

# MATERIAL SAFETY DATA SHEET

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Patton "TERMINATOR"

GENERAL USE: Truck wash pre-spray & aluminum brightener

PRODUCT DESCRIPTION: Blue liquid, acrid acid odor



MANUFACTURER'S NAME

Patton Industrial Services

DATE PREPARED: April 23, 2008

SUPERSEDES: New

Page 1 of 4

ADDRESS (NUMBER, STREET, P.O. BOX)

1802 North Hearne

TELEPHONE NUMBER FOR INFORMATION

(318) 227-4000

(CITY, STATE AND ZIP CODE)

Shreveport, LA 71107

COUNTRY

USA

EMERGENCY TELEPHONE NUMBER

Infotrac (800) 535-5053 Outside USA (352) 323-3500

## SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	CAS #	% (by weight)	OSHA PEL		ACGIH TWA		SARA TITLE III	RQ LBS
			PPM	MG/M3	PPM	MG/M3		
Hydrofluoric acid (a,b,c,d,e,f)	7664-39-3	2 - 4	3		3 C		Yes	100

(a,c) See Section 15

(b) Indicates that the Resource Conservation and Recovery Act (RCRA) has determined the waste for this chemical is listed as hazardous and must be handled according to regulations in 40 CFR 260-281.

(d) Indicates an Extremely Hazardous Substance, if your facility has a designated amount of this substance, Threshold Planning Quantity (TPQ) in inventory, the regulations of 40 CFR 355 and 370 apply, including submission of Tier I / Tier II forms every March 1.

(e) OSHA regulation (29 CFR 1910.119), monitor and control safety at certain types of industrial facilities. Compliance is triggered by specified quantities of specific chemicals. Minimum threshold quantity for this Highly Hazardous Chemical is 1,000 lbs.

(f) A "C" in the OSHA PEL or ACGIH TWA column indicates ceiling limits, the concentration that should not be exceeded during any part of the working exposure.

## SECTION 3 - HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

Toxic, harmful and corrosive to the skin, eyes, nose, mucous membranes, respiratory tract and gastrointestinal tract, or any tissue with which it comes in contact. Hazard Symbol- C,T. Risk phrases R 23/24/25, 34

### POTENTIAL HEALTH EFFECTS

**INHALATION:** Inhaling HF vapors can seriously damage the lungs. Delayed reactions up to and including fatal pulmonary edema may not be apparent for hours after the initial exposure. Airborne concentrations of 10-15 ppm will irritate the eyes, skin, and respiratory tract; 30 ppm is considered "Immediately Dangerous to Life and Health" (IDLH) and may have irreversible health effects; above 50 ppm, even brief exposure may be fatal.

**SKIN:** Corrosive and extremely irritating; may produce severe chemical burns which are slow in healing. Subcutaneous tissue may be affected, becoming blanched and bloodless. In 20% - 50% HF concentrations, burns can be delayed 1 to 8 hours. Concentrations of less than 20% HF may cause delayed painful erythema up to 24 hours after contact. Latent skin burns and necrosis with slow healing can occur even at concentrations of 2% HF. Delayed burns begin with itching sensation and proceed to burning and pain.

**EYES:** Corrosive; Causes immediate severe burns of the eye and eyelids. If not quickly removed by thorough irrigation with water, there may be prolonged or permanent visual impairment or total loss of sight.

**INGESTION:** Corrosive. Swallowing hydrofluoric acid causes severe burns of the mucous membrane of the mouth, throat, esophagus and the stomach.

CARCINOGENICITY

NTP?

No

IARC MONOGRAPHS?

No

OSHA REGULATED?

No

**MATERIAL SAFETY DATA SHEET**PRODUCT NAME: Patton "TERMINATOR"  
April 23, 2008

Page 2 of 4

**SECTION 4 - FIRST AID MEASURES**

**INHALATION:** Remove affected person to fresh air; get immediate medical attention with emphasis on hydrofluoric acid exposure. If breathing is difficult, supply oxygen. If breathing has stopped, begin artificial respiration.

**SKIN:** Remove contaminated clothing while flushing affected area with drenching shower for 5 minutes. Launder contaminated clothing before reuse; seek immediate medical attention with emphasis on hydrofluoric acid exposure. Apply 2½% Calcium Gluconate ointment to contacted area.

**EYES:** Check for and remove contact lenses. Immediately flush eyes for 5 minutes in clear running water while holding eyelids open; seek immediate medical attention with emphasis on hydrofluoric acid exposure. Irrigate open eyelids with 500 to 1,000 cc's of 1% Calcium Gluconate in saline solution.

**INGESTION:** Drink high amounts of calcium based antacid in water followed by milk or milk of magnesia; DO NOT induce vomiting; never give anything by mouth to an unconscious person; seek immediate medical attention with emphasis on hydrofluoric acid exposure.

**SECTION 5 - FIRE FIGHTING MEASURES****FLASH POINT (METHOD USED)**

Non-flammable

**FLAMMABLE LIMITS**

LEL: Not applicable

UEL: Not applicable

**AUTOIGNITION TEMPERATURE:**

Not determined

**NFPA CLASS:** **None**

**GENERAL HAZARDS:** Product is corrosive. Products of combustion include compounds of carbon, hydrogen, oxygen, and fluorine, including carbon monoxide.

**EXTINGUISHING MEDIA**

Carbon dioxide, water fog, dry chemical, chemical foam. Do not use solid stream of water.

**FIRE FIGHTING PROCEDURES**

Firefighters should be equipped with NIOSH approved fully enclosed self-contained breathing apparatus with plastic window in the hood. Keep containers cool with water spray to prevent container rupture due to steam buildup; CAUTION - material is corrosive.

**UNUSUAL FIRE AND EXPLOSION HAZARDS**

Contact with B:C extinguisher powder may produce large amounts of carbon dioxide. Material can generate explosive hydrogen gas on contact with certain metals.

**HAZARDOUS COMBUSTION PRODUCTS**

Smoke, fumes or vapors, oxides of carbon, fluorine vapors.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Caution - Corrosive. Allow only Trained Hazardous Response Personnel in the area. Confine and absorb into approved absorbent; place material into approved containers for disposal; for spills in excess of allowable quantities (RQ) notify the National Response Center (800) 424 - 8802; refer to CERCLA 40 CFR 302 for detailed instructions; refer to SARA Title III, Section 313, 40 CFR 372 for reporting requirements. Do not discharge into lakes, ponds, streams or public waters.

**SECTION 7 - HANDLING AND STORAGE**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** This product will attack glass, concrete and certain metals. Keep container closed when not in use; protect containers from abuse; protect from extreme temperatures. CAUTION - material is corrosive. Keep this and other chemicals out of reach of children. Refer to 40 CFR 355 & 370 for regulations pertaining to items classified as Threshold Planning Quantities as shown in Section 2, Hazardous Ingredients.

**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION****ENGINEERING CONTROLS**

The use of local exhaust ventilation is recommended. Use corrosion-resistant ventilation equipment.

**PERSONAL PROTECTION:**

**RESPIRATORY PROTECTION:** None required while threshold limits are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator must be worn. A chemical cartridge respirator with acid cartridge is recommended. If concentration exceeds capacity of cartridge respirator, a self-contained breathing apparatus is advised. Refer to 29 CFR 1910.134, ANSI Z88.2, or European Standard EN 149 for complete regulations.

**PROTECTIVE GLOVES:** Required. Saranex, Barricade, Chemrel, Responder, and Butyl rubber are recommended. Do not use Nitrile Rubber, Polyvinyl Alcohol or Polyvinyl Chloride.

**EYE PROTECTION:** Chemical splash goggles. Refer to 29 CFR 1910.133, ANSI Z87.1, or European Standard EN166.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Chemical resistant butyl rubber apron, or other approved chemical resistant equipment should be worn to prevent skin contact. Do not use Nitrile Rubber, Polyvinyl Alcohol or Polyvinyl Chloride. Safety eyewash station nearby.

**WORK / HYGIENIC PRACTICES:** Practice safe workplace habits. Safety showers and safety eyewash nearby.

**MATERIAL SAFETY DATA SHEET**

PRODUCT NAME: Patton "TERMINATOR"  
April 23, 2008

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE AND ODOR Blue liquid, acrid acid odor	VAPOR DENSITY (AIR = 1) > 1
SPECIFIC GRAVITY (WATER = 1) 1.020	EVAPORATION RATE (Water = 1) < 1
SOLUBILITY IN WATER Complete	% VOLATILE (BY WEIGHT) 99%
pH < 1.0	VAPOR PRESSURE 17 mm Hg @ 20° C
BOILING POINT 212° F ( 100° C )	FREEZING POINT 32° F ( 0° C )
VISCOSITY Like that of water	VOLATILE ORGANIC COMPOUNDS (VOC's) None

**SECTION 10 - STABILITY AND REACTIVITY**

STABILITY UNSTABLE: STABLE: X	CONDITIONS TO AVOID: Extreme temperatures. Contact with active metals can release flammable hydrogen gas.
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers, strong alkalies, most metals, cyanides, sulfides, glass and ceramics.	
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, hydrocarbons, fumes or vapors, fluorine and smoke may be produced.	
HAZARDOUS POLYMERIZATION MAY OCCUR: WILL NOT OCCUR: X	CONDITIONS TO AVOID: None. Non-hazardous endothermic polymerization may occur in both the liquid and gas phases.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

Hazardous Ingredients	CAS #	EINECS #	LD50 of Ingredient Species and Route	LC50 of Ingredient Species
Hydrofluoric acid (a,b,c,d,e,f)	7664-39-3	231-634-8	Not established	1276 / ppm / 1H Inhalation - rat
(a,c) See Section 15				

**SECTION 12 - ECOLOGICAL INFORMATION**

No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL METHOD: Dispose of in accordance with local, state, and federal regulations. Do not flush to sanitary sewer or waterway. Refer to 40 CFR 260 - 299 for complete waste disposal regulations for corrosive materials containing Hydrofluoric Acid. Consult your local, state, or federal agency before disposing of any chemicals.

**SECTION 14 - TRANSPORT INFORMATION**

PROPER SHIPPING NAME: Hydrofluoric acid, solution (< 60 %)	
DOT HAZARD CLASS / Pack Group: 8 (6.1) / II	IATA HAZARD CLASS / Pack Group: 8 (6.1) / II
REFERENCE: 49 CFR 173.202, .243	IMDG HAZARD CLASS: 8 (6.1) / II
UN / NA IDENTIFICATION NUMBER: UN 1790	RID/ADR Dangerous Goods Code: 8 (6.1) / II
LABEL: CORROSIVE, POISON	UN TDG Class / Pack Group: 8 (6.1) / II
HAZARD SYMBOLS: C T	Hazard Identification Number (HIN): 86

Note: Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, 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**

PRODUCT NAME: Patton "TERMINATOR"  
 April 23, 2008

**SECTION 15 - REGULATORY INFORMATION**

**TSCA (Toxic Substance Control Act)**

All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

**SARA TITLE III (Superfund Amendments and Reauthorization Act)**

311/312 Hazard Categories  
 Immediate health

313 Reportable Ingredients:

(a) Indicates a toxic chemical subject to annual reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

**CERCLA (Comprehensive Response Compensation and Liability Act)**

(c) The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) has notification requirements for releases or spills to the environment of the Reportable Quantity (RQ for this mixture = 5,000 lbs) or greater amounts, according to 40 CFR 302.

**California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986**

There are no reportable chemicals present known to the state of California to cause cancer or reproductive toxicity.

**CPR (Canadian Controlled Products Regulations)**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. WHMIS Classification: E, D1A, D2A

**IDL (Canadian Ingredient Disclosure List)**

Components of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 2.

**DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List)**

Components of this product identified by CAS number are listed on the DSL or NDSL, or are otherwise in compliance with the New Substances Notification (NSN) regulations. Only ingredients classified as "hazardous" are listed in Section 2 unless otherwise indicated.

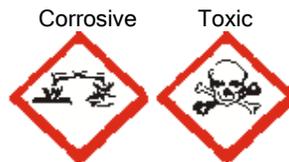
**EINECS (European Inventory of Existing Commercial Chemical Substances)**

Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

**Risk Phrases**

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.  
 R34 Causes burns.

**SYMBOL(S) REQUIRED FOR LABEL**



**Safety Phrases**

S7/9 Keep container tightly closed and in a well ventilated place.  
 S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
 S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible.)

**SECTION 16 - OTHER INFORMATION**

Specific toxicity tests have not been conducted on this product. Our hazard evaluation is based on Information from similar products, the ingredients, technical literature, and/or professional experience.

**HMIS HAZARD RATINGS**

HEALTH	3	* = Chronic Health Hazard	2 = MODERATE
FLAMMABILITY	0	0 = INSIGNIFICANT	3 = HIGH
PHYSICAL HAZARD	1	1 = SLIGHT	4 = EXTREME
PERSONAL PROTECTIVE EQUIPMENT	C	Safety Glasses, Gloves, Apron	

**REVISION SUMMARY:**

This MSDS has been revised in the following sections:  
 No changes noted

**MSDS Prepared by:**

Comprehensive Data Base, Inc.  
 P.O. Box 686  
 Seffner, FL 33583 USA  
 (863) 644 - 3298      www.compdatabase.com or www.msds.cc

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.