



SAFETY DATA SHEET

1. Product and Company Identification

PRODUCT NUMBER:	2616	COMPANY PHONE:	1-800-241-8180
PRODUCT NAME:	ELECTRO SOLV BULK	EMERGENCY TELEPHONE:	1-800-241-8180
PRODUCT DESCRIPTION:	Electrical Equipment Safety Solvent	INFOTRAC:	1-800-535-5053
COMPANY INFORMATION:	PRO CHEM, INC. 1475 Bluegrass Lakes Parkway Alpharetta, GA 30004		

2. Hazards Identification

GHS CLASSIFICATION: Physical hazards Not classified. Skin corrosion/irritation, Category 2 Serious eye damage/eye irritation, Category 2A Germ cell mutagenicity, Category 2 Carcinogenicity, Category 1 Specific target organ toxicity, single exposure, Category 3 narcotic effects Environmental hazards Not classified. OSHA defined hazards Not classified.	SIGNAL WORD: DANGER	SYMBOL:		
--	--------------------------------------	----------------	--	--

HAZARD STATEMENTS:

Causes skin irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Suspected of causing genetic defects.
May cause cancer.

PRECAUTIONARY STATEMENTS:

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

Response:

IF ON SKIN: Wash with plenty of water.
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 EXPOSED OR CONCERNED: Get medical advice/attention. Call a poison center/doctor if you feel unwell. Specific treatment (see this label).
If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Storage: 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.

HAZARDS NOT OTHERWISE SPECIFIED:

None known.

SUPPLEMENTAL INFORMATION:

None.

3. Composition / Information on Ingredients

CHEMICAL NAME	CAS	Concentration % by Weight
Trichloroethylene	79-01-6	90-100
1,2-Butylene Oxide	106-88-7	0.1-1
Other components below reportable levels		0.1-1

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First Aid Measures

EMERGENCY OVERVIEW

WARNING: If exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

SKIN: Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

INHALATION:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

INGESTION:

Rinse mouth. Get medical attention if symptoms occur.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED:

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Vapors have a narcotic effect and may cause headache, fatigue, dizziness, and nausea. Skin irritation. 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.

5. Fire-Fighting Measures**SUITABLE FIRE EXTINGUISHING MEDIA:**

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

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:

Move containers from fire area if you can do so without risk. Use standard firefighting procedures and consider the hazards of other involved materials.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:

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

GENERAL FIRE HAZARDS:

No unusual fire or explosion hazards noted.

6. Accidental Release Measures**PERSONAL PRECAUTIONS:**

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

ENVIRONMENTAL PRECAUTIONS AND CLEAN-UP METHODS:

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.

Large Spills: Stop the flow of material, if this is without risk. 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. Never return spills to original containers for re-use. For waste disposal, see Section 13 of the SDS.

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, watercourses or onto the ground.

7. Handling and Storage**SAFE HANDLING:**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

SAFE STORAGE & INCOMPATIBILITIES:

Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure Controls / Personal Protection**Occupational exposure limits****US. OSHA Table Z-2 (29 CFR 1910.1000)****COMPONENTS****TYPE****VALUE**

Trichloroethylene (CAS 79-01-6)

Ceiling

200 ppm

TWA

100 ppm

US. ACGIH Threshold Limit Values**COMPONENTS****TYPE****VALUE**

Trichloroethylene (CAS 79-01-6)

STEL

25 ppm

TWA

10 ppm

US. NIOSH: Pocket Guide to Chemical Hazards**COMPONENTS****TYPE****VALUE**

Trichloroethylene (CAS 79-01-6)

TWA

25 ppm

US. Workplace Environmental Exposure Level (WEEL) Guides**COMPONENTS****TYPE****VALUE**

1,2-Butylene Oxide (CAS 106-88-7)

TWA

5.9 mg/m³

2 ppm

BIOLOGICAL LIMIT VALUE:**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Trichloroethylene (CAS 79-01-6)	15mg/l	Trichloroacetic acid	Urine	*
	0.5 mg/	Trichlorethanol, without hydrolysis	Blood	*

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

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. Eyewash facilities and emergency shower must be available when handling this product.

INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:



EYE PROTECTION: Chemical respirator with organic vapor cartridge and full facepiece.

SKIN PROTECTION: Wear appropriate chemical resistant gloves. Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

RESPIRATORY PROTECTION: Chemical respirator with organic vapor cartridge and full facepiece.

THERMAL HAZARDS: Wear appropriate thermal protective clothing, when necessary.

GENERAL HYGIENE CONSIDERATIONS: 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.

9. Physical & Chemical Properties

APPEARANCE:		FLAMMABILITY:	Not available.
Physical State:	Liquid.	Flammability Limit-lower (%)	8 % estimated
Form:	Liquid.	Flammability Limit-upper (%)	52 % estimated
Color:	Not available.	Explosive Limit – lower (%)	Not available.
ODOR:	Not available.	Explosive Limit – upper (%)	Not available.
ODOR THRESHOLD:	Not available.	VAPOR PRESSURE:	111.77 psig @70°F estimated
pH:	Not available.	VAPOR DENSITY:	Not available.
MELTING/FREEZING POINT:	Not available.	RELATIVE DENSITY:	Not available.
BOILING POINT/RANGE:	194 °F (90 °C) estimated	SOLUBILITY (water):	Not available.
PARTITION COEFFICIENT (n-octanol/water):	Not available.	AUTO-IGNITION TEMP:	788 °F (420 °C) estimated
VISCOSITY:	Not available.	DECOMPOSITION TEMP:	Not available.
SPECIFIC GRAVITY:	1.455 estimated	EVAPORATION RATE:	Not available.
FLASH POINT:	Not available.		

10. Stability & Reactivity Information

REACTIVITY:

The product is stable and non-reactive under normal conditions of use, storage and transport.

CHEMICAL STABILITY:

Material is stable under normal conditions.

POSSIBILITY OF HAZARDOUS REACTIONS:

Hazardous polymerization does not occur.

INCOMPATIBLE MATERIALS:

Strong oxidizing agents.

CONDITIONS TO AVOID:

Contact with incompatible materials.

DECOMPOSITION PRODUCTS:

No hazardous decomposition products are known.

11. Toxicological Information

PRIMARY ROUTE OF ENTRY:

EYES: Causes serious eye irritation.

SKIN: Causes skin irritation.

INHALATION: Headache. Nausea, vomiting. Vapors have a narcotic effect and may cause headache, fatigue, dizziness, and nausea.

Prolonged inhalation may be harmful.

INGESTION: Expected to be a low ingestion hazard.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

ACUTE TOXICITY:

Narcotic effects.

COMPONENTS	SPECIES	TEST RESULTS
Trichloroethylene (CAS 79-01-6)		
Acute		
<i>Dermal</i>		
LD50	Rat	19031 mg/kg
<i>Inhalation</i>		
LC50	Rat	12500 ppm, 4 Hours 1044 mg/l/4 h

* Estimates for product may be based on additional component data not shown.

SKIN CORROSION/IRRITATION:

Causes skin irritation.

SERIOUS EYE DAMAGE/IRRITATION:

Causes serious eye irritation.

RESPIRATORY SENSITIZATION:

Not available.

SKIN SENSITIZATION:

This product is not expected to cause skin sensitization.

GERM CELL MUTAGENICITY:

Suspected of causing genetic defects.

CARCINOGENICITY:

May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

1,2-Butylene Oxide (CAS 106-88-7)

2B Possibly carcinogenic to humans.

Trichloroethylene (CAS 79-01-6)

If <1L: Consumer Commodity Carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Trichloroethylene (CAS 79-01-6)

Reasonably Anticipated to be a Human Carcinogen.

REPRODUCTIVE TOXICITY:

This product is not expected to cause reproductive or developmental effects.

SPECIFIC TARGET ORGAN TOXICITY (single exposure):

May cause drowsiness and dizziness.

SPECIFIC TARGET ORGAN TOXICITY (repeated exposures):

Not classified.

ASPIRATION HAZARD:

Not available.

CHRONIC EFFECTS:

Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological Information

ECOTOXICITY:

Harmful to aquatic life with long lasting effects.

COMPONENTS		SPECIES	TEST RESULTS
1,2-Butylene Oxide (CAS 106-88-7)			
Aquatic			
Algae	IC50	Algae	500 mg/L, 72 Hours
Crustacea	EC50	Daphnia	69.8 mg/L, 48 Hours
Fish	LC50	Fish	160, 96 Hours
Trichloroethylene (CAS 79-01-6)			
Aquatic			
Crustacea	EC50	Daphnia	2.2 mg/L, 48 Hours
Fish	LC50	Fish	40.8933, 96 Hours
		Flagfish (Jordanella floridae)	3.1 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

PERSISTENCE AND DEGRADABILITY:

No data is available on the degradability of this product.

BIOACCUMULATIVE POTENTIAL:

No data available.

Partition coefficient n-octanol / water (log Kow)

Trichloroethylene 2.61

MOBILITY IN SOIL:

No data 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 Consideration

DISPOSAL INSTRUCTIONS:

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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

Trichloroethylene (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. Transportation Information

DOT: UN NUMBER: UN1710
UN PROPER SHIPPING NAME: Trichloroethylene
TRANSPORT HAZARD CLASS(ES)
Class: 6.1(PGIII)
Subsidiary Risk: -
Label(s): 6.1



PACKING GROUP: III

SPECIAL PRECAUTIONS FOR USER: Read safety instructions, SDS and emergency procedures before handling.

SPECIAL PROVISIONS: IB3, N36, T4, TP1
PACKAGING EXCEPTIONS: 153
PACKAGING NON BULK: 203
PACKAGING BULK: 241
IATA: **UN NUMBER:** UN1710
UN PROPER SHIPPING NAME: Trichloroethylene
TRANSPORT HAZARD CLASS(ES)
Class: 6.1(PGIII)
Subsidiary Risk: -
PACKING GROUP: III
ENVIRONMENTAL HAZARDS: No.
ERG CODE: 6A
SPECIAL PRECAUTIONS FOR USER: Read safety instructions, SDS and emergency procedures before handling.
OTHER INFORMATION:
PASSENGER AND CARGO AIRCRAFT: Allowed.
CARGO AIRCRAFT ONLY: Allowed.

IMDG: **UN NUMBER:** UN1710
UN PROPER SHIPPING NAME: TRICHLOROETHYLENE
TRANSPORT HAZARD CLASS(ES)
Class: 6.1(PGIII)
Subsidiary Risk: -
PACKING GROUP: III
ENVIRONMENTAL HAZARDS:
Marine pollutant: No.
EmS: F-A, S-A
SPECIAL PRECAUTIONS FOR USER: Read safety instructions, SDS and emergency procedures before handling.
TRANSPORT IN BULK ACCORDING TO ANNEX I IOP MARPOL 73/78 and the IBC CODE:
This substance/mixture is not intended to be transported in bulk.



15. Regulatory Information

US FEDERAL REGULATIONS:

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4)
1,2-Butylene Oxide (CAS 106-88-7) Listed.
Trichloroethylene (CAS 79-01-6) Listed.
SARA 304 Emergency release notification: Not regulated.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not 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: Not listed.
SARA 311/312 Hazardous Chemical: No.
SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Trichloroethylene	79-01-6	90 - 100
1,2-Butylene Oxide	106-88-7	0.1 - 1

OTHER FEDERAL REGULATIONS

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
1,2-Butylene Oxide (CAS 106-88-7)
Trichloroethylene (CAS 79-01-6)
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): Not regulated.
Safe Drinking Water Act (SDWA): Not regulated.

US STATE REGULATIONS

US. Massachusetts RTK - Substance List
1,2-Butylene Oxide (CAS 106-88-7)
Trichloroethylene (CAS 79-01-6)
US. New Jersey Worker and Community Right-to-Know Act
1,2-Butylene Oxide (CAS 106-88-7)
Trichloroethylene (CAS 79-01-6)
US. Pennsylvania Worker and Community Right-to-Know Law
1,2-Butylene Oxide (CAS 106-88-7)
Trichloroethylene (CAS 79-01-6)
US. Rhode Island RTK
1,2-Butylene Oxide (CAS 106-88-7)
Trichloroethylene (CAS 79-01-6)
US. California Proposition 65
WARNING: This product contains a chemical known to the State of California to cause cancer.

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

Trichloroethylene (CAS 79-01-6)

Listed: April 1, 1988

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

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

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information

N/A = Not Applicable; N/D = Not Determined

HMIS	Health Hazards: 3*	Flammability: 1	Physical hazards: 0	Personal protection: G
------	--------------------	-----------------	---------------------	------------------------

*=Chronic

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.