

MATERIAL SAFETY DATA SHEET

Page 1 of 6

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Break-Free Powder Blast Gun Cleaner, Aerosol		DATE: October 18, 2011
PRODUCT NUMBER: GC-16-1, GC-16-12		
TRADE NAME: Powder Blast Gun Cleaner GENERAL USE: Gun Cleaner CHEMICAL FAMILY: Solvent Blend. PRODUCT DESCRIPTION: Light amber colored liquid with a very mild orange citrus odor.		
MANUFACTURER Safariland LLC		DATE PREPARED: October 18, 2011 SUPERSEDES: July 9, 2011
ADDRESS (NUMBER, STREET, P.O. BOX) 13386 International Parkway		TELEPHONE NUMBER FOR INFORMATION / Customer Service 800-347-1200
(CITY, STATE AND ZIP CODE) Jacksonville, FL. 32218	COUNTRY USA	CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBER  1-800-255-3924 01-813-248-0585 North America Toll Free International

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Note: All components are in full compliance with the Toxic Substances Control Act (TSCA) Inventory Regulations. All SARA Title III requirements have been complied with.

Cancer Information: For hazardous communication purposes, under OSHA Standard 29 CFR Part 1910.1200, both Methylene chloride and trichloroethylene are listed as a potential carcinogens by IARC and NTP. Methylene chloride has been shown to increase the incidence of malignant tumors in mice and benign tumors in rats. Studies have shown that tumors observed in mice are unique to that species. Other animal studies, as well as several human epidemiology studies, failed to show tumorigenic response. Methylene chloride is not believed to pose a measurable carcinogenic risk to man when handled as recommended.

POTENTIAL HEALTH EFFECTS

INHALATION:

In confined or poorly ventilated areas, vapors can readily accumulate and can cause unconsciousness and death. Excessive exposure may cause irritation to upper respiratory tract. Excessive exposure may cause carboxyhemoglobiemia, thereby impairing the blood's ability to transport oxygen. Minimal anesthetic or narcotic effects may be seen in the range of 500-1000 ppm Methylene chloride. Progressively higher levels over 1000ppm can cause dizziness, drunkenness, and as low as 10,000 ppm, unconsciousness and death. These high levels may also cause cardiac arrhythmia's (irregular heart beat).

SKIN:

A single prolonged exposure is not likely to result in the material being absorbed through the skin in harmful amounts. Prolonged or repeated exposure may cause skin irritation, drying or flaking of the skin. Immersion may cause an intense burning sensation followed by a cold, numb feeling which will subside after contact is removed.

EYES:

Irritant, liquid contact may irritate eyes and cause conjunctivitis, which may be slow to heal. May cause slight corneal injury.

INGESTION:

Single dose oral toxicity is considered very low. Small amounts swallowed incidental to handling operations are not likely to cause injury. Swallowing large amount may cause injury and if aspirated (liquid enters the lung) may be rapidly absorbed through the lungs and result in injury to other body systems.

CARCINOGENICITY:

NTP? Methylene Chloride Trichloroethylene	IARC MONOGRAPHS? Methylene Chloride Trichloroethylene	OSHA REGULATED? YES
CALIFORNIA, Prop.65?	Yes- Methylene Chloride, Trichloroethylene.	

MATERIAL SAFETY DATA SHEET

Page 2 of 6

PRODUCT NAME: Break-Free Powder Blast Gun Cleaner, Aerosol
PRODUCT NUMBER: GC-16-1, GC-16-12 **DATE:** October 18, 2011

SECTION 3 - HAZARDOUS INGREDIENTS

Hazardous Components	% (by Weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES (Full Text Section 15)
Methylene Chloride	30-40	75-09-2	200-838-9	Xn	R40
Trichloroethylene	55-65	79-01-6	201-167-4	T, Xn, Xi	R36/38,R45,R52/53,R67
Orange Oil Concentrate	2-6	Proprietary	Proprietary	None	None
Carbon Dioxide Propellant	<1	124-38-9	204-696-9	None	None

Notes:

SECTION 4 - FIRST AID MEASURES

INHALATION:

If inhaled, move to fresh air. Anesthetic or narcotic effects could occur from overexposure to vapors, so call a physician; if available, give oxygen. If breathing stops, give mouth-to-mouth resuscitation. Solvents contained in this product may increase the sensitivity of the heart to adrenaline and related drugs. Never administer these drugs to persons that display symptoms which could be attributed to overexposure to this product. Follow good industrial hygiene practices.

EYES:

Flush for at least 15 minutes with potable water, contact a physician if irritation persists.

SKIN:

Wash with plenty of soap and water.

INGESTION:

If swallowed, do not induce vomiting. If conscious, drink large quantities of water and seek immediate medical attention.

SECTION 5 - FIRE FIGHTING MEASURES

GENERAL HAZARDS:

Flash Point: None, Flammability Limits: LEL=14% UEL=22%, AUTOIGNITION Threshold: NE

EXTINGUISHING MEDIA:

Carbon Dioxide, Dry Chemical, Foam.

FIRE FIGHTING PROCEDURES:

Firefighters should wear NIOSH approved, positive pressure self-contained breathing apparatus for possible exposure to hydrogen chloride, chlorine and phosgene. Also, proper eye and skin protection should be used. Use water spray to keep containers cool.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Will decompose at temperatures above 250°C. Decomposition products can include hydrogen chloride, chlorine and carbonyl halides such as phosgene. Contact with certain finely divided metals may cause an exothermic reaction and/or explosive combinations. Also, if product is mixed with air at pressures greater than one atmosphere, the resulting mixture can be flammable. Vapors are heavier than air and may travel a long distance. If concentrated in a confined or poorly ventilated space such as the air-vapor interface of a vapor degreaser can be ignited with a flame or high intensity source of heat. Use water spray to cool fire exposed containers until fire is out and danger of reignition has passed.

HAZARDOUS COMBUSTION PRODUCTS:

Carbon monoxide, carbon dioxide, hydrogen chloride, chlorine and carbonyl halides such as phosgene.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Immediately evacuate the area and provide maximum ventilation. Unprotected personnel should move upwind of spill. Only personnel equipped with proper respiratory and skin/eye protection should be permitted in the area. Dike area to contain spill. Take precautions as necessary to prevent contamination of ground or surface waters. Recover or absorb spilled material on sawdust or vermiculite and sweep into closed containers for disposal. After all visible traces have been removed, thoroughly wet vacuum area. DO NOT FLUSH TO SEWER. If area of spill is porous, remove as much contaminated earth and gravel as necessary and place in closed containers for disposal.

MATERIAL SAFETY DATA SHEET

Page 3 of 6

PRODUCT NAME:	Break-Free Powder Blast Gun Cleaner, Aerosol	DATE:	October 18, 2011
PRODUCT NUMBER:	GC-16-1, GC-16-12		

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Keep away from open flame and other ignition sources. Treat this material as a compressed gas. Due to the low boiling point and high vapor pressure, do not store above 48.9°C (120°F) or near sources of heat. Maintain adequate ventilation and keep from children. Note that vapors are heavier than air and can displace air in low areas or confined spaces such as pits or storage tanks. Do not enter those areas where large quantities of vapors are suspected of collecting until exchanging the air or using special breathing apparatus with an observer present for possible assistance.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

HAZARDOUS COMPONENTS	NIOSH				ACGIH		OSHA	
	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3	TLV/TWA ppm	TWA mg/m3	TWA ppm	PEL mg/m3
Methylene Chloride					50		25	C125 ST
Trichloroethylene	100				100		100	C200
Orange Oil Concentrate								
Carbon Dioxide Propellant	5000		30,000 ST				5000	

PERSONAL PROTECTION

RESPIRATORY PROTECTION:

Not required for normal work situations where adequate ventilation is provided. Use NIOSH European EN-149 approved self contained, positive pressure respirators for emergencies and in situations where air may be displaced by vapors. Follow OSHA Std. 29CFR 1910.134.

PROTECTIVE GLOVES:

Use gloves and full protective clothing if there is prolonged or repeated contact of liquid with skin. Solvex gloves recommended.

EYE PROTECTION:

For normal conditions wear safety glasses. Where there is reasonable probability of liquid contact, wear splash proof goggles. Contact lenses should not be worn under such conditions. If vapor exposure causes eye discomfort, use a full-face respirator.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

Safety shower and eye-wash fountain in manufacturing areas. Personal protective clothing and use of equipment must be in accordance with 29CFR 1910.132 and 29CFR 1910.133.

WORK / HYGIENIC PRACTICES:

Do not smoke, eat or drink while using the product. Wash hands with soap and water before smoking, eating, drinking or using toilet facilities. Launder contaminated clothing before re-use.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR Light amber colored liquid with a very mild orange citrus odor.	VAPOR PRESSURE 30 PSIA 20°C (70°F)
pH NA	SPECIFIC GRAVITY (WATER = 1) 1.3
BOILING POINT / BOILING RANGE 39.8°C (104°F)	SOLUBILITY IN WATER Insoluble
FLASH POINT None.	VISCOSITY NA
FLAMMABLE LIMITS LEL: 14% UEL: 22%	VAPOR DENSITY (AIR = 1) 2.93
AUTO-IGNITION TEMPERATURE NE	EVAPORATION RATE >1 (Ether = 1) VOC- <10%

MATERIAL SAFETY DATA SHEET

Page 4 of 6

PRODUCT NAME:	Break-Free Powder Blast Gun Cleaner, Aerosol	DATE:	October 18, 2011
PRODUCT NUMBER:	GC-16-1, GC-16-12		

SECTION 10 - STABILITY AND REACTIVITY

STABILITY STABLE X	CONDITIONS TO AVOID: Sources of ignition such as sparks, hot spots, welding, flames, and cigarettes. Explosions may result if in the flammable range. Non-explosive conditions may yield toxic and/or corrosive decomposition products.
----------------------------------	---

INCOMPATIBILITY (MATERIALS TO AVOID):
 Strong acids and alkalis, reactive metals, e.g., powdered or freshly abraded aluminum (may cause strong exothermic reaction), sodium, potassium, calcium, magnesium, zinc, molten aluminum, barium and lithium shavings. Strong oxidizing agents. Avoid unintended contact with amines.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:
 Carbon Monoxide, carbon dioxide, hydrogen chloride, chlorine and carbonyl halides such as phosgene.

HAZARDOUS POLYMERIZATION: Will not occur.	CONDITIONS TO AVOID: None related to polymerization.
---	--

SECTION 11 - TOXICOLOGICAL INFORMATION

Hazardous Components	CAS # EINECS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
Methylene Chloride*	75-09-2 200-838-9	Oral, mouse: LD50 = 873 mg/kg	Inhalation, mouse: LC50 = 14400 ppm/7H
Trichloroethylene*	79-01-6 201-167-4	Oral, mouse: LD50 = 2402 mg/kg	Inhalation, mouse: LC50 = 8450 ppm/4H;

*Suspect carcinogens, NTP.

SECTION 12 - ECOLOGICAL INFORMATION

No specific ecological information is available for this product, however it is known that Trichloroethylene and Methylene Chloride are both persistent environmental toxins that accumulate as insoluble components in water. Due diligence is strongly advised regarding any potential environmental discharge of this product. Contact local authorities if discharge occurs.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:
 Contaminated sawdust, vermiculite or porous surface must be disposed of in a permitted hazardous waste facility. Recovered liquids may be reprocessed or incinerated or treated in a permitted hazardous waste management facility. Care must be taken when using or disposing of chemical materials and/or their containers to prevent environmental contamination. It is your duty to dispose of the chemical materials and/or their containers in accordance with the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act as well as any other relevant Federal, State or local laws and regulations regarding disposal.

SECTION 14 - TRANSPORT INFORMATION

PROPER SHIPPING NAME: Aerosol, Non-Flammable, Containing Substances in Category 6.1, PG III	
DOT HAZARD CLASS / Pack Group: 2.2 (6.1) REFERENCE: 49CFR UN / NA IDENTIFICATION NUMBER: UN1950 LABEL: Non-Flammable, toxic (see above) HAZARD SYMBOLS: <div style="display: flex; justify-content: space-around; align-items: center;">   </div>	IATA HAZARD CLASS / Pack Group: 2.2 (6.1), 75kg max Passenger, 150 kg max CAO. IMDG HAZARD CLASS: 2.2 (6.1) RID/ADR Dangerous Goods Code: 2.2 (6.1) UN TDG Class / Pack Group: 2.2 (6.1) Hazard Identification Number (HIN): 26

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

MATERIAL SAFETY DATA SHEET

Page 5 of 6

PRODUCT NAME:	Break-Free Powder Blast Gun Cleaner, Aerosol							
PRODUCT NUMBER:	GC-16-1, GC-16-12	DATE: October 18, 2011						
SECTION 15 - REGULATORY INFORMATION								
<p>TSCA (USA - Toxic Substance Control Act): All components are listed.</p> <p>SARA TITLE III (USA - Superfund Amendments and Reauthorization Act):</p> <table style="width: 100%;"> <tr> <td>Acute Health: Yes</td> <td>Chronic Health: Yes</td> </tr> <tr> <td>Fire: No</td> <td>Sudden Release of Pressure: Yes</td> </tr> <tr> <td>Reactive: No</td> <td></td> </tr> </table>			Acute Health: Yes	Chronic Health: Yes	Fire: No	Sudden Release of Pressure: Yes	Reactive: No	
Acute Health: Yes	Chronic Health: Yes							
Fire: No	Sudden Release of Pressure: Yes							
Reactive: No								
<p>313 REPORTABLE INGREDIENTS: This material contains Trichloroethylene (CAS# 79-01-6, >99%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR. This material contains Methylene chloride (CAS# 75-09-2, >99.5%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.</p> <p>CERCLA (USA - Comprehensive Response Compensation and Liability Act): R.Q. final for CAS# 79-01-6 Trichloroethylene is 100lbs. CAS# 75-09-2 Methylene Chloride: 1000 lb final RQ; 454 kg final RQ.</p> <p>California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: WARNING: This product contains Trichloroethylene, a chemical known to the state of California to cause cancer. WARNING: This product contains Methylene chloride, a chemical known to the state of California to cause cancer.</p> <p>CPR (Canadian Controlled Products Regulations): Referenced.</p> <p>IDL (Canadian Ingredient Disclosure List): Listed.</p> <p>DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List): Listed on DSL.</p> <p>EINECS (European Inventory of Existing Commercial Chemical Substances): Proprietary ingredients not referenced.</p> <p>WGK Water Quality Index: 3</p>								
RISK PHRASES:	SYMBOL(S) REQUIRED FOR EU LABEL	SAFETY PHRASES:						
<p>R 36/38: Irritating to eyes and skin.</p> <p>R 45: May cause cancer.</p> <p>R 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p> <p>R 67: Vapors may cause drowsiness and dizziness.</p>	 (+T)-Toxic  (+N)-Dangerous for the environment.	<p>S 1/2: Keep locked up and out of the reach of children.</p> <p>S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).</p> <p>S 53: Avoid exposure - obtain special instructions before use.</p> <p>S 61: Avoid release to the environment. Refer to special instructions /safety data sheets.</p>						

MATERIAL SAFETY DATA SHEET

Page 6 of 6

PRODUCT NAME: Break-Free Powder Blast Gun Cleaner, Aerosol
PRODUCT NUMBER: GC-16-1, GC-16-12 **DATE:** October 18, 2011

SECTION 16 - OTHER INFORMATION

Legend: NA = Not Available, NE = Not Established, ND = Not Determined, C = Carcinogen, NTP = National Toxicology Program

HMIS HAZARD RATINGS	HEALTH:	2	0 = INSIGNIFICANT
	FLAMMABILITY:	1	1 = SLIGHT
	PHYSICAL HAZARD:	0	2 = MODERATE
	PERSONAL PROTECTIVE EQUIPMENT:	C	3 = HIGH 4 = EXTREME

REVISION SUMMARY:

Revised to GHS/E.U. protocols 10/5/2011 supersedes 7/09/2011 issue. LB

MSDS Prepared by:

ChemTel Inc.
 1305 North Florida Avenue
 Tampa, Florida USA 33602-2902
 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
 Website: www.chemtelinc.com



The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.