





SAFETY DATA SHEET

1. Product and Company Identification

PRODUCT NUMBER:	1728	COMPANY PHONE:	1-800-241-8180
PRODUCT NAME:	PROTECT-O-FLEX	EMERGENCY TELEPHONE:	1-800-241-8180
PRODUCT DESCRIPTION:	Aerosol Metal Parts Protector & Battery Terminal Coater	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 Germ cell mutagenicity: Category 1B Carcinogenicity: Category 1B Specific target organ toxicity, repeated exposure: Category 1 Aspiration hazard: Category 1 OSHA defined hazards: Not classified.	SIGNAL WORD: DANGER	SYMBOL:		
HAZARD STATEMENTS: Extremely flammable aerosol. May be fatal if swallowed and enters airways. Causes damage to organs through prolonged or repeated exposure.				
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. Do not breathe gas. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Response: IF SWALLOWED: Immediately call a poison center/doctor. Get medical advice/attention if you feel unwell. Do NOT induce vomiting. Storage: Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. 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
Butane	106-97-8	20-40
Mineral Spirits	8052-41-3	20-40
Naphtha, Petroleum, Light Alkylate	64741-66-8	10-20
Propane	74-98-6	10-20
Other components below reportable levels		20-40

*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: 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.
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: Aspiration may cause pulmonary edema and pneumonitis. Dizziness. Prolonged exposure may cause chronic effects.
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: Foam. 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: 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. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. 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 clean up. Do not breathe gas. 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.

METHODS & MATERIALS FOR CONTAINMENT AND CLEAN UP:

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. Do not breathe gas. When using, do not eat, drink, or smoke. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

SAFE STORAGE & INCOMPATIBILITIES:

Level 3 Aerosol.

Store locked up. 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
Mineral Spirits (CAS 8052-41-3)	PEL	2900 mg/m ³ 500 ppm
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
Mineral Spirits (CAS 8052-41-3)	TWA	100 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

COMPONENTS	TYPE	VALUE
Butane (CAS 106-97-8)	TWA	1900 mg/m ³ 800 ppm
Mineral Spirits (CAS 8052-41-3)	Ceiling	1800 mg/m ³
	TWA	350 mg/m ³
Propane (CAS 74-98-6)	TWA	1800 mg/m ³ 1000 ppm

BIOLOGICAL LIMIT VALUE:

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

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/FACE PROTECTION: If contact is likely, safety glasses with side shields are recommended.

SKIN PROTECTION: Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. Use of an impervious apron is recommended.

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			
Appearance:		Flammability(solid/gas):	Not available.
Physical State:	Gas.	Flammability Limit-lower (%):	0.9% estimated
Form:	Aerosol.	Flammability Limit-upper (%):	Not available.
Color:	Dark brown.	Explosive Limit – lower (%):	Not available.
Odor:	Solvent.	Explosive Limit – upper (%):	Not available.
Odor Threshold:	Not available.	Vapor Pressure:	Not available.
pH:	Not available.	Vapor Density:	Not available.
Melting/Freezing Point:	Not available.	Relative Density:	Not available.
Initial Boiling point/Range:	Not available.	Solubility (water):	Not available.
Partition Coeff (n-octanol/water):	Not available.	Auto-Ignition Temperature:	Not available.
Viscosity:	Not available.	Decomposition Temperature:	Not available.
Evaporation Rate:	Not available.	Flash Point:	156.0°F (-104.4°C) propellant estimated
Explosion 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 skin contact are expected.			
INHALATION: May cause damage to organs through prolonged or repeated exposure by inhalation.			
INGESTION: Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.			
SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:			
Aspiration may cause pulmonary edema and pneumonitis. Dizziness.			
ACUTE TOXICITY:			
May be fatal if swallowed and enters airways.			
COMPONENTS	SPECIES	TEST RESULTS	
Butane (CAS 106-97-8)			
Acute			
<i>Inhalation</i>			
LC50	Mouse	1237 mg/l, 120 Minutes	
	Rat	52 %, 120 Minutes	
		1355 mg/l	
Naphtha, Petroleum, Light Alkylate (CAS 64741-66-8)			
Acute			
<i>Dermal</i>			
LD50	Rabbit	> 1900 mg/kg, 24 Hours	
<i>Inhalation</i>			
LC50	Rat	> 5020 mg/m ³ , 4 Hours	
		> 4980 mg/m ³	
		> 4980 mg/m ³ , 4 Hours	
		> 4.96 mg/l, 4 Hours	
<i>Oral</i>			
LD50	Rat	5000 mg/kg	
Propane (CAS 74-98-6)			
Acute			
<i>Inhalation</i>			
LC50	Mouse	1237 mg/l, 120 Minutes	
	Rat	52 %, 120 Minutes	
		1355 mg/l	
		658 mg/l/4h	
* 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:

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not available.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not available.

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):

Causes damage to organs through prolonged or repeated exposure.

ASPIRATION HAZARD:

May be fatal if swallowed and enters airways.

CHRONIC EFFECTS:

Causes damage to organs through prolonged or repeated exposure.

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
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Naphtha, Petroleum, Light Alkylate (CAS 64741-66-8)

Aquatic

Algae IC50 Algae 30000 mg/L, 72 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)

Butane 2.89
Mineral Spirits 3.16 - 7.15
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 re-use 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 NON-BULK: 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.

IMDG: **UN NUMBER:** UN1950
UN PROPER SHIPPING NAME: AEROSOLS
TRANSPORT HAZARD CLASS(ES)
Class: 2.1
Subsidiary Risk: -
Label(s): None.



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 available.

GENERAL INFORMATION:

IMDG Regulated Marine Pollutant.

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): Not 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 – Yes.
Pressure Hazard – Yes.
Reactivity Hazard – No.

SARA 302 Extremely hazardous substance: Not listed.

SARA 311/312 Hazardous Chemical: No.

SARA 313 (TRI reporting): Not regulated.

OTHER FEDERAL REGULATIONS

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List: Not regulated.

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)

Mineral Spirits (CAS 8052-41-3)

Naphtha, Petroleum, Light Alkylate (CAS 64741-66-8)

US. Massachusetts RTK - Substance List

Butane (CAS 106-97-8)

Mineral Spirits (CAS 8052-41-3)

Propane (CAS 74-98-6)

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

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

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

Butane (CAS 106-97-8)

Mineral Spirits (CAS 8052-41-3)

Propane (CAS 74-98-6)

US. Rhode Island RTK

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals

currently listed as carcinogens or reproductive toxins.

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)	No
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

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.