






# SAFETY DATA SHEET

## 1. Product and Company Identification

<b>PRODUCT NUMBER:</b>	1127001	<b>COMPANY PHONE:</b>	1-800-241-8180
<b>PRODUCT NAME:</b>	SAFE-SOLV	<b>EMERGENCY TELEPHONE:</b>	1-800-535-5053
<b>PRODUCT DESCRIPTION:</b>	Non-Flammable Solvent Degreaser	<b>INFOTRAC:</b>	1-800-535-5053
<b>COMPANY INFORMATION:</b>	<b>PRO CHEM, INC.</b> 1475 Bluegrass Lakes Parkway Alpharetta, GA 30004		

## 2. Hazards Identification

<b>GHS CLASSIFICATION:</b> Gases Under Pressure - Liquefied Gas Eye Irritation - Category 2A Skin Irritation - Category 2 Skin Sensitizer - Category 1B Carcinogenicity - Category 1B Specific Target Organ Toxicity - Repeated Exposure - Category 1 Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) - Category 3	<b>SIGNAL WORD:</b> <b>DANGER</b>	<b>SYMBOL:</b>			
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### HAZARD STATEMENTS:

**Physical:** H280 - Contains gas under pressure; may explode if heated.  
**Health:** H350 - May cause cancer.  
H319 - Causes serious eye irritation.  
H315 - Causes skin irritation.  
H317 - May cause an allergic skin reaction.  
H372 - Causes damage to organs through prolonged or repeated exposure.  
H336 - May cause drowsiness or dizziness.

### 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.  
**Prevention:** P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P270 - Do not eat, drink or smoke when using this product.  
P280 - Wear protective gloves, protective clothing, eye protection and face protection.  
P264 - Wash thoroughly after handling.  
P272 - Contaminated work clothing should not be allowed out of the workplace.  
P260 - Do not breathe mist, vapors or spray.  
P271 - Use only outdoors or in a well-ventilated area.  
**Response:** P308 + P313 - IF exposed or concerned: Get medical attention.  
P314 - Get medical attention 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 attention.  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
P362 + P364 - Take off contaminated clothing and wash it before reuse.  
P333 + P313 - If skin irritation or a rash occurs: Get medical attention.  
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P312 - Call a POISON CENTER or doctor if you feel unwell.  
**Storage:** P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.  
P403 + P405 - Store in a well-ventilated place. Store locked up.  
**Disposal:** P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

## 3. Composition / Information on Ingredients

Chemical Name	CAS	Concentration % by Weight
TETRACHLOROETHYLENE	127-18-4	68% - 100%
Carbon Dioxide	124-38-9	1.2% - 3%
Carbon Tetrachloride	56-23-5	0.1% - 2%

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

#### 4. First Aid Measures

##### EMERGENCY OVERVIEW

**EYES:** Rinse eyes cautiously with lukewarm, gently flowing water for 15 minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

**SKIN:** Take off immediately all 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. If skin irritation persists: Get medical advice/attention. Wash contaminated clothing before re-use. IF exposed or concerned: Get medical advice/attention.

##### INHALATION:

Remove source of exposure or move person to fresh air and keep comfortable for breathing. If exposed/If you feel unwell/If concerned: Call a POISON CONTROL CENTER/doctor. Eliminate all ignition sources if safe to do so.

##### INGESTION:

Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. If vomiting occurs naturally, lie on your side, in the recovery position.

##### MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED:

No data available.

##### INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

No data available.

#### 5. Fire-Fighting Measures

##### SUITABLE EXTINGUISHING MEDIA:

Dry chemical, foam, carbon dioxide. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only. Do not direct a solid stream of water or foam into hot, burning pools this may result in frothing and increase fire intensity.

##### UNSUITABLE EXTINGUISHING MEDIA:

No data available.

##### SPECIFIC HAZARDS IN CASE OF FIRE:

Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Product is highly flammable and forms explosive mixtures with air, oxygen, and all oxidizing agents. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. During a fire, irritating and highly toxic gases may be generated during combustion or decomposition. High temperatures can cause sealed containers to rupture due to a build up of internal pressure. Cool with water. Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Container could potentially burst or be punctured upon mechanical impact, releasing flammable vapors.

##### FIRE-FIGHTING PROCEDURES SPECIAL PROTECTIVE ACTIONS:

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. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Do not direct a solid stream of water or foam into burning material; this may cause splattering and spread the fire. Wear goggles and use a self-contained breathing apparatus. If water is used, fog nozzles are preferred.

#### 6. Accidental Release Measures

##### EMERGENCY PROCEDURE:

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch or walk through spilled material. Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

##### RECOMMENDED EQUIPMENT:

See Section 8 for specifics on personal protective equipment (PPE).

##### PERSONAL PRECAUTIONS:

Avoid breathing vapor. Avoid contact with skin, eye or clothing. ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

##### ENVIRONMENTAL PRECAUTIONS:

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.

##### METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:

Absorb liquids in vermiculite, dry sand, earth or similar inert material and deposit in sealed containers for disposal.

#### 7. Handling and Storage

##### GENERAL:

Wash hands after use. Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. Eyewash stations and showers should be available in areas where this material is used and stored.

##### 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.

##### STORAGE ROOM REQUIREMENTS:

Do not cut, drill, grind, weld, or perform similar operations on or near containers. Do not pressurize containers to empty them. Store at temperatures below 120°F.

## 8. Exposure Controls / Personal Protection

Chemical Name	OSHA TWA (mg/m3)	OSHA TWA (ppm)	OSHA STEL (mg/m3)	OSHA STEL (ppm)	OSHA Carcinogen	OSHA Skin Designation	OSHA Tables (Z1, Z2, Z3)	ACGIH TWA (mg/m3)	ACGIH TWA (ppm)
Carbon Tetrachloride		10 (a) / 25 ceiling		200ppm /5mins. In any 3 hrs.			1		5
Carbon Dioxide	9000	5000					1		5000
Tetrachloroethylene		100 (a) / 200 ceiling		300ppm /5mins. In any 3 hrs.(a)			1,2		25

Chemical Name	ACGIH STEL (mg/m3)	ACGIH STEL (ppm)	ACGIH Carcinogen	ACGIH TLV Basis	ACGIH Notations	NIOSH TWA (mg/m3)	NIOSH TWA (ppm)	NIOSH STEL (mg/m3)	NIOSH STEL (ppm)	NIOSH Carcinogen
Carbon Tetrachloride		10	A2	Liver dam	Skin; A2			12.3b	2b	1
Carbon Dioxide		30000		Asphyxia		9000	5000	54000	30000	
Tetrachloroethylene		100	A3	CNS impair	A3; BEI		b			1

(C) - Ceiling limit, A2 - Suspected Human Carcinogen, A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans, BEI - Substances for which there is a Biological Exposure Index or Indices, CNS - Central nervous system, dam - Damage, impair - Impairment

### PERSONAL PROTECTIVE EQUIPMENT:



**Eye/Face Protection:** Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

**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 is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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 and ANSI Z88.2 should be followed.

### APPROPRIATE ENGINEERING CONTROLS:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

## 9. Physical & Chemical Properties

<b>Appearance:</b>	Clear liquid	<b>Flammability:</b>	Will not burn.
<b>Description:</b>	N.A.	<b>Explosive Limit-Lower (%):</b>	N.A.
<b>Odor Threshold:</b>	N.A.	<b>Explosive Limit-Upper (%):</b>	N.A.
<b>pH:</b>	N.A.	<b>Vapor Density:</b>	N.A.
<b>Melting/Freezing Point:</b>	N.A.	<b>Solubility (water):</b>	N.A.
<b>Low Boiling Point:</b>	N.A.	<b>Auto-Ignition Temp:</b>	N.A.
<b>High Boiling Point:</b>	N.A.	<b>Density:</b>	13.59 lb/gal
<b>Viscosity:</b>	N.A.	<b>Density VOC:</b>	0 lb/gal
<b>Flash Point:</b>	N.A.	<b>% VOC:</b>	0%
<b>Flash Point Symbol:</b>	N.A.	<b>Decomposition Temp:</b>	N.A.
<b>Evaporation Rate:</b>	Slower than ether		

## 10. Stability & Reactivity Information

### STABILITY:

The product is stable under normal storage conditions.

### CONDITIONS TO AVOID:

High temperatures.

### INCOMPATIBLE MATERIALS:

None known.

### HAZARDOUS REACTIONS/POLYMERIZATION:

Will not occur.

### HAZARDOUS DECOMPOSITION PRODUCTS:

None known.

## 11. Toxicological Information

### SKIN CORROSION/IRRITATION:

Causes skin irritation.

### LIKELY ROUTE OF EXPOSURE:

Inhalation, ingestion, skin absorption.

### SERIOUS EYE DAMAGE/IRRITATION:

Causes serious eye irritation.

### CARCINOGENICITY:

May cause cancer.

**GERM CELL MUTAGENICITY:**

No data available.

**REPRODUCTIVE TOXICITY:**

No data available.

**RESPIRATORY/SKIN SENSITIZATION:**

May cause an allergic skin reaction.

**SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE:**

May cause drowsiness or dizziness.

**SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE:**

Causes damage to organs through prolonged or repeated exposure.

**ASPIRATION HAZARD:**

No data available.

**ACUTE TOXICITY:**

No data available.

**127-18-4 Tetrachloroethylene**

LC50 (rat): Approximately 3786 ppm (4-hour exposure) (22); approximately 4000 ppm (4-hour exposure) (23)

LC50 (mouse): 5200 ppm (4-hour exposure) (24)

LD50 (oral, rat): Approximately 2600 mg/kg (cited as 1.6 mL/kg) (20)

LD50 (oral, male rat): 3835 mg/kg (25)

LD50 (oral, female rat): 3005 mg/kg (25)

LD50 (dermal, rabbit): Greater than 3245 mg/kg (0/5 animals died) (2)

**56-23-5 Carbon Tetrachloride**

LC50 (rat): 8000 ppm (4-hour exposure) (24)

LD50 (oral, male rat): 2500 mg/kg (25)

LD50 (oral, rat): 2920 mg/kg (26)

LD50 (dermal, guinea pig): greater than 15000 mg/kg (cited as greater than 0.94 mL/kg) (27)

LD50 (dermal, rat): 5070 mg/kg (28, unconfirmed)

**12. Ecological Information****TOXICITY:**

Toxic to aquatic life with long lasting effects.

**PERSISTENCE AND DEGRADABILITY:**

No data available.

**BIO-ACCUMULATIVE POTENTIAL:**

No data available.

**MOBILITY IN SOIL:**

No data available.

**OTHER ADVERSE EFFECTS:**

No data available.

**13. Disposal Consideration****WATER DISPOSAL:**

Under RCRA, it is the responsibility of the user of the product, to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, 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. Return drums to reclamation centers for proper cleaning and reuse.

**14. Transportation Information**

	IATA Information	IMDG Information	U.S. DOT Information
<b>UN Number:</b>	UN1950	UN1950	UN1950
<b>Proper Shipping Name:</b>	Aerosols, nonflammable	Aerosols	Aerosols
<b>Hazard Class:</b>	2.2	2.2	2.2
<b>Packaging Group:</b>	N.A.	N.A.	N.A.
<b>Hazardous Substance (RQ):</b>		No Data Available	No Data Available
<b>Marine Pollutant:</b>			No Data Available
<b>Note / Special Provision:</b>	(LTD QTY)	(LTD QTY)	(LTD QTY)
<b>Toxic-Inhalation Hazard:</b>			No Data Available

**15. Regulatory Information**

CAS	Chemical Name	% By Weight	Regulation List
127-18-4	TETRACHLOROETHYLENE	68% - 100%	SARA313, CERCLA, HAPS, SARA312, VHAPS, VOC exempt, TSCA, RCRA, ACGIH, California Proposition 65 Cancer, OSHA
124-38-9	Carbon Dioxide	1.2% - 3%	SARA312, TSCA, ACGIH, OSHA
56-23-5	Carbon Tetrachloride	0.1% - 2%	SARA313, CERCLA, HAPS, SARA312, VHAPS, TSCA, RCRA, ACGIH, California Proposition 65 Cancer, OSHA

## 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.

### 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.