

## 1. PRODUCT & PREPARATION INFORMATION

Manufacturer:	SCOTTS PRESSURE WASH 4747 - 68 AVE. SE Calgary AB, T2C 4Z4, Canada 403-245-4020	Product Use:	Rust Remover
Emergency telephone numbers:	403-245-4020	WHIMIS Classification:	E, D1A, D2A
Product Name:	BioShine 2-Step Cleaner	TDG Classification:	Hydrofluoric Acid & Sulfuric Acid Mixture, UN1786
Synonyms:	Not Applicable	Class:	8(6.1), PGI
Chemical Family:	Mineral Acid	NFPA:	4* Health, 0 Fire, 1 Instability
Molecular Formula:	Not Available	Prepared by:	Research & Development Department
		Preparation Date:	20 June 2016

## 2. HAZARDOUS INGREDIENTS

Hazardous Ingredients	CAS Number	Wt. %	TLV ppm	LD/50 Oral – Rat	LC/50 Inhal – Rat, 4 hr
Sulfuric Acid	7664-93-9	15-40	0.2 mg/m <sup>3</sup>	2,140 mg/kg	255 mg/m <sup>3</sup>
Phosphoric Acid	7664-38-2	7-13	1 mg/m <sup>3</sup>	1,530 mg/kg	850 mg/m <sup>3</sup> (1 hr)
Ethyleneglycol Monobutyl Ether	111-76-2	3-7	20	400 mg/Kg	450 ppm
Hydrofluoric Acid	7664-39-3	1-5	0.5	Not Available	425-638 ppm

## 3. PHYSICAL DATA

Physical State	Liquid
Appearance	Clear Dark Red, Foaming Liquid
Odour	Acid
Odour Threshold	Not Available
Boiling Point	100 deg. C
Melting/Freezing Point	Not Available
Vapour Density (Air = 1)	> 1
Specific Gravity (g/cc)	1.2
Vapour Pressure (mm Hg)	Not Available
Evaporation Rate, n-Butyl Acetate = 1	Not Available
PH	0-1
Solubility in Water	Soluble

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## 4. FIRE & EXPLOSION DATA

Flammability Limits in Air (%)	Not Applicable
Extinguishing Media:	Use media appropriate for surrounding fire or materials. Do not use water.
Flash Point (TCC deg. C):	Not Applicable.
Auto-ignition Temperature (deg. C):	Not Available.
Hazardous Combustion Products:	Hydrogen fluoride, hydrogen gas, chlorine oxide, oxides of sulphur, oxides of phosphorous, carbon monoxide.
Sensitivity to Mechanical Impact:	Not available. Not expected to be sensitive to mechanical impact.
Rate of Burning:	Not available.
Explosive Power:	Not available.
Sensitivity to Static Discharge:	Not available. Not expected to be sensitive to static discharge.
Unusual Fire Hazard:	Reacts with most metals to produce hydrogen gas, which could make an explosive mixture with air. Contents may develop pressure on on prolonged exposure to heat.

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## 5. REACTIVITY DATA

Chemical Stability:	Yes, under normal conditions. Becomes not stable if heated.
Compatibility with Other Substances:	No, with metals, strong oxidizing agents, reducing agents, Lewis or mineral acids, strong bases.
Hazardous Products of Decomposition:	Flammable hydrogen gas, hydrogen fluoride, sulphur oxides, carbon monoxide.
Hazardous Polymerisation:	Will not occur.

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## 6. TOXICOLOGICAL PROPERTIES

**Route of Entry:**

Skin Contact: ..... Yes

Skin Absorption: . Yes

Eye Contact: ..... Yes

Inhalation: ..... Yes

Ingestion: ..... Yes

Effects of Exposure: ..... Corrosive. Toxic if inhaled or swallowed, effects may be delayed. Causes severe skin and eye burns. Causes severe burning and pain in the mouth, throat and abdomen. Inhalation or absorption through skin causes degeneration of the bone structure. Product is extremely irritating to the eyes, nose, throat and respiratory tract.

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Carcinogenicity: Sulfuric acid as aerosol or mist is classified as suspected carcinogen by ACGIH and IARC.

Reproductive Effects: No information is available and no adverse Reproductive effects are anticipated.

Teratogenicity: No information is available and no adverse Teratogenic effects are anticipated.

Mutagenicity: No information is available and no adverse Mutagenic effects are anticipated.

### 7. PREVENTIVE MEASURES

- Eye Protection:** ..... Safety glasses are required. Use full face-shield and chemical safety goggles when there is potential for contact. Contact lenses should not be worn when working with this material.
- Skin Protection:** ..... Gloves and protective clothing made from butyl rubber should be impervious under condition of use. Discard contaminated gloves.
- Respiratory Protection:** ..... A NIOSH/MSHA-approved full facepiece air-purifying respirator equipped with acid gas, dust, mist, fume cartridge for concentrations up to 10 mg/m<sup>3</sup> Sulfuric Acid and up to 5 ppm Fluorine. Wear air-supplied respirator if concentrations are higher of unknown.
- Other Personal Protective Equipment:** ..... Wear an impermeable apron and boots. Locate safety showers and eyewash station close to chemical handling area.
- Engineering Controls:** ..... Local exhaust ventilation required, it should be corrosion proof.
- Leak/Spill Clean-Up Procedures:** ..... Use calcium hydroxide (hydrated lime) to neutralize to a pH between 7 and 9. Check for neutral pH using pH paper. Neutralization is expected to be exothermic. Ventilate enclosed spaces. Collect product for disposal. Dispose of waste material at an approved hazardous waste treatment/disposal facility in accordance with applicable local, provincial and federal regulations. Do not dispose of waste with normal garbage, or to sewer systems. Notify applicable government authority if release is reportable or could adversely affect the environment.
- Storage Instructions:** ..... Store in clean, cool well-ventilated area away from strong bases.

### 8. FIRST-AID MEASURES

In case of **Eye Contact**, immediately flush eyes with running water for a minimum of 20 minutes. Hold eyelids open during flushing.

Get medical attention IMMEDIATELY.

For **Skin**, remove contaminated clothing wash effected areas thoroughly with soap and water. Get medical attention IMMEDIATELY. If affected by inhalation of vapour or spray mist, move to fresh air.

Obtain medial attention IMMEDIATELY.

In case of **Ingestion** do not attempt to give anything by mouth to unconscious person. IMMEDIATELY contact local Poison Control Centre. If victim is alert and not convulsing, rinse mouth out and give 1-2 glasses of milk. Water may be used but it is not as effective. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomit, rinse mouth and administer more milk or water.

IMMEDIATELY transport victim to an emergency facility.

### 9. OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

This MSDS is valid for three years.

The information contained herein is based on data considered accurate. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof.

Scotts Pressure Wash Inc, assumes no responsibility for personal injury or property damage to vendees or users or third parties, caused by the material.

Such vendees or users assume all risks with the use of the material.