



**MATERIAL SAFETY DATA SHEET**

MSDS No.: 00020301  
Date: 08/30/2004  
Supercedes: 10/30/2000

**BRITE PLUS MX**  
(Aluminum & Stainless Steel Cleaner)

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier:** Brite MX  
**General Use:** Aluminum & Stainless Steel Cleaner (Ready-to-Use)  
**Product Description:** Blue Liquid with Citrus Odor

**MANUFACTURER**  
Dakota AG Innovations, LLC  
40690 253rd Street  
Mitchell, South Dakota 57301  
605-996-7800

**EMERGENCY TELEPHONE NUMBERS:**  
ChemTrec (800) 424-9300

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	wt %	CAS Registry #
Hydrofluoric Acid	1%	7664-39-5

**OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200):**

EXPOSURE LIMITS 8 hrs TWA (ppm)		
OSHA PEL	ACGIH-TLV	OTHER
3 ppm	3 ppm	

Hydrofluoric Acid

**3. HAZARD IDENTIFICATION**

**EMERGENCY OVERVIEW**

This is a diluted material. The level of active ingredients in the product are either 1% or less than 1% by wt. Liquid may cause eye irritation if it comes in contact with the eyes. Flush eyes with plenty of water for at least 15 minutes. Seek immediate medical attention if irritation persists.

**EYE CONTACT:**

Liquid can cause irritation and burns of the eye and eye lids if splashed into the eyes. If the chemical is not removed immediately, permanent damage may result.

**SKIN CONTACT:**

The mixture is corrosive. Prolonged skin contact is expected to cause drying and irritation with prolonged, repeated contact.

**FIRE FIGHTING EQUIPMENT:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. For small outdoor fires, which may be easily extinguished with a portable fire extinguisher, use of any SCBA may not be required.

**HAZARDOUS COMBUSTION PRODUCTS:**

May emit corrosive fumes or fluorides.

**6. ACCIDENTAL RELEASE MEASURES**

**LAND SPILL RESPONSE:**

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation and personal protective equipment.

**WATER SPILL:**

Product is miscible with water. Material is biodegradable. Material spilled in limited quantities will naturally dilute and should result in no adverse effect.

**RECOMMENDED DISPOSAL:**

Mixture may have an acidic pH. Verify with local regulatory agencies concerning sewer disposal of waste material.

**7. HANDLING AND STORAGE**

**STORAGE TEMPERATURE:** Ambient

**STORAGE PRESSURE:** Atmospheric

**GENERAL:**

- Keep container closed.
- Store in a cool, well-ventilated place away from incompatible materials.
- Keep away from heat, sparks and flame.
- Protect material from direct sunlight
- Follow all MSDS/label warnings; even after container is emptied.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**ENGINEERING CONTROLS:**

Provide eyewash and hand washing facilities.

**PERSONAL PROTECTION:**

None required, if airborne vapor concentrations are maintained below the component respective threshold limit values and there is no direct skin contact with the material.

**INGESTION:**

May cause gastrointestinal irritation.

**INHALATION:**

Concentrations of active ingredients in the mixture are not sufficiently volatile nor in sufficient concentration to produce an inhalation hazard.

**CHRONIC:**

Prolonged or repeated exposure to lower concentrations of hydrofluoric acid may cause changes in the bones. Exposure to low concentrations of vapors of hydrogen fluoride may also cause chronic irritation and congestion of the nose, throat, and bronchial tubes.

**4. FIRST AID MEASURES**

**INHALATION:**

Remove to fresh air. Obtain medical attention if symptoms persist.

**EYE CONTACT:**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lens. Do not use an eye ointment. Seek immediate medical attention.

**SKIN CONTACT:**

If the material gets on the skin, immediately flush the contaminated skin with water for a considerable time. If clothing is affected, remove clothing and flush skin with water. Apply a neutralising agent (calcium gluconate gel) to the affected area after the acid has been washed off. Seek medical attention.

**INGESTION:**

DO NOT INDUCE VOMITING. If conscious, give person large quantities of water to dilute the material. Seek immediate medical attention.

**5. FIRE FIGHTING MEASURES**

**Flashpoint and Method:** Unknown  
**Flammable Limits:** Unknown  
**Autoignition Temperature:** Unknown

**GENERAL HAZARD:**

Product is water based and not expected to produce a significant fire hazard.

**FIRE FIGHTING INSTRUCTIONS:**

Either allow fire to burn out under controlled conditions or extinguish with foam or dry chemical. Use water spray to cool fire exposed surfaces. Avoid spraying water directly into storage containers due to danger of boil over.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Vapor Pressure:</b> Not Available	<b>Vapor Density:</b> Not Available
<b>Specific Gravity:</b> 1.0	<b>Evaporation Rate:</b> Not Available
<b>Solubility in Water:</b> Fully Miscible	<b>Freezing Point:</b> Not Available
<b>pH:</b> Acidic	<b>Odor:</b> Pleasant Citrus
<b>Boiling Point:</b> Not Available	<b>Appearance:</b> Blue
<b>Viscosity:</b> Not Available	<b>Physical State:</b> Liquid

**10. STABILITY AND REACTIVITY**

**GENERAL:**

This product is stable and hazardous polymerization will not occur.

**INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:**

Reactive with oxidizing agents, glass and metals.

**HAZARDOUS DECOMPOSITION:**

None

**11. TOXICOLOGICAL INFORMATION**

**TOXICITY TO ANIMALS:**

- Acute oral toxicity (LD50): 560 mg/kg rat (EGBE)
- Acute dermal toxicity (LD50): 1200 ml/kg guinea pig (EGBE)
- Inhalation (4 hr) LD50: 486 ppm rat (EGBE)
- LC50 (5 min): 4970 ppm rat (HF)
- Acute oral (LD50): 1530 mg/kg rat (H<sub>3</sub>PO<sub>4</sub>)
- Dermal LD50 rat: 2740 mg/kg (H<sub>3</sub>PO<sub>4</sub>)

**CHRONIC EFFECTS ON HUMANS:**

Prolonged or repeated exposure to hydrogen fluoride vapor may cause changes in the bones. Exposure to low concentrations of vapors of hydrogen fluoride may also cause chronic irritation and congestion of the nose, throat and bronchial tubes.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity:** Not Available  
**BOD5 and COD:** Not Available

**PRODUCTS OF BIODEGRADATION:**

Products of biodegradation are less toxic than the product itself.

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**13. DISPOSAL CONSIDERATIONS**

This product has a corrosive pH and would require neutralization prior to disposal. Consult agencies prior to disposal.

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**14. TRANSPORT INFORMATION**

DOT (Department of Transportation)

PROPER SHIPPING NAME: None

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**15. REGULATORY INFORMATION****TSCA (Toxic Substance Control Act):**

Components of this product are listed on the TSCA inventory.

**SARA Title III (Superfund Amendments and Reauthorization Act):**

Components of this product are listed under this statute.

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

Components of this product are listed under this statute.

**STATE CHEMICAL LISTS**

Pennsylvania HSSF List - Components Listed (HF, H3PO4).

New Jersey Right-to-Know Hazardous Substance List - Components Listed (HF, H3PO4)

California Proposition 65 - No components Listed.

Massachusetts Substance List - Components Listed (HF, H3PO4)

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**16. OTHER INFORMATION****NATIONAL FIRE PROTECTION ASSOCIATION**

Health: 1  
Fire: 0  
Reactivity: 0

**REVISION SUMMARY:**

Created on August 30, 2004 by:

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Saint Paul, Minnesota 55114  
(651) 642-1150

THE INFORMATION RELATES TO THIS SPECIFIC INFORMATION. IT MAY NOT BE VALID FOR THIS MATERIAL IF USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY ONESELF AS TO THE SUITABILITY AND COMPLETENESS OF THIS INFORMATION FOR HIS OWN PARTICULAR USE. 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.