

SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

MANUF / DIST: DETAILS MANUFACTURING AND DISTRIBUTING
504 E. LINCOLN WAY
AMES, IOWA 50010

PREPARER / CONTACT: LUKE STAGG
PREPARER PHONE: 515-233-6555
24 HOUR EMERGENCY PHONE: INFOTRAC 1-800-535-5053

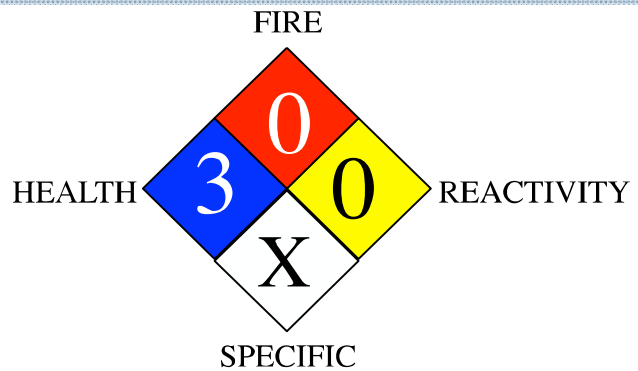
PRODUCT IDENTIFIER: **BRAKE AWAY RTU**
RECOMMENDED USE: FOR INDUSTRIAL USE ONLY
FORMULA: PROPRIETARY RESTRICTIONS ON USE: *SEE
PRODUCT CODE: NOT APPLICABLE INFORMATION ON THIS SHEET*
INTENDED USE: AUTOMOTIVE CLEANING PRODUCT

SECTION 2 - HAZARDOUS IDENTIFICATION

HAZARDOUS IDENTIFICATION SYSTEM:

HAZARD WARNING

- 4 - Extreme
- 3 - High
- 2 - Moderate
- 1 - Slight
- 0 - Insignificant
- X- See Section IV & V of SDS Sheet



Signal Word: **DANGER!** FOR HEALTH EFFECTS (Acute and Chronic): SEE SECTION 11

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

NAMES OF HAZARDOUS INGREDIENTS: See CFR29§1910.1200 (i)-(13) [exact % withheld as trade secret]

CHEMICAL / COMMON NAME	CAS#	PERCENTAGE	PEL-OSHA	TLV-ACGIH
Ammonium BiFluoride	1341-49-7	>1	2.5mg/m ³	2.5mg/m ³
Sulfuric Acid	7664-93-9	>1	1mg/m ³	1mg/m ³
2 Butoxy Ethanol (Skin)	111-76-2	>1	50PPM	25PPM

THIS PRODUCT HAS NO CARCINOGENS

HAZARDOUS DECOMPOSITION PRODUCTS: None

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SECTION 4 - FIRST AID MEASURES

EMERGENCY FIRST AID PROCEDURES:

- a) Skin: Immediately flush skin with lots of running water for at least 30 minutes. Remove contaminated clothing and shoes, wash before reuse.
- b) Eyes: Flush immediately with large quantities of running water for at least 15 minutes. Consult physician.
- c) Inhalation: If affected, remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet and get medical attention.
- d) Ingestion: Call physician immediately. If conscious, give lots of water or milk. Do not give anything by mouth to an unconscious or convulsing person.

SECTION 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: SEE SECTION 8 OTHER ADDITIONAL COMMENTS

SPECIAL FIRE FIGHTING PROCEDURES: Clear area of all personnel. Do not enter confined area without full bunker gear. See additional comments section.

UNUSUAL FIRE AND EXPLOSION HAZARDS: N/A

SPECIAL FIRE FIGHTING OR SPILL PROCEDURES ALWAYS WEAR FULL BUNKER GEAR, AND BREATHING APPARATUS. COOL CONTAINERS WITH WATERFOG SPRAY. HEAVY STREAMS COULD SPREAD, AND SPLASH ACID ON OTHERS.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Large spill: Absorb the spill with suitable absorbent. Lime slurry, soda ash, or other alkali can neutralize the acid. Wash the residue down the drain or pit with plenty of water.

Small spill: Can be flushed down the drain with plenty of water.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

- a) Do not store under freezing conditions or above 120 degrees F.
- b) Protect from physical damage and keep tightly closed.
- c) Do not store near alkalis or alkaline materials and oxidizers.
- d) Containers mark: Ammonium BiFluoride solution, UN-2817, Corrosive, Poison.

INCOMPATIBILITY (Material To Avoid): Alkalis, silicones, metals, and organics.

MAINTENANCE PRECAUTIONS: When working with FLAMMABLE material electrically ground all equipment and use only non-sparking tools.

OTHER PRECAUTIONS: Containers, even those that have been emptied will retain product residue and vapors. Always obey hazard warnings. Avoid dropping full containers, they may burst, and cause spills.

EYE, FACE, AND BODY PROTECTION SHOULD ALWAYS BE WORN WHEN HANDLING OR USING THIS PRODUCT.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

HEALTH EFFECTS - a. Fluorosis in bone and joints. b. Skin tissues can be deteriorated with exposure. Dermatitis, irritation, burning, pain can be prevented with proper handling, and protective equipment and clothing. Those personnel using this product should be familiar with the use, and cautioned to the severity of damage that could be caused by mis-handling

WORK PRACTICES: Eye wash fountain and safety shower should be easily accessible. Discard properly. Do not use steel wool for application. Use stainless steel brushes, always wear protective gloves, face and eye protection.

HYGIENIC PRACTICES: Avoid contact with eyes, skin and clothing. Avoid inhalation of product vapors. Wash

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thoroughly after handling and before eating, drinking or smoking. Remove contaminated clothing promptly and wash thoroughly before reusing.

RESPIRATORY PROTECTION: An appropriate NIOSH approved hydrocarbon canister or respirator for mineral acids.

PROTECTIVE GLOVES: Acid resistant gloves should be worn when using. In case of spills, full protective clothing should be worn.

OTHER PROTECTIVE EQUIPMENT: Skin protection, full length clothing should always be worn when working with this product. Eye wash and quick drench facilities should be readily available in workplace.

OTHER ENGINEERING CONTROLS: None Known

VENTILATION:

LOCAL EXHAUST: Below TLV(s) MECHANICAL (General): N/A

SPECIAL: N/A OTHER: N/A

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Thin Clear Liquid	APPEARANCE:	Clear color
ODOR INFORMATION:	Definite acid odor.	PERCENT VOLATILE BY VOLUME (%):	> 80.00
SPECIFIC GRAVITY (WATER=1):	1.210	SOLUBILITY IN WATER	100%
BOILING POINT (F):	>212	EVAPORATION RATE (WATER=1):	1
VAPOR PRESSURE (mmHg):	N/D	pH	1
VAPOR DENSITY (AIR=1):	N/D	FLAMMABLE LIMITS: LEL=	N/A UEL= N/A
FLASH POINT (Method Used):	None	Melting pt-N/A /freezing pt-	30°F/Relative density N/A

SECTION 10 - STABILITY AND REACTIVITY

THIS PRODUCT IS STABLE, AND HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

SECTION 11 - TOXICOLOGICAL INFORMATION

FOR NUMERICAL MEASURES OF TOXICITY SEE SECTION 3, COLUMNS (PEL-OSHA) AND (TLV-ACGIH)

Acute:

- a) Eyes: Vapors as well as liquid can cause corneal burns or conjunctivitis.
- b) Skin: Vapors as well as liquid can cause severe burns which may not immediately be noticed. Hydrofluoric Acid will penetrate skin and attack protein, subsurface tissue and bone.
- c) Inhalation: Even small amounts, and prolonged breathing of fumes can cause irritation of. Heavy exposure can cause throat burns, lung inflammation and pulmonary edema. Calcium level in body will be depleted if not promptly treated.
- d) Ingestion: Will cause severe mouth, throat and stomach burns kidneys can be affected, can be fatal. Possibility of hypocalcaemia could be fatal, unless medical attention is prompt. **POISON IF INGESTED.**

*****SEE ADDITIONAL COMMENTS SECTION *****

Chronic

Overexposure to Mineral Acids has been found to cause anemia, liver, kidney, and lung damage, hypocalcaemia, blood damage and tissue breakdown in laboratory animals.

PRIMARY ROUTES OF ENTRY:

- a) Skin
- b) Inhalation

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Pre-existing skin, eye and respiratory disorders may be aggravated by exposure to product.

THIS PRODUCT DOES NOT CONTAIN CARCINOGENS: (NTP, IARC, OSHA)

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SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: N/A 100% BIODEGRADABLE ECOTOXICOLOGICAL INFORMATION: N/A

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS: Dispose of according to local, state and federal regulations.

SECTION 14 - TRANSPORT INFORMATION

**AMMONIUM HYDROGENBIFLUORIDE, SOLUTION, 8,
UN-2817, PG II, CORROSIVE, TOXIC (6.1)**

KEEP OUT OF THE REACH OF CHILDREN!

SHIPPING INFO, UN/NA #'s, Secondary container label INFO NECESSARY OR SUGGESTED

SECTION 15 - REGULATORY INFORMATION

UNITED STATES: TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All Ingredients are on the TSCA Inventory or are not required to be listed on the TSCA Inventory.

SECTION 16 - OTHER INFORMATION

IN CLOSE COOPERATION OF THE US GOVERNMENT'S PAPER REDUCTION ACT, AND ALSO IN EFFORT TO PROVIDE FULL AND COMPLETE INFORMATION AS SUGGESTED BY THE OSHA GUIDELINES, AND KEEPING IN ALIGNMENT WITH THE SOCIETY for CHEMICAL HAZARD COMMUNICATION (SCHC) AND WE HAVE BEEN ABLE TO KEEP ALL IN 4 PAGES..

THESE SDS SHEETS ARE WRITTEN IN AN EFFORT TO PROVIDE INFORMATION TO THE WORKER IN THE WORKPLACE AND IN SUCH A WAY IT CAN BE UNDERSTOOD.

We have enjoyed many compliments as to the readability and understandable content, and take great pride in providing these Safety Data Sheets to the use of our customers.

The International Labour Organization has suggested 16 sections of the sheets, and we have re adjusted the 8 part, and rearranged the information, and renamed the sheets from MATERIAL Safety Data Sheets to SAFETY DATA SHEETS. THE INFORMATION CONTAINED HEREIN IS BELIEVED TO BE ACCURATE. IT IS PROVIDED FOR A CONTINUING SAFETY PROGRAM INITIATED BY THE MANUFACTURER/DISTRIBUTOR NAMED ON THIS SHEET. IT IS NOT INTENDED TO CONSTITUTE PERFORMANCE INFORMATION CONCERNING THE PRODUCT. NO EXPRESS WARRANTY, OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE WITH RESPECT TO THE PRODUCT OR THE INFORMATION CONTAINED HEREIN.

Please note that several items were left out of section 9 because they do not affect the worker in the workplace. Partition coefficient: n-octanol/water;
• Auto-ignition temperature; • Decomposition temperature and Odor threshold.