



SAFETY DATA SHEET

1. Product and Company Identification

PRODUCT NUMBER:	1851	COMPANY PHONE:	1-800-241-8180
PRODUCT NAME:	SOLAR GUARD	EMERGENCY TELEPHONE:	1-800-241-8180
PRODUCT DESCRIPTION:	Aerosol Auto Detailer & Protector	INFOTRAC:	1-800-535-5053
COMPANY INFORMATION:	PRO CHEM, INC. 1475 Bluegrass Lakes Parkway Alpharetta, GA 30004		

2. Hazards Identification

GHS CLASSIFICATION:
Flammable aerosols: Category 1
Health hazards: Not classified.
OSHA defined hazards: Not classified.

SIGNAL WORD:
DANGER

SYMBOL:



HAZARD STATEMENTS:

Extremely flammable aerosol.

PRECAUTIONARY STATEMENTS:

Prevention: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

Response: IF EXPOSED OR CONCERNED: Get medical advice/attention.

Storage: Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal: Dispose of waste and residues in accordance with local authority requirements.

HAZARDS NOT OTHERWISE SPECIFIED:

None known.

SUPPLEMENTAL INFORMATION:

None.

3. Composition / Information on Ingredients

CHEMICAL NAME	CAS	Concentration % by Weight
1,2,3-Propanetriol	56-81-5	2.5-10
Butane	106-97-8	2.5-10
Propane	74-98-6	1-2.5
Diethanolamine	111-42-2	0.1-1
Other components below reportable levels		80-90

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

4. First Aid Measures

EMERGENCY OVERVIEW

GENERAL: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

EYES: Rinse with water. Get medical attention if irritation develops and persists.

SKIN: Wash off with soap and water. Get medical attention if irritation develops and persists.

INHALATION:

If symptoms develop move victim to fresh air. Get medical attention if symptoms persist.

INGESTION:

Rinse mouth. Get medical attention if symptoms occur.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED:

Direct contact with eyes may cause temporary irritation.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

Treat symptomatically.

5. Fire Fighting Measures

SUITABLE FIRE EXTINGUISHING MEDIA:

Not available.

UNSUITABLE FIRE 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. Pressurized container may explode when exposed to heat or flame. 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. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Use standard firefighting procedures and consider the hazards of other involved materials. In the event of fire and/or explosion do not breathe fumes.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

GENERAL FIRE HAZARDS:

Extremely flammable aerosol.

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

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during cleanup. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see Section 8 of the SDS.

MATERIALS AND METHODS FOR CLEANUP:

Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. For waste disposal, see Section 13 of the SDS.

ENVIRONMENTAL PRECAUTIONS:

Avoid discharge into drains, watercourses or onto the ground.

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

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not reuse empty containers. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

SAFE STORAGE & INCOMPATIBILITIES:

Level 1 Aerosol.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure Controls / Personal Protection**Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

COMPONENTS	TYPE	VALUE	FORM
1,2,3-Propanetriol (CAS 56-81-5)	PEL	5 mg/m ³ 15 mg/m ³	Respirable fraction. Total dust.
Propane (CAS 74-98-6)	PEL	1800 mg/m ³ 1000 ppm	
US. ACGIH Threshold Limit Values			
COMPONENTS	TYPE	VALUE	
Butane (CAS 106-97-8)	STEL	1000 ppm	Inhalable fraction and vapor.
Diethanolamine (CAS 111-42-2)	TWA	1 mg/m ³	
US. NIOSH: Pocket Guide to Chemical Hazards			
COMPONENTS	TYPE	VALUE	
Butane (CAS 106-97-8)	TWA	1900 mg/m ³ 800 ppm	
Diethanolamine (CAS 111-42-2)	TWA	15 mg/m ³ 3 ppm	
Propane (CAS 74-98-6)	TWA	1800 mg/m ³ 1000 ppm	

BIOLOGICAL LIMIT VALUE:

No biological exposure limits noted for the ingredient(s).

EXPOSURE GUIDELINES:

US - California OELs: Skin designation: Diethanolamine (CAS 111-42-2) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation: Diethanolamine (CAS 111-42-2) Can be absorbed through the skin.

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

Skin Protection: Hand protection: Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other: Wear suitable protective clothing.

Respiratory Protection: If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

Thermal Hazards: Wear appropriate thermal protective clothing, when necessary.

General Hygiene Considerations: When using do not 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.

9. Physical & Chemical Properties

Physical State:	Gas.	Flammability (solid/gas):	Not available.
Form:	Aerosol.	Flammability Limit-lower (%)	Not available.

Color:	Not available.	Flammability Limit–upper (%):	Not available.
Odor:	Not available.	Explosive Limit – lower (%):	Not available.
Odor Threshold:	Not available.	Explosive Limit – upper (%):	Not available.
pH:	Not available.	Vapor Pressure:	Not available.
Melting/Freezing Point:	Not available.	Vapor Density:	Not available.
Initial Boiling Point/Range:	237.36 °F (114.09 °C) estimated	Relative Density:	Not available.
Partition Coeff (n-octanol/water):	Not available.	Solubility (water):	Not available.
Viscosity:	Not available.	Auto-Ignition Temperature:	Not available.
Specific Gravity:	122.479 estimated	Decomposition Temperature:	Not available.
Flash Point:	-156.0 °F (-104.4 °C) PROPELLANT estimated	Evaporation Rate:	Not available.
Explosive Properties:	Not explosive.	Oxidizing Properties:	Not oxidizing.

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. Nitrates. Fluorine. Chlorine.

CONDITIONS TO AVOID:

Avoid temperatures exceeding the flash point. Contact with incompatible materials.

HAZARDOUS DECOMPOSITION PRODUCTS:

No hazardous decomposition products are known.

11. Toxicological Information

PRIMARY ROUTE OF ENTRY:

Eyes: Direct contact with eyes may cause temporary irritation.

Skin: No adverse effects due to inhalation are expected.

Inhalation: No adverse effects due to inhalation are expected.

Ingestion: Expected to be a low ingestion hazard.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:

Direct contact with eyes may cause temporary irritation.

ACUTE TOXICITY:

COMPONENTS	SPECIES	TEST RESULTS
<u>1,2,3-Propanetriol (CAS 56-81-5)</u>		
Acute		
<i>Dermal</i>		
LD50	Guinea pig	45 ml/kg, Days
<i>Inhalation</i>		
LC50	Rat	4655 mg. min/l, 7 Hours
<i>Oral</i>		
LD50	Guinea pig	>= 10000 mg/kg
	Mouse	23000 mg/kg
	Rat	20.81 ml/kg
	Rat	18300 mg/kg
<u>Butane (CAS 106-97-8)</u>		
Acute		
<i>Inhalation</i>		
LC50	Mouse	1237 mg/l, 120 Minutes
	Rat	52 %, 120 Minutes
	Rat	1355 mg/l
<u>Diethanolamine (CAS 111-42-2)</u>		
Acute		
<i>Oral</i>		
LD50	Rat	1100 mg/kg
<u>Propane (CAS 74-98-6)</u>		
Acute		
<i>Inhalation</i>		
LC50	Mouse	1237 mg/l, 120 Minutes
	Mouse	52 %, 120 Minutes
	Rat	1355 mg/l
	Rat	658 mg/l/4 h

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

SKIN CORROSION/IRRITATION:

Prolonged skin contact may cause temporary irritation.

SERIOUS EYE DAMAGE/IRRITATION:

Direct contact with eyes may cause temporary irritation.

RESPIRATORY SENSITIZATION:

Not a respiratory sensitizer.

SKIN SENSITIZATION:

This product is not expected to cause skin sensitization.

GERM CELL MUTAGENICITY:

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

CARCINOGENICITY:

Risk of cancer cannot be excluded with prolonged exposure.

IARC Monographs. Overall Evaluation of Carcinogenicity:

Diethanolamine (CAS 111-42-2) 2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens: Not listed.

REPRODUCTIVE TOXICITY:

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

SPECIFIC TARGET ORGAN TOXICITY (single exposure):

Not classified.

SPECIFIC TARGET ORGAN TOXICITY (repeated exposures):

Not classified.

ASPIRATION HAZARD:

Not likely, due to the form of the product.

CHRONIC EFFECTS:

Prolonged exposure may cause chronic effects.

12. Ecological Information**ECOTOXICITY:**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

COMPONENTS	SPECIES	TEST RESULTS
1,2,3-Propanetriol (CAS 56-81-5)		
Aquatic		
Fish	LC50	Rainbow trout, donaldson trout (<i>Oncorhynchus mykiss</i>)
Diethanolamine (CAS 111-42-2)		51000 - 57000 mg/l, 96 hours
Aquatic		
Algae	IC50	7.8 mg/L, 72 Hours
Crustacea	EC50	55 mg/L, 48 Hours
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>)
		100 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:**Partition coefficient n-octanol / water (log Kow):**

1,2,3-Propanetriol	-1.76
Butane	2.89
Diethanolamine	-1.43
Propane	2.36

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. Contents under pressure. Do not puncture, incinerate or crush. 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.

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:

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste-handling site for recycling or disposal. Do not reuse empty containers.

14. Transportation Information

DOT: **UN Number:** UN1950
UN Proper Shipping Name: Aerosols, flammable, (each not exceeding 1 L capacity)
Transport Hazard Class(es)
Class: 2.1
Subsidiary Risk: -
Label(s): 2.1



Packing Group: Not applicable.

Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling.

Special Provisions: N82
Packaging Exceptions: 306
Packaging Nonbulk: None.
Packaging Bulk: None.

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

IATA: **UN Number:** UN1950
UN Proper Shipping Name: Aerosols, flammable
Transport Hazard Class(es)
Class: 2.1
Subsidiary Risk: -
Label(s): 2.1



Packing Group: Not applicable.

Environmental Hazards: No.

ERG Code: 10L

Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling.

Other Information:

Passenger and Cargo Aircraft: Allowed with restrictions.

Cargo Aircraft Only: Allowed with restrictions.

Packaging Exceptions: LTD QTY

IMDG: **UN NUMBER:** UN1950
UN Proper Shipping Name: AEROSOLS
Transport Hazard Class(es)
Class: 2.1
Subsidiary Risk: -
Label(s): 2.1



Packing Group: Not applicable.

Environmental Hazards:

Marine pollutant: No.

EmS: F-D, S-U

Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling.

Packaging Exceptions: LTD QTY

TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 and the IBC CODE:

Not applicable.

15. Regulatory Information

US FEDERAL REGULATIONS:

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

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4): Diethanolamine (CAS 111-42-2) Listed.

SARA 304 Emergency release notification: Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not regulated.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT of 1986 (SARA):

Hazard categories: Immediate Hazard – No.

Delayed Hazard – No.

Fire Hazard – Yes.

Pressure Hazard – No.

Reactivity Hazard – No.

SARA 302 Extremely hazardous substance: Not listed.

SARA 311/312 Hazardous Chemical: No.

SARA 313 (TRI reporting): Diethanolamine (CAS 111-42-2): 0.1-1%

OTHER FEDERAL REGULATIONS

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

Diethanolamine (CAS 111-42-2)

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

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

Safe Drinking Water Act (SDWA): Not regulated.

US STATE REGULATIONS

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100): Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a)):

Butane (CAS 106-97-8)

Diethanolamine (CAS 111-42-2)

US. Massachusetts RTK - Substance List:

1,2,3-Propanetriol (CAS 56-81-5)

Butane (CAS 106-97-8)

Diethanolamine (CAS 111-42-2)

Propane (CAS 74-98-6)

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

1,2,3-Propanetriol (CAS 56-81-5)

Butane (CAS 106-97-8)

Diethanolamine (CAS 111-42-2)

Propane (CAS 74-98-6)

US. Pennsylvania Worker and Community Right-to-Know Law:

1,2,3-Propanetriol (CAS 56-81-5)

Butane (CAS 106-97-8)

Diethanolamine (CAS 111-42-2)

Propane (CAS 74-98-6)

US. Rhode Island RTK:

Butane (CAS 106-97-8)

Diethanolamine (CAS 111-42-2)

Propane (CAS 74-98-6)

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:**

Diethanolamine (CAS 111-42-2)

Listed: June 22, 2012

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)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
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**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.