



# SAFETY DATA SHEET

## 1. Product and Company Identification

<b>PRODUCT NUMBER:</b>	1831	<b>COMPANY PHONE:</b>	1-800-241-8180
<b>PRODUCT NAME:</b>	SOLAR SHIELD II	<b>EMERGENCY TELEPHONE:</b>	1-800-241-8180
<b>PRODUCT DESCRIPTION:</b>	Aerosol Surface Protector & Restorer	<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> Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) - Category 3 Specific Target Organ Toxicity - Repeated Exposure - Category 2 Aspiration Hazard - Category 1 Skin Irritation - Category 2 Aerosol - Category 1 Reproductive Toxicity - Category 2 Flammable Liquids - Category 2	<b>SIGNAL WORD:</b> <b>DANGER</b>	<b>SYMBOL:</b>	
---	--------------------------------------	----------------	--

### HAZARD STATEMENTS:

**Physical:**

H225 - Highly flammable liquid and vapor.  
H222, H229 - Extremely flammable aerosol, Pressurized container may burst if heated.

**Health:**

H336 - May cause drowsiness or dizziness.  
H373 - May cause damage to organs through prolonged or repeated exposure.  
H304 - May be fatal if swallowed and enters airways.  
H315 - Causes skin irritation.  
H361 - Suspected of damaging fertility or the unborn child.

### 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:**

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.  
P271 - Use only outdoors or in a well-ventilated area.  
P211 - Do not spray on an open flame or other ignition source.  
251 - Do not pierce or burn, even after use.  
P264 - Wash thoroughly after handling.  
P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.

**Response:**

P370 + P378 - In case of fire: Use water fog, dry chemical or carbon dioxide to extinguish.  
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.  
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P331 - Do NOT induce vomiting.  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
P332 + P313 - If skin irritation occurs: Get medical advice/attention.  
P362 + P364 - Take off contaminated clothing. And wash it before reuse.  
P308 + P313 - IF exposed or concerned: Get medical advice/attention.

**Storage:**

P235 - Keep cool.  
P403 - Store in a well-ventilated place.  
P405 - Store locked up.  
P410 - Protect from sunlight.  
P412 - Do not expose to temperatures exceeding 50°C/122°F.

**Disposal:** P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

## 3. Composition / Information on Ingredients

CHEMICAL NAME	Concentration % by Weight	CAS
HEXANE	25% - 44%	0000110-54-3
BUTANE	11% - 24%	0000106-97-8
PROPANE	5% - 11%	0000074-98-6
ISOBUTANE	5% - 10%	0000075-28-5
SILICONE	3% - 6%	0063148-62-9
MINERAL-OIL, SLAB OIL	1% - 2%	0008042-47-5

#### 4. First Aid Measures

##### EMERGENCY OVERVIEW

**EYES:** Remove source of exposure or move person to fresh air. 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. If eye irritation persists: Get medical advice/attention.

**SKIN:** Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Gently blot or brush away excess product. Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. Call a POISON CENTER/doctor if you feel unwell. Store contaminated clothing under water and wash before reuse or discard.

##### INHALATION:

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

##### INGESTION:

Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position. Never give anything by mouth to an unconscious or convulsing victim. Keep person warm and quiet.

#### 5. Fire-Fighting Measures

##### SUITABLE FIRE EXTINGUISHING MEDIA:

Use water, fog, dry chemical, or carbon dioxide. 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.

##### UNSUITABLE EXTINGUISHING MEDIA:

Water may be ineffective but can be used to cool containers exposed to heat or flame.

##### SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:

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. Aerosol cans may rupture when heated. Heated cans may burst. In fire, will decompose to carbon dioxide, carbon monoxide.

##### SPECIFIC FIRE-FIGHTING METHODS:

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. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

##### PERSONAL PRECAUTIONS:

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear. Care should always be exercised in dust/mist areas.

#### 6. Accidental Release Measures

##### EMERGENCY PROCEDURE:

Flammable/combustible material. ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stay upwind; keep out of low areas. Immediately turn off or isolate any source of ignition. Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material. Clean up immediately. Use absorbent sweeping compound to soak up material and put into suitable container for proper disposal.

##### RECOMMENDED EQUIPMENT:

Positive pressure, full face piece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

##### PERSONAL PRECAUTIONS:

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Use explosion-proof equipment. Avoid breathing vapor. Avoid contact with skin, eye or clothing. 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.

#### 7. Handling and Storage

##### GENERAL:

For industrial and institutional use only.  
For use by trained personnel only.  
Keep away from children.  
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:

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retains residue and may be dangerous. Do not cut, drill, grind, weld, or perform similar operations on or near containers. Do not pressurize containers to empty them. Ground all structures, transfer containers and equipment to conform to the national electrical code. Use procedures that prevent static electrical sparks. Static electricity may accumulate and create a fire hazard. Store at temperatures below 120°F.

## 8. Exposure Controls / Personal Protection

### PERSONAL PROTECTIVE EQUIPMENT



**EYE PROTECTION:** Chemical goggles, safety glasses with side shields or vented/splash proof goggles. Contact lenses may absorb irritants. Particles may adhere to lenses and cause corneal damage.

**SKIN PROTECTION:** Wear gloves, long sleeved shirt, long pants and other protective clothing as required to minimize skin contact. 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. Chemical-resistant clothing is recommended to avoid prolonged contact. Avoid unnecessary skin contact.

**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. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapors. When spraying more than one-half can continuously or more than one can consecutively, use NIOSH approved respirator.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA-Tables-Z1,2,3	OSHA Carcinog	OSHA Skin designati	NIOSH TWA (ppm)	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinog
BUTANE								800	1900			
HEXANE	500	1800			1			50	180			
ISOBUTANE								800	1900			
PROPANE	1000	1800			1			1000	1800			

Chemical Name	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL(ppm)	ACGIH STEL(mg/m3)
BUTANE	1000			
HEXANE	50	176		
ISOBUTANE	1000			
Chemical Name	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL(ppm)	ACGIH STEL(mg/m3)
PROPANE	See Appendix F: Minimal Oxygen Content			

## 9. Physical & Chemical Properties

<b>Density:</b>	5.84183 lb/gal	<b>Density VOC:</b>	5.30418 lb/gal
<b>% VOC</b>	90.79658%	<b>VOC Actual:</b>	5.30418 lb/gal
<b>VOC Regulatory:</b>	5.30418 lb/gal	<b>VOC Actual</b>	635.60001 g/l
<b>VOC Regulatory:</b>	635.60001 g/l	<b>Appearance:</b>	Not available.
<b>Odor Threshold:</b>	Not available.	<b>Odor Description:</b>	Not available.
<b>pH:</b>	Not available.	<b>Water Solubility:</b>	Nil
<b>Flammability:</b>	Flashpoint below 73 °F	<b>Flash Point Symbol:</b>	Not available.
<b>Flash Point:</b>	Not available.	<b>Viscosity:</b>	Not available.
<b>Lower Explosion Level:</b>	1.8	<b>Upper Explosion Level:</b>	9.5
<b>Melting Point:</b>	Not available.	<b>Vapor Density:</b>	Slower than ether.
<b>Low Boiling Point:</b>	0 °F	<b>High Boiling Point:</b>	610 °F
<b>Decomposition Point:</b>	0	<b>Auto-Ignition Temperature:</b>	Not available.
<b>Evaporation Rate:</b>	Slower than ether.	<b>Freezing Point:</b>	Not available.

## 10. Stability & Reactivity Information

### STABILITY:

Stable.

### CONDITIONS TO AVOID:

High temperatures.

### INCOMPATIBLE MATERIALS:

None known.

### HAZARDOUS REACTIONS/POLYMERIZATION:

Will not occur.

### HAZARDOUS DECOMPOSITION PRODUCTS:

In fire, will decompose to carbon dioxide, carbon monoxide.

## 11. Toxicological Information

### SKIN CORROSION/IRRITATION:

Overexposure will cause defatting of skin.

Causes skin irritation

### SERIOUS EYE DAMAGE/IRRITATION:

Overexposure will cause redness and burning sensation.

**CARCINOGENICITY:**

No data available

**GERM CELL MUTAGENICITY:**

No data available

**REPRODUCTIVE TOXICITY:**

Suspected of damaging fertility or the unborn child.

**RESPIRATORY/SKIN SENSITIZATION:**

No data available

**SPECIFIC TARGET ORGAN TOXICITY - Single Exposure:**

May cause drowsiness or dizziness

**SPECIFIC TARGET ORGAN TOXICITY - Repeated Exposure:**

May cause damage to organs through prolonged or repeated exposure.

**ASPIRATION HAZARD:**

May be fatal if swallowed and enters airways

**ACUTE TOXICITY:**

Inhalation: effect of overexposure include irritation of respiratory tract, headache, dizziness, nausea, and loss of coordination. Extreme overexposure may result in unconsciousness and possibly death.

**0000110-54-3 HEXANE**

LC50 (male rat): 38500 ppm (4-hour exposure); cited as 77000 ppm (271040 mg/m3) (1-hour exposure) (15)

LC50 (rat): 48000 ppm (4-hour exposure) (16)

LC50 (rat): 73680 ppm (260480 mg/m3) (4-hour exposure) (n-hexane and isomers) (1,3)

LD50 (oral, 14-day old rat): 15840 mg/kg (3)

LD50 (oral, young rat): 32340 mg/kg (3)

LD50 (oral, adult rat): 28700 mg/kg (3,16)

**0000075-28-5 ISOBUTANE**

LC50 (mouse, inhalation): 520,000 ppm (52%); 2-hour exposure.(4)

**0000106-97-8 BUTANE**

LC50 (mouse): 202000 ppm (481000 mg/m3) (4-hour exposure); cited as 680 mg/L (2-hour exposure) (9)

LC50 (rat): 276000 ppm (658000 mg/m3) (4-hour exposure); cited as 658 mg/L (4- hour exposure) (9)

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

No data available.

**PERSISTENCE AND DEGRADABILITY:**

No data available.

**BIOACCUMULATIVE POTENTIAL:**

No data available.

**MOBILITY IN SOIL:**

No data available.

**OTHER ADVERSE EFFECTS:**

No data available.

**13. Disposal Consideration**

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****U.S.-DOT Information:**

Consumer Commodity, ORM-D

**IMDG Information:**

Consumer Commodity, ORM-D

**IATA Information:**

Consumer Commodity, ORM-D

**15. Regulatory Information**

CAS	Chemical Name	% By Weight	Regulation List
0000074-98-6	PROPANE	5% - 11%	SARA312,VOC,TSCA,ACGIH,OSHA
0000075-28-5	ISOBUTANE	5% - 10%	SARA312,VOC,TSCA,ACGIH
0000106-97-8	BUTANE	11% - 24%	SARA312,VOC,TSCA,ACGIH
0000110-54-3	HEXANE	25% - 44%	CERCLA,HAPS,SARA312,SARA313,VOC,TSCA,ACGIH,OSHA
0008042-47-5	MINERAL OIL, SLAB OIL	1% - 2%	SARA312,TSCA
0063148-62-9	SILICONE	3% - 6%	SARA312,TSCA

## 16. Other Information

### GLOSSARY:

\* There are points of differences between OSHA GHS and UN GHS. In 90% of the categories, they can be used interchangeably, but for the Skin Corrosion/Irritant Category and the Specific Target Organ Toxicity (Single and Repeated Exposure) Categories. In these cases, our system will say UN GHS.

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.

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

<b>NFPA</b>	Health Hazards: 2	Flammability: 3	Instability: 0	Physical & Chemical Properties:
<b>HMIS</b>	Health Hazards: 2	Flammability: 3	Physical hazards: 0	Personal protection: B

### 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.