ATTN: SAFETY DIRECTOR
UNIVERSITY OF WISCONSIN WHITewater
P O BOX 296
WHITewater WI 53190-0296

DATE: 05/06/94
CUST#: 523216
PO#: UND-435595

MATERIAL SAFETY DATA SHEET

SECTION 1. -- -- -- -- -- -- CHEMICAL IDENTIFICATION-- -- -- -- -- -- -- --
PRODUCT #: 20836-1
NAME: SILVER TETRAFLUOROBORATE, 98%

SECTION 2. -- -- -- -- -- COMPOSITION/INFORMATION ON INGREDIENTS -- -- -- --
CAS #: 14104-20-2
MF: AGBF
SYNONYMS:
SILVER BOROFLUORIDE * SILVER FLUOROBORATE * SILVER TETRAFLUOROBORATE *

SECTION 3. -- -- -- -- -- HAZARDS IDENTIFICATION -- -- -- -- -- --
LABEL PRECAUTIONARY STATEMENTS
CORROSIVE
CAUSES BURNS.
HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.
TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING.
WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION.

SECTION 4. -- -- -- -- -- FIRST-AID MEASURES-- -- -- -- -- --
IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES.
ASSURE ADEQUATE FLUSHING OF THE EYES BY SEPARATING THE EYELIDS WITH FINGERS.
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
CALL A PHYSICIAN.
WASH CONTAMINATED CLOTHING BEFORE REUSE.
DISCARD CONTAMINATED SHOES.

SECTION 5. -- -- -- -- -- FIRE FIGHTING MEASURES -- -- -- -- -- --
USE EXTINGUISHING MEDIA APPROPRIATE TO SURROUNDING FIRE CONDITIONS.
SPECIAL FIREFIGHTING PROCEDURES

CONTINUED ON NEXT PAGE
PRODUCT #: 208361  NAME: SILVER TETRAFLUOROBORATE, 98%
MF: AGBF4

WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES. UNUSUAL FIRE AND EXPLOSIONS HAZARDS EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6. - - - - - - ACCIDENTAL RELEASE MEASURES - - - - - - - -
EVACUATE AREA.
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.
SNIP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.
AVOID RAISING DUST.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7. - - - - - - HANDLING AND STORAGE - - - - - - - -
REFER TO SECTION 8.

ADDITIONAL INFORMATION
VIOLENT SPONTANEOUS EXPLOSIONS HAVE OCCURRED IN THE PREPARATION OF THE SALT FROM SILVER OXIDE AND BORON TRIFLUORIDE ETHERATE IN NITROMETHANE.

SECTION 8. - - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION - - - - - -
WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY BOBBLES, OTHER PROTECTIVE CLOTHING.
SAFETY SHOWER AND EYE BATH.
USE ONLY IN A CHEMICAL FUME HOOD.
FACESHIELD (8-INCH MINIMUM).
DO NOT BREATH DUST.
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
AVOID PROLONGED OR REPEATED EXPOSURE.
WASH THOROUGHLY AFTER HANDLING.
CORROSIVE, HARMFUL SOLID.
KEEP TIGHTLY CLOSED.
MOISTURE SENSITIVE.
HANDLE AND STORE UNDER NITROGEN.

CONTINUED ON NEXT PAGE
MATERIAL SAFETY DATA SHEET

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: WHITE TO LIGHT TAN POWDER

SECTION 10. STABILITY AND REACTIVITY

INCOMPATIBILITIES: LIGHT SENSITIVE. MAY DECOMPOSE ON EXPOSURE TO MOIST AIR OR WATER. STRONG ACIDS. HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS: HYDROGEN FLUORIDE

SECTION 11. TOXICOLOGICAL INFORMATION


TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

RTECS NO: ED243000
BORATE(1-), TETRAFLUORO-, SILVER (1+)

TOXICITY DATA

LD50: 56 MG/KG

CONTINUED ON NEXT PAGE
MATERIAL SAFETY DATA SHEET  

PRODUCT #: 208361  NAME: SILVER TETRAFLUOROBorate, 98%
MF#: AGBF4

COMPLETE INFORMATION.

SECTION 12. - - - - - - - - - - - - - - ECOLOGICAL INFORMATION - - - - - - - - - - - - - -
DATA NOT YET AVAILABLE.

SECTION 13. - - - - - - - - - - - - - - DISPOSAL CONSIDERATIONS - - - - - - - - - - - - - -
CATALYSTS AND EXPENSIVE METALS SHOULD BE RECOVERED FOR REUSE OR RECYCLING.
OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. - - - - - - - - - - - - - - TRANSPORT INFORMATION - - - - - - - - - - - - - -
CONTACT ALDRICH CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. - - - - - - - - - - - - - - REGULATORY INFORMATION - - - - - - - - - - - - - -
REVIEWS, STANDARDS, AND REGULATIONS
ACGIH TLV-TWA 0.01 MG(AG)/M3  
MSHA STANDARD-AIR: TWA 0.01 MG(AG)/M3
OSHA PEL: TWA 2.5 MG(F)/M3
PEEREC 94.2923.89
OSHA PEL: TWA 2.5 MG(F)/M3
PEEREC 94.2923.89
DEL-Arab Republic of Egypt: TWA 0.01 MG(AG)/M3 JANUARY 1993
DEL-Australia: TWA 0.01 MG(AG)/M3 JANUARY 1993
DEL-Belgium: TWA 0.01 MG(AG)/M3 JANUARY 1993
DEL-Denmark: TWA 0.01 MG(AG)/M3 JANUARY 1993
DEL-Finland: TWA 0.01 MG(AG)/M3; SKIN JANUARY 1993
DEL-The Netherlands: TWA 0.01 MG(AG)/M3 JANUARY 1993
DEL-Philippines: TWA 0.01 MG(AG)/M3 JANUARY 1993
DEL-Switzerland: TWA 0.01 MG(AG)/M3 JANUARY 1993
DEL-United Kingdom: TWA 0.01 MG(AG)/M3 JANUARY 1993
DEL-in Bulgaria, Colombia, Jordan, Korea, New Zealand, Singapore,
Vietnam, Check ACGIH TLV
NIOSH REL TO FLUORIDES: INORGANIC-AIR:10H TWA 2.5 MG(F)/M3
NIOSH* DHHS #92-100,92

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PRODUCT #: 208361  NAME: SILVER TETRAFLUOROBORATE, 98%
MF: AgBF4

No. 1933: HZD X7186; NIS 1: TNE 7; NIS 1: TNE 1445; TFE 230
EPA TSCA CHEMICAL INVENTORY; JUNE 1993
THIS PRODUCT IS SUBJECT TO SARA SECTION 313 REPORTING REQUIREMENTS.

SECTION 16. OTHER INFORMATION

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO
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