARDOUS DECOMPOSITION PRODUCTS:

No data available.

11. Toxicological Information**INFORMATION ON LIKELY ROUTES OF EXPOSURE:**

Eyes Contact: No data available.

Skin Contact: No data available.

Inhalation: No data available.

Ingestion: No data available.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:

Eyes Contact: No data available.

Skin Contact: No data available.

Inhalation: No data available.

Ingestion: No data available.

INFORMATION ON TOXICOLOGICAL EFFECTS**ACUTE TOXICITY (LIST ALL POSSIBLE ROUTES OF EXPOSURE):**

Oral Product: Not classified for acute toxicity based on available data.

Dermal Product: Not classified for acute toxicity based on available data.

Inhalation Product: Not classified for acute toxicity based on available data.

REPEATED DOSE TOXICITY:

Product: No data available.

Components:

Ethene, 1,1,2- trichloro-

NOAEL (Rat(Male), Inhalation): 100 ppm(m) Inhalation Experimental result, Key study
NOAEL (Rat(Male), Oral, 52 Weeks): 50 mg/kg Oral Experimental result, Key study

SKIN CORROSION/IRRITATION:

Product: No data available

Components:

Ethene, 1,1,2- trichloro-

Assessment Irritating.

SERIOUS EYE DAMAGE/IRRITATION:

Product: No data available.

RESPIRATORY SENSITIZATION:

Product: No data available.

SKIN SENSITIZATION:**Product:** No data available.**CARCINOGENICITY:****Product:** No data available.**Components:**

Ethene, 1,1,2- trichloro- Potential cancer hazard.

IARC Monographs. Overall Evaluation of Carcinogenic Risks to Humans:

Ethene, 1,1,2- trichloro- Overall evaluation: 1. Carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

Ethene, 1,1,2- trichloro- Overall evaluation: 1. Carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogenic components identified

GERM CELL MUTAGENICITY:**In vitro Product:** No data available.**In vivo Product:** No data available.**REPRODUCTIVE TOXICITY:****Product:** No data available.**SPECIFIC TARGET ORGAN TOXICITY (single exposure):****Product:** Narcotic effect. - Category 3 with narcotic effects.**SPECIFIC TARGET ORGAN TOXICITY (repeated exposures):****Product:** No data available.**Target Organs:** Specific Target Organ Toxicity - Single Exposure: Narcotic effect.**ASPIRATION HAZARD:****Product:** No data available.**OTHER EFFECTS**

Central nervous system

12. Ecological Information**ECOTOXICITY:****ACUTE HAZARDS TO THE AQUATIC ENVIRONMENT:****Fish****Product:** No data available.**Components:**

Ethene, 1,1,2- trichloro- LC 50 (Pimephales promelas, 96 h): 44.1 mg/l Experimental result, Supporting study

AQUATIC INVERTEBRATES:**Product:** No data available**Components:**

Ethene, 1,1,2- trichloro- IC 50 (Daphnia magna, 48 h): 20.8 mg/l Experimental result, Key study

CHRONIC HAZARDS TO THE AQUATIC ENVIRONMENT:**Fish****Product:** No data available.**Components:**

Ethene, 1,1,2- trichloro- NOAEL (Jordanelia floridae): 5.76 mg/l Experimental result, Key study

AQUATIC INVERTEBRATES:**Product:** No data available.**TOXICITY TO AQUATIC PLANTS:****Product:** No data available.**PERSISTENCE AND DEGRADABILITY:****Biodegradation Product:** No data available.**Components:**

Ethene, 1,1,2- trichloro- 19% (28 d) Detected in water. Experimental result, Key study

BOD/COD RATIO:**Product:** No data available.**BIOACCUMULATIVE POTENTIAL:****Bioconcentration Factor (BCF)****Product:** No data available.**Components:**

Ethene, 1,1,2- trichloro- Lepomis macrochirus, Bioconcentration Factor (BCF): 17 Aquatic sediment Experimental result, Key study

PARTITION COEFFICIENT N-OCTANOL / WATER (LOG KOW):**Product:** No data available.**MOBILITY IN SOIL:**

No data available.

Components:

Ethene, 1,1,2- trichloro- No data available.

Carbon dioxide No data available.

OTHER ADVERSE EFFECTS:

Harmful to aquatic organisms.

13. Disposal Consideration

DISPOSAL INSTRUCTIONS:

Discharge, treatment, or disposal may be subject to national, state, or local laws.

CONTAMINATED PACKAGING:

No data available.

14. Transportation Information

DOT: UN Number: UN1950
UN Proper Shipping Name: Aerosols, non-flammable
Transport Hazard Class(es)
Class: 2.2
Label(s): -
EmS No.:



Packing Group: II
Special Precautions for User: Not regulated.

IATA: UN Number: UN1950
UN Proper Shipping Name: Aerosols, non-flammable
Transport Hazard Class(es)
Class: 2.2
Label(s): -



Packing Group: -
Special Precautions for User: Not regulated

Other Information:

Passenger and Cargo Aircraft: Allowed.

IMDG: UN NUMBER: UN1950
UN Proper Shipping Name: Aerosols, non-flammable
Transport Hazard Class(es)
Class: 2
Label(s): -
EmS No.:



Packing Group: -
Special Precautions for User: Not regulated

15. Regulatory Information

US. FEDERAL REGULATIONS:

Restrictions on use: Not known.

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

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity:

TRICHLOROETHYLENE

TRICHLOROETHENE

Superfund Amendments and Reauthorization Act of 1986 (SARA):

Hazard Categories: Skin Corrosion or Irritation, Serious eye damage or eye irritation, Germ Cell Mutagenicity, Carcinogenicity, Specific target organ toxicity (single or repeated exposure)

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances:

None present or none present in regulated quantities.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:

Chemical Identity	% by weight
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Ethene, 1,1,2-trichloro-	0.1%
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Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

US. STATE REGULATIONS:

US. California Proposition 65: For more information go to www.P65Warnings.ca.gov.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

Ethene, 1,1,2-trichloro-

Carbon dioxide

US. Massachusetts RTK – Substance List

Chemical Identity

Ethene, 1,1,2-trichloro-

US. Pennsylvania RTK – Hazardous Substances

Chemical Identity

Ethene, 1,1,2-trichloro-

Carbon dioxide

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

INTERNATIONAL REGULATIONS

Montreal protocol: Not applicable
Stockholm convention: Not applicable
Rotterdam convention: Not applicable
Kyoto protocol

INVENTORY STATUS:

Australia AICS	On or in compliance with the inventory
Canada DSL Inventory List	On or in compliance with the inventory
Canada NDSL Inventory	Not in compliance with the inventory.
Ontario Inventory	On or in compliance with the inventory
China Inv. Existing Chemical Substances	On or in compliance with the inventory
Japan (ENCS) List	On or in compliance with the inventory
Japan ISHL Listing	On or in compliance with the inventory
Japan Pharmacopoeia Listing	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI)	On or in compliance with the inventory
Mexico INSQ	On or in compliance with the inventory
New Zealand Inventory of Chemicals	On or in compliance with the inventory
Philippines PICCS	On or in compliance with the inventory
Taiwan Chemical Substance Inventory	On or in compliance with the inventory
US TSCA Inventory	On or in compliance with the inventory
EINECS, ELINCS or NLP	Not in compliance with the inventory.

16. Other Information**DISCLAIMER:**

To the best of our knowledge, information contained herein is accurate. However, there is no assumption of liability 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 hazard, which exists. The information contained in this SDS was obtained from current and reliable sources; however, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions or handling, storage and disposal of this product are beyond the control of the manufacturer, the manufacturer will not be responsible for loss, injury, or expense arising out of the products improper use. No warranty, expressed or inferred, regarding the product described in this SDS shall be created or inferred by any statement in this SDS. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product, which may not be covered by this SDS. The user is responsible for full compliance.