

**MATERIAL SAFETY DATA SHEET  
7001AM**

Canutec 1-613-996-6666 (24 hours)

**1. CHEMICAL PRODUCT AND COMPANY INFORMATION**

Product identification : 7001AM  
Product name : Glass marking paste  
Chemical family : Mixture  
Supplier / Manufacturer : Auto-Chem Inc.  
33 Royal  
LeGardeur, QC, Canada  
J5Z 4Z3  
Tel : 450-654-9292  
Fax : 450-654-0633  
www.autochem.com  
Contact : Jean Dagenais

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

<u>Ingredient</u>	<u>CAS</u>	<u>Percentage</u>	<u>Exposure limits</u>
Ammonium bifluoride	1341-49-7	15 – 40	LD50 130 mg/kg, rat, oral TWA TLV 2.5 mg/m <sup>3</sup> , ACGIH TWA PEL 2.5 mg/m <sup>3</sup> , OSHA
Trisodium hexafluoroaluminate	15096-52-3	15 – 40	LC50 1 mg/m <sup>3</sup> /6hrs, rat LD50 >5000 mg/kg, rat, oral TWA TLV 2.5 mg/m <sup>3</sup> , ACGIH TWA PEL 10 mg/m <sup>3</sup> , OSHA
Polystyrene sulfonic acid	28210-41-5	1 – 5	No data.

**3. HAZARDS IDENTIFICATION**

Routes of entry: Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects :

Eye contact : Liquid and vapour can cause an irritation or burn of the cornea. May cause permanent eye damage.

Skin contact : Liquid and vapour can cause burns which may not be immediately be painful or visible. The product can penetrate the skin and attack tissues and bones. Burns over a large area (25 sq. in.) can cause hypocalcemia and other toxic effects which can be fatal. Can cause burns in case of prolonged contact. May cause permanent damage.

Inhalation : Can irritate the nose, throat and respiratory system. Symptoms can appear after several hours. Severe exposure can cause burns of the nose and throat, inflammation of the lungs and pulmonary oedema. Other toxic effects can appear, including hypocalcemia, which must be treated immediately. Irritation and burning effect may not appear immediately. May produce signs and symptoms of toxicity similar to those described for swallowing.

Ingestion : Ingestion can cause severe burns of the mouth, throat and stomach and can be fatal. Ingestion can cause hypocalcemia and systemic poisoning is possible unless medical

treatment is promptly initiated. May cause abdominal discomfort, nausea, vomiting and diarrhoea. Symptoms may also include weakness, tremors, shallow respiration, carpopedal spasm, convulsions and coma. May cause brain and kidney damage. Affects heart and circulatory system. Death may be caused by respiratory paralysis.

Potential chronic health effects :

Prolonged exposure can cause changes in bones and articulations in humans. Prolonged contact can cause burns.

Eye contact : Overexposure can cause irreversible damages to the cornea.

Skin contact : See above.

Inhalation : See above.

Ingestion : Harmful if swallowed.

#### **4. FIRST AID MEASURES**

Eyes : Flush eyes with gently flowing water for at least 15 minutes or until the chemical is removed, while holding eyelids open. Obtain immediate medical attention.

Skin : In case of direct contact, rinse with running water 15 to 20 minutes. Remove contaminated clothing and wash with soap and water. Apply calcium gluconate gel to the affected area, rub in until locally free of pain and then continue for 15 minutes. If possible, apply a dressing soaked in 20% calcium gluconate solution. If burns cover large areas, the patient should be completely bathed in a least 1% gluconate solution. Obtain immediate medical attention.

Inhalation : Can irritate the nose, throat and respiratory system. Symptoms can appear after several hours. Severe exposure can cause burns of the nose and throat, inflammation of the lungs and pulmonary oedema. Other toxic effects can appear, including hypocalcemia, which must be treated immediately.

Ingestion : Give milk or water. Do not induce vomiting. Never give anything by mouth to an unconscious or convulsing person. In case of respiratory or cardiac arrest, start cardio-pulmonary resuscitation and obtain medical attention. Get immediate medical attention.

Note to physician: For burns over a large area, ingestion or severe inhalation, systemic effects can appear. Check for and treat hypocalcemia, cardiac arrhythmia, hypomagnesemia, and hyperkalemia. Treat as chemical pneumonia.

#### **5. FIRE FIGHTING MEASURES**

Flash point : Does not apply.

Auto-ignition temperature : Does not apply.

Flammability limits – air (%) : LEL: UEL:

Extinguishing media : Suitable for cause of fire.

Protective equipment : Firefighters must wear adequate protective equipment and NIOSH/MSHA approved autonomous masks.

Special hazards: Flammable hydrogen gas may be produced on prolonged contact with metals and moisture. Water run-off and vapour cloud may be corrosive.

Hazardous combustion

materials : Ammonia, hydrogen, nitrogen oxides, hydrofluoric acid, carbon oxides, sulphur oxides.

Recommendations: Move containers away from the source of fire if safe to do so. Do not disperse product with high pressure water jets. Dam water run-off. Cool containers with water.

## 6. ACCIDENTAL RELEASE MEASURES

Wear appropriate protection equipment.

Limit access of spill area to qualified personnel. Good ventilation is necessary. Do not touch spilled product. Prevent spilled product from reaching sewers or waterways. Stop or restrain leak if safe to do so.

Small spill : Contain and absorb product with a non-reactive absorbent material. Neutralize with a weak solution of sodium bicarbonate. Clean with water. Store residues in a closed container and identify for elimination.

Large spill : Contain and absorb product with a non-reactive absorbent material. Neutralize with a weak solution of sodium bicarbonate. Clean with water. Store residues in a closed container and identify for elimination.

## 7. HANDLING AND STORAGE

Handling : Do not breathe vapours or aerosol. Avoid contact with eyes or skin by wearing appropriate equipment. Avoid contact with incompatible materials. Wash carefully after handling the product. Clean contaminated clothing before reuse. Empty containers may contain residue. Eliminate according to current regulations.

Storage : Store in a cool and dry area, well ventilated and away from incompatible products. Keep from freezing.

## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering controls : Use local ventilation to control vapours and aerosols.

Personal protection equipment for routine handling :

Eye : Splash goggles.  
Skin : Long sleeves, lab coat.  
Gloves : Impermeable gloves.  
Inhalation : If necessary, use NIOSH/MSHA approved mask.

Personal protection equipment for spills :

Eyes : Splash goggles.  
Skin : Impermeable clothes.  
Gloves : Impermeable gloves, chemical resistant.  
Inhalation : NIOSH/MSHA approved mask. If in an enclosed space, an autonomous mask is recommended.

Note : These precautions are for room temperature handling. Use at elevated temperatures or aerosol spray applications may require added protection.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : Gel.  
Colour : Off white.

Odour :	Acid.
pH @ 1% :	3.65
Relative density (g/cm <sup>3</sup> ) :	1.341
Boiling point :	Not determined.
Freezing point :	Not determined.
Vapour pressure :	Not determined.
Volatiles (weight) :	Not determined.
Solubility (water) :	Soluble.
VOC (%) :	Not determined.
Viscosity :	Not determined.

## 10. STABILITY AND REACTIVITY

Chemical stability :	Stable.
Hazardous polymerization :	None known.
Conditions to avoid :	Acids or alkalis.
Materials to avoid :	Reaction with some metals can cause the formation of flammable hydrogen gas. Alkalis, strong oxidants.
Dangerous decomposition products :	Ammonia, hydrogen, nitrogen oxides, hydrofluoric acid, carbon oxides, sulphur oxides.

## 11. TOXICOLOGICAL INFORMATION

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### Potential acute health effects :

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**Ingestion :** Ingestion can cause severe burns of the mouth, throat and stomach and can be fatal. Ingestion can cause hypocalcemia and systemic poisoning is possible unless medical treatment is promptly initiated.

### Potential chronic health effects :

Carcinogenic effects: None known.

Mutagenic effects: None known.  
Teratogenic effects: None known.

Target organs: One of the components of the product can cause changes in bones and articulations in humans.

## 12. ECOLOGICAL INFORMATION

Do not allow product or runoff from fire control to enter storm or sanitary sewers, lakes, rivers, streams or public waterways. Block off drains and ditches. Spill areas must be cleaned and restored to original condition or to the satisfaction of authorities. May be harmful to aquatic life. Some of the components have potential for bioaccumulation.

## 13. DISPOSAL CONSIDERATIONS

Waste disposal method : Dispose according to municipal, provincial and federal regulations.  
Contaminated packaging : According to municipal, provincial and federal regulations.

## 14. TRANSPORT INFORMATION

Regulatory Information	Shipping name	UN	Class	PG
TDG Classification	Corrosive liquid, toxic n.o.s. (Ammonium bifluoride)	2922	8 (6.1)	II

## 15. REGULATORY INFORMATION

WHIMS (Canada):  
D1A Materials causing immediate and serious toxic effects.  
D2B Materials causing other toxic effects.  
E Corrosive materials.

DSL : All components of this product are either on the Domestic Substance List (DSL), the Non-Domestic Substance List (NDSL) or exempt.

TSCA : U.S. TSCA Inventory Status : All components of this product are either on the Toxic Substances Control Act Inventory List or exempt.

## 16. OTHER INFORMATION

HMIS rating (U.S.A.) :		National Fire Protection Association (U.S.A.)	
Health:	3	Health:	3
Fire hazard:	1	Flammability:	1
Physical hazard:	1	Reactivity:	1
Reactivity:	1	Special:	Corrosive
Personal protection :	C		

Prepared by : Danielle Gonthier, chemist

Date : June 2<sup>nd</sup>, 2010

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