


# Safety Data Sheet

Section 1. Identification		
<b>Product Identifier</b>	<b>Chem-Bright</b>	<b>Version: 7</b> <b>Effective Date: 8 December 2020</b>
<b>Other Means Of Identification</b>	Not applicable	
<b>Initial Supplier Identifier</b>	Chemfax Products Ltd. 11444 – 42 Street SE Calgary, AB T2C 5C4 Tel: 403-287-2055	
<b>Recommended Use And Restrictions On Use</b>	Aluminium Cleaner Industrial use	
<b>Product Family</b>	Blend	
<b>Emergency Phone</b>	1-855-887-2055 Monday - Friday 8:00am - 4:30pm MST	

Section 2. Hazard Identification	
<b>Hazard Classification</b>	 <p>Skin Corrosion/Irritation – Category 1B            Eye Damage/Irritation – Category 1            Acute Toxicity (Oral) - Category 3</p>
<b>Signal Word</b>	Danger
<b>Hazard Statement</b>	Causes severe skin burns and eye damage. Toxic if swallowed.
<b>Precautionary Prevention Statement</b>	Do not inhale dust or mist. Wash hands thoroughly after handling. Wear protective gloves, clothing, and eye & face protection. Do not eat, drink or smoke when using this product.
<b>Precautionary Response Statement</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTRE. IF ON SKIN (or hair): Immediately take off all contaminated clothing. Rinse skin with water or shower if on clothes. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes.

## Safety Data Sheet

	Remove contact lenses if present and easy to do. Continue rinsing. Specific Treatment: First aid procedures require medical personnel.
<b>Precautionary Storage Statement</b>	Store locked up.
<b>Precautionary Disposal Statement</b>	Dispose of contents / container in accordance with local regulations.
<b>Other Hazards</b>	None

### Section 3. Composition / Information on Ingredients

Chemical Name	Common Name or Synonyms	CAS NO. and Other Unique Identifiers	% by weight
Sulphuric acid	Oil of vitriol	7664-93-9	10 – 30
Ammonium Bifluoride	Ammonium hydrogen difluoride	1341-49-7	1 - 10
Balance of ingredients are considered non-hazardous and constitute a proprietary blend			

### Section 4. First-Aid Measures

<b>Eye Contact</b>	Immediately flush eyes with water for 30 minutes, preferably 60 minutes. Hold eyelids open during flushing. If irritation persists, repeat flushing. Do not transport victim until flushing period is complete, unless flushing can be continued during transport. Seek IMMEDIATE medical attention.
<b>Skin Contact</b>	Prompt removal of the material from the skin is essential. Remove all contaminated clothing and wash exposed areas with copious amounts of water for a minimum of 30 minutes and up to 60 minutes. Obtain IMMEDIATE medical attention.
<b>Inhalation</b>	Remove victim to fresh air. Obtain IMMEDIATE medical attention.
<b>Ingestion</b>	IMMEDIATELY contact your local Poison Control Centre. If the victim is conscious, alert, and non-convulsing, rinse mouth out and give 1 to 2 glasses of milk (water may be used in place of milk but will not be as effective). If spontaneous vomiting occurs, have the victim lean forward to avoid aspiration of the vomit, rinse mouth and administer more milk or water. Do not induce vomiting. Seek IMMEDIATE medical attention.
<b>Most Important Symptoms and Effects Both Acute and Delayed</b>	Corrosive to skin and eye. Highly toxic. Causes severe burns by all routes of exposure.

## Safety Data Sheet

<b>Immediate Medical Attention and Special Treatment</b>	<p>Do not attempt to neutralize the acid with a weak base as the exothermic reaction may extend the corrosive injury. Do not use buffering agents (antacids) as they can produce significant exothermic reaction without significantly altering the pH.</p> <p>Perforation of the esophagus may lead to mediastinitis or peritonitis and resultant complications. Mucosal injury following ingestion of this corrosive material may contraindicate the induction of vomiting, similarly, if gastric lavage is performed, intubation should be done with great care. If ingestion is suspected an esophagoscopy should be performed as soon as possible. Scope should not be passed beyond the first burn due to risk of perforation.</p>
--	--

<b>Section 5. Fire-Fighting Measures</b>	
<b>Suitable and Unsuitable Extinguishing Media</b>	Do not use water. Use media appropriate for surrounding fire.
<b>Hazardous Combustion Products</b>	Thermal combustion products are toxic and may include oxides of sulphur and irritating gases.
<b>Specific Hazards Arising From the Product</b>	Liberates hydrogen fluoride which is highly corrosive and toxic. Gives off hydrogen by reaction with metals.
<b>Special Protective Equipment and Precautions for Fire-Fighters</b>	<p>Fire-fighters should wear self-contained breathing apparatus and full protective clothing. Use water spray to cool containers and structures exposed to fire.</p> <p>Avoid direct contact of this product with water as this can cause a violent exothermic reaction. Closed containers exposed to heat may explode. Reacts with most metals to produce hydrogen gas which could make an explosive mixture with air.</p>

<b>Section 6. Accidental Release Measures</b>	
<b>Personal Precautions, Protective Equipment and Emergency Procedures</b>	Any person in the area of the spill should be fully equipped with protective equipment – chemical resistant clothing, footwear, gloves, safety glasses and respirator. Evacuate personnel to safe area. Keep people away from and upwind of spill/leak.
<b>Environmental Precautions</b>	Do not allow to enter the storm water systems or surface drains. Dike and contain any spill.
<b>Methods and Materials for Containment and Clean Up</b>	Do not use any combustible material as an absorbent (i.e. sawdust). Spilled material may cause floors and contact surfaces to become slippery. Residues or material that cannot be recovered must be neutralized with soda ash or sodium bicarbonate (final pH should be 6 to 9). Neutralization is expected to be exothermic with vigorous effervescence.

## Safety Data Sheet

<b>Section 7. Handling and Storage</b>	
<b>Precautions For Safe Handling</b>	Corrosive material, handle with care. Good housekeeping practices should be in place. Containers exposed to heat may be under internal pressure. These should be cooled and carefully vented before opening, protective wear should be worn. When diluting, add small amounts of the product to water to avoid spattering. Never add water to this product.
<b>Conditions For Safe Storage</b>	Store in a cool, well ventilated area. Keep containers closed when not in use. Ensure product segregation measures are in place, keep away from incompatible materials. Containment for spillage should be in place with acid resistant coatings.

<b>Section 8. Exposure Controls / Personal Protection</b>				
<b>Control Parameters</b>	<b>TWA: 8 Hr</b>	<b>STEL: 15 min</b>	<b>Ceiling</b>	<b>IDLH *</b>
Sulphuric acid	1 mg/m <sup>3</sup> OSHA (PEL)			15 mg/ m <sup>3</sup> (NIOSH)
Ammonium Bifluoride	2.5 mg/m <sup>3</sup> (as F) OSHA PEL * Immediately Dangerous to Life and Health			500 mg/m <sup>3</sup>
<b>Exposure Controls</b>	Local exhaust ventilation			
<b>Appropriate Engineering Controls</b>	Ensure that eyewash stations and safety showers are close to the workstation location.			
<b>Individual Protective Measures</b>				
<b>Eye/Face Protection</b>	Safety glasses.			
<b>Skin Protection</b>	Chemical resistant coveralls, gloves and footwear.			
<b>Respiratory Protection</b>	Air purifying respirator fitted with cartridges for acid gases / particulate.			

<b>Section 9. Physical and Chemical Properties</b>	
<b>Appearance</b>	Pale yellow liquid
<b>Odour</b>	Pungent
<b>Odour Threshold</b>	Not available.
<b>pH</b>	2.0
<b>Flash Point</b>	> 100 C
<b>Boiling Point and Boiling Range</b>	No data

## Safety Data Sheet

<b>Melting Point and Freezing Point</b>	No data
<b>Evaporation Rate</b>	No data
<b>Flammability (solid, gas)</b>	No data
<b>Upper and Lower flammability or Explosive Limits</b>	No data
<b>Vapour Pressure</b>	No data
<b>Vapour Density</b>	No data
<b>Relative Density</b>	1.156
<b>Solubility</b>	Soluble
<b>Partition co-efficient, n-Octanol/Water</b>	No data
<b>Auto-ignition Temperature</b>	No data
<b>Decomposition Temperature</b>	No data
<b>Viscosity</b>	No data

<b>Section 10. Stability and Reactivity</b>	
<b>Reactivity</b>	Reacts with metals and bases
<b>Chemical Stability</b>	Stable
<b>Possibility of Hazardous Reactions</b>	Will not occur
<b>Conditions to Avoid</b>	Excessive temperatures.
<b>Incompatible Materials</b>	Violently reactive with: sodium chlorite, reducing agents, strong bases, combustibles, metals, alkali metals and their hydrides, organic materials, aluminium and its alloys, copper and its alloys, cast iron, mild steel, and titanium.
<b>Hazardous Decomposition Products</b>	At elevated temperatures, hydrogen fluoride gases may be involved in contact with metals. Material will react with metals as listed above and produce hydrogen gas.

<b>Section 11. Toxicological Information</b>			
<b>Component Toxicity</b>	<b>LD50 Oral</b>	<b>LD50 Dermal</b>	<b>LC50 Inhalation</b>
Sulphuric Acid	2140mg/kg (Rat)	No data	255 mg/m <sup>3</sup> (Rat) 4h
Ammonium Bifluoride	60mg/kg (Rat)		
<b>Likely Routes of Exposure</b>			
<b>Skin:</b>	May cause severe, deep and painful burns if not washed off immediately. Toxic effects are secondary and may be delayed.		
<b>Eyes:</b>	May cause corneal scarring and clouding. Glaucoma, cataracts and permanent blindness may occur.		

## Safety Data Sheet

<b>Inhalation:</b>	May cause severe irritation of the nose, throat and respiratory tract. Repeated and prolonged exposure may cause a productive cough, running nose, bronchopneumonia, pulmonary oedema (fluid build-up in the lungs), and reduction of pulmonary function
<b>Ingestion:</b>	May causes severe burning and pain in the mouth, throat and abdomen. Vomiting, diarrhea and perforation of the esophagus and stomach lining may occur. Prolonged and repeated exposure may cause discolouration and erosion of the teeth.
<b>Acute Toxicity Estimate (ATE)</b>	No data
<b>STOT (Specific Target Organ Toxicity) – Single Exposure</b>	No data
<b>Aspiration Toxicity</b>	No data
<b>STOT (Specific Target Organ Toxicity) – Repeated Exposure</b>	No data
<b>Skin Corrosion / Irritation</b>	Corrosive
<b>Serious Eye Damage / Irritation</b>	Risk of serious damage
<b>Respiratory or Skin Sensitization</b>	Did not cause sensitization on laboratory animals.
<b>Carcinogenicity</b>	No direct link has been established, but the World Health Organization has concluded that exposure to Sulphuric acid fumes and vapours may be linked to cancer of the larynx and possibly the lung.
<b>Reproductive Toxicity</b>	
- <b>Sexual function and Fertility</b>	No data
- <b>Development of Offspring</b>	No data
- <b>Effects on or via Lactation</b>	No data
<b>Germ Cell Mutagenicity</b>	No evidence of mutagenic effects
<b>Interactive Effects</b>	No data
<b>Other Information</b>	Toxic effect linked with corrosive properties.

### Section 12. Ecological Information

<b>Ecotoxicity</b>	Sulphuric acid: harmful to aquatic life at low concentrations and is primarily associated with low pH.
--------------------	--

## Safety Data Sheet

	24 hr TLm = 24.5 mg/L (Bluegill) 48 hr TLm = 49 mg/L (Bluegill) 48 hr LC50: 100 – 300 mg/L (Flounder)
<b>Persistence and Degradability</b>	Does not bioaccumulate
<b>Bioaccumulative Potential</b>	Will not bioaccumulate
<b>Biodegradability</b>	Not available
<b>Mobility in Soil</b>	Not available
<b>Other adverse effects</b>	None

### Section 13. Disposal Consideration

<b>Disposal Considerations</b>	Dispose of contents/container in accordance with local regulations.
--------------------------------	---

### Section 14. Transport Information

<b>UN Number</b>	UN2796
<b>UN Proper Shipping Name</b>	Sulphuric acid solution
<b>Transport Hazard Class(es)</b>	8
<b>Packaging Group</b>	II
<b>Environmental Hazards</b>	Not applicable
<b>Bulk Transport</b>	Not applicable
<b>Special Precaution</b>	Not applicable
<b>DOT Erg#</b>	157

### Section 15. Regulatory Information

<b>Canada – DSL Inventory</b>	All components of this product are either on the Domestic Substances List (DSL), Non-Domestic Substances List (NDSL), or exempt
<b>TSCA</b>	All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt
<b>Additional Information</b>	None



Section 16. Other Information	
<b>NFPA Rating</b>	Health-3/ Flammability-0/Reactivity-2/Special Hazard-Not applicable
<b>HMIS Rating</b>	Health-3/Flammability-0/Reactivity-2/Personal Protection-See Section 8.
<b>Prepared by:</b>	Chemfax Products Ltd., Technical Department
<b>Date Prepared:</b>	5 January, 2012
<b>Date of Latest Revision:</b>	8 December 2020
<b>Disclaimer:</b>	
<p>Notice to reader</p> <p>To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever 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 hazards that exist.</p> <p>Chemfax Products Ltd. expressly disclaims all expressed or implied warranties of merchantability and fitness for a particular purpose with respect to the product provided.</p>	