ATTN: SAFETY DIRECTOR
UNIVERSITY OF WISCONSIN WHITESTONE
P.O. BOX 296
WHITESTONE WI 53190-0296
DATE: 05/06/94
CUST#: 523215
PO#: UN5-635595

MATERIAL SAFETY DATA SHEET

SECTION 1. -- -- -- -- -- -- C. CHEMICAL IDENTIFICATION

PRODUCT #: 19997-4
NAME: ALUMINUM OXIDE, ACTIVATED, NEUTRAL, BROCKMANN 1, STD GRADE, CA. 150 MESH

CAS #: 1344-28-1
MF #: AL2O3
SYNONYMS
A 1 (SORBENT) * ABRAMAX * ABRAREX * ABRASIT * ACTIVATED ALUMINUM OXIDE * A1-3945 E 1/16" * A1-4126 E 1/16" * ALCOA F 1 * ALNITE * ALON * ALON-T * ALOXITE * ALUMINA * ALUMINA * BETA-ALUMINA * ALPHA-ALUMINA * GAMMA-ALUMINA * BETA-ALUMINA * ALPHA-ALUMINA * ACGRH, OSHA * ALUMINA 37 * ALUMINA OXIDE * ALUMINA OXIDE * ALUMINA OXIDE * ALUMINA OXIDE * ALUMINA OXIDE * ALUMINA OXIDE * ALUMINA OXIDE * ALUMINA OXIDE * ALUMINA OXIDE * ALUMINA OXIDE * ALUMINA OXIDE

SECTION 2. -- -- -- -- COMPOSITION/INFORMATION ON INGREDIENTS

CAS #: 1344-28-1
MF #: AL2O3

SECTION 3. -- -- -- -- -- -- HAZARDS IDENTIFICATION

LABEL PRECAUTIONARY STATEMENTS
HARMFUL BY INHALATION. IRITATING TO RESPIRATORY SYSTEM. DO NOT BREATHE DUST. IN CASE OF INSUFFICIENT VENTILATION, WEAR SUITABLE RESPIRATORY EQUIPMENT. WEAR SUITABLE PROTECTIVE CLOTHING.

SECTION 4. -- -- -- -- -- -- FIRST-AID MEASURES

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH copious amounts of water for at least 15 MINUTES.

CONTINUED ON NEXT PAGE
PRODUCT #: 199974  NAME: ALUMINUM OXIDE, ACTIVATED, NEUTRAL, BROCKMANN I, STD GRADE, CA. 150 MESH

CUST#: 523216
PD#: UNI-D35595

HF: AL203

FLUSH SKIN WITH WATER. IF INHALED, REMOVE TO FRESH AIR. IF BREATHING BECOMES DIFFICULT, CALL A PHYSICIAN. WASH CONTAMINATED CLOTHING BEFORE REUSE.

SECTION 5. -- --- --- --- --- --- --- --- --- --- FIRE FIGHTING MEASURES -- --- --- --- --- --- --- --- --- ---

EXTINGUISHING MEDIA
NONCOMBUSTIBLE.
USE EXTINGUISHING MEDIA APPROPRIATE TO SURROUNDING FIRE CONDITIONS.

SPECIAL FIREFIGHTING PROCEDURES
FOR FIRES INVOLVING THIS MATERIAL, DO NOT ENTER ANY ENCLOSURE OR CONFINED FIRE SPACE WITHOUT PROPER PROTECTIVE EQUIPMENT. THIS MAY INCLUDE SELF-CONTAINED BREATHING APPARATUS TO PROTECT AGAINST THE HAZARDOUS EFFECTS OF THE NORMAL PRODUCTS OF COMBUSTION OR OXYGEN DEFICIENCY.


WEAR RESPIRATOR, CHEMICAL SAFETY Goggles, RUBBER BOOTS AND HEAVY RUBBER GLOVES.
Sweep up, place in a bag and hold for waste disposal.
AVOID RAISING DUST.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.


REFER TO SECTION 8.

SECTION 8. -- --- --- --- --- EXPOSURE CONTROLS/PERSONAL PROTECTION -- --- --- --- ---

CHEMICAL SAFETY Goggles, COMPATIBLE CHEMICAL-RESISTANT GLOVES.
MECHANICAL EXHAUST REQUIRED.
NIOSH/MSHA-APPROVED RESPIRATOR IN NONVENTILATED AREAS AND/OR FOR EXPOSURE ABOVE THE ACGIH TLV.
SAFETY SHOWER AND EYE BATH.
DO NOT BREATHE DUST.

CONTINUED ON NEXT PAGE
PRODUCT #: 199974  NAME: ALUMINUM OXIDE, ACTIVATED, NEUTRAL,
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AVOID CONTACT AND INHALATION.
WASH THOROUGHLY AFTER HANDLING.
HARMFUL DUST.
IRRITANT.
KEEP TIGHTLY CLOSED.
STORE IN A COOL DRY PLACE.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES
APPEARANCE AND ODOR:
WHITE POWDER.
SPECIFIC GRAVITY: 3.970

SECTION 10. STABILITY AND REACTIVITY
INCOMPATIBILITIES:
STRONG ACIDS.
STRONG BASES.
PROTECT FROM MOISTURE.
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS.
NATURE OF DECOMPOSITION PRODUCTS NOT KNOWN.

SECTION 11. TOXICOLOGICAL INFORMATION
ACUTE EFFECTS:
HARMFUL IF INHALED.
MAY CAUSE EYE IRITATION.
MAY CAUSE SKIN IRITATION.
MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER
RESPIRATORY TRACT.
PROLONGED EXPOSURE CAN CAUSE:
DAMAGE TO THE LUNGS.
NEUROTOXIC EFFECTS.

RTECS NO: BD120000
ALUMINUM OXIDE (2:3)
TARGET ORGAN DATA
LUNGS, THORAX OR RESPIRATION (TUMORS).
TUMORIGENIC (NEOPLASTIC BY RTECS CRITERIA).

CONTINUED ON NEXT PAGE
MATERIAL SAFETY DATA SHEET

PRODUCT #: 199974 NAME: ALUMINUM OXIDE, ACTIVATED, NEUTRAL,
MF: AL2O3 BROCKMANN I, STD GRADE, CA. 150 MESH

TUMORIGENIC (EQUIVOCAL TUMORIGENIC AGENT BY RTECS CRITERIA)
TUMORIGENIC (TUMORS AT SITE OF APPLICATION)
ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES
(RTECS DATA) IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR
COMPLETE INFORMATION.

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

SECTION 13. - - - - - - DISPOSAL CONSIDERATIONS - - - - - - - -
BURY IN A LANDFILL SITE APPROVED FOR THE DISPOSAL OF CHEMICAL
AND HAZARDOUS WASTE.
OBSEVE 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
AGSIN TLV-TWA 10 MG/M3, TOTAL DUST 85/198 5, 21, 86
MSHA STANDARD: DUST PARTICulates 60/15 3, 9, 71
OSHA PEL: 8H TWA 15 MG/M3, TOTAL DUST 54, 2923, 89
OSHA PEL: 8H TWA 5 MG/M3, RESPIRABLE FRACTION
FERAC 54, 2923, 89
OSHA PEL: FINAL 8H TWA 10 MG/M3, TOTAL DUST
FERAC 54, 2923, 89
OSHA PEL: FINAL 8H TWA 5 MG/M3, RESPIRABLE FRACTION
FERAC 54, 2923, 89
DEL-AUSTRALIA: TWA 10 MG/M3 JANUARY 1993
DEL-BELGIUM: TWA 10 MG/M3 JANUARY 1993
DEL-DENMARK: TWA 10 MG/M3 JANUARY 1993
DEL-FRANCE: TWA 10 MG/M3 JANUARY 1993
DEL-GERMANY: TWA 6 MG/M3 JANUARY 1993

CONTINUED ON NEXT PAGE
CUST#: 523216
PO#: UND-435595

PRODUCT #: 199974
NAME: ALUMINUM OXIDE, ACTIVATED, NEUTRAL
MF: AL2O3

DEL-THE NETHERLANDS: TWA 10 MG/M3, JANUARY 1993
DEL-RUSSIA: STEL 4 MG/M3, JANUARY 1993
DEL-SWITZERLAND: TWA 6 MG/M3, JANUARY 1993
DEL-UNITED KINGDOM: TWA 10 MG/M3, STEL 20 MG/M3, JANUARY 1993
DEL IN BULGARIA, COLOMBIA, JORDAN, KOREA, NEW ZEALAND, SINGAPORE,
VIETNAM CHECK ACGIH TLV
NOS 1974: HZD 20265; NIS 267; TWF 40757; NOS 158; TNE 513250
NOS 1983: HZD 31552; NIS 3; TWF 117; NOS 11; TNE 1034; TFE 116
EPA TSCA CHEMICAL INVENTORY, JUNE 1993
EPA TSCA TEST SUBMISSION (TSCATS) DATABASE, SEPTEMBER 1993
NIOSH ANALYTICAL METHODS: SEE NUISANCE DUST, TOTAL, 0500; NUISANCE
DUST, RESPIRABLE, 0600;
NIOSH ANALYTICAL METHODS: SEE ALUMINUM, 7013

SECTION 16. OTHER INFORMATION

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