

MALLINCKRODT INC.,SCIENCE PRODUCTS DIVISION -- BROMINE, CAT #0441 -- 6810-00-236-5342

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Product Identification  
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Product ID:BROMINE, CAT #0441

MSDS Date:01/01/1987

FSC:6810

NIIN:00-236-5342

MSDS Number: BDLSY

=== Responsible Party ===

Company Name:MALLINCKRODT INC.,SCIENCE PRODUCTS DIVISION

Address:PARIS BYPASS

Box:M

City:PARIS

State:KY

ZIP:40361

Country:US

Info Phone Num:314-982-5000

Eme

rgency Phone Num:314-982-5000

CAGE:62910

=== Contractor Identification ===

Company Name:MALLINCKRODT SPECIALTY CHEMICALS CO

Address:222 RED SCHOOL LANE

Box:City:PHILLIPSBURG

State:NJ

ZIP:08865

Country:US

Phone:908-859-2151

CAGE:62910

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Composition/Information on Ingredients  
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Ingred Name:BROMINE (SARA III)

CAS:7726-95-6

RTECS #:EF9100000

Fraction by Wt: >98%

OSHA PEL:0.1PPM/0.3 STEL

ACGIH TLV:O.1PPM/0.3 STEL;9192

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Hazards Identification  
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Effects of Overexposure:INH:LIQ/VAP CORR TO BODY  
TISSUES;ING:CORR/VOMITG,SORE THROAT;SKIN/EYES:CORR.CAUSES  
PAIN,BLRRD VISION

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First Aid Measures =====

First Aid:INHAL:RMV TO FRESH AIR.IF NEEDED,GIVE CPR/OXYGEN.GET  
MD;INGEST:GIVE SEVRL GL OF WATER.DO NOT INDUCE VOMITG.IMMED GET  
MD;SKIN:FLUSH W/LG QTY OF H\*2O FOR 15 MIN.REMV CONTAMTD CLOTHES.GET  
MD;EYES:IMMED F LUSH W/PLENTY OF H\*2O FOR AT LEAST 15 MIN.GET MD.

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Fire Fighting Measures =====

Flash Point:NONE  
Extinguishing Media:EXTINGUISH W. AGENT SUITABLE FOR SURROUNDING FIRE.  
Fire Fighting Procedures:WEAR SELF-CNTD BRTHG,APP H\*2O SPRAY TO COOL  
CONTR.  
Unusual Fire/Explosion Hazard:NOT CONSDRD AS EXPLSN HAZARD;FUMES ARE  
EMITD WHEN HEATD.VAP CAN FLOW ALONG SURFCS TO LYING AREAS.

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Accidental Release Measures =====

Spill Release Procedures:ESTABLSH PLAN/TRNG FOR EMERGY.KEEP  
U  
PWIND.VENT/EVAC AREA.USE PROTCTV CLOTHG/RESP EQUIP.CONTAIN/RECUR  
SPILLS IF POSS.NEUTRLZ SM SPILLS W/NA\*2S\*2O\*3 SOLN.DIKE LG SPILL  
W/SAND.SPRAY WATER TO 1 INCH.CAREF ULLY,NEUTRLZ VAP IN AIR W/ANHYD  
NH\*3(SEE DISPOSL)\*

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Handling and Storage =====

Handling and Storage Precautions:KEEP IN TIGHTLY CLOSED CONTNRS AT  
COOL,DRY,VENTILATED PLACE.PROTECT AGAINST PHY DAMAGE.KEEP ABOVE 20F  
TO AVOID FREEZING BUT AVOID HEATG ABOVE ATM TEMP

Other Prec  
autions:AVOID BREATHING MIST.USE W/ADEQUATE VENTILATION.KEEP  
CONTAINRS CLOSED.WASH THOROUGHLY AFTER HANDLING.AVOID SKIN,EYES &  
CLOTHING CONTACT.\*\*NOTE:ALLOW ONLY QUALIFIED PERSONS TO WORK  
W/BROMINE.

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Exposure Controls/Personal Protection =====

Respiratory Protection:SUPPLIED AIR RESPIR/SCBA; ESCAPE: GAS MASK  
Ventilation:LOCAL EXHAUST TO MAINTN BELOW TLV.  
Protective Gloves:IMPERVIOUS  
Eye Protection:GOGGLES/FACE SHIELD  
Other Protective Equipment:FULL PROTECTIVE

CLOTHING,SAFETY SHOWER,EYE  
WASH STATION

Supplemental Safety and Health

MSDS FROM MFR DATED:1 AUG 85 CONFORMS TO OSHA HAZ COMM STD;REACTS  
W/WATER OR STEAM TO PRODUCE FUMES OF HYPOBROMOUSACID & HYDROGEN  
BROMIDE;

===== Physical/Chemical Properties =====

HCC:C1

Boiling Pt:B.P. Text:58C(136F)

Vapor Pres:175

Vapor Density:5.5

Spec Gravity:3.1

Solubility in Water:MODERATE

Appearance and Odor:DARK,REDDISH-BROWN FUMING LIQUID W/PUNGENT ODOR

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Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

WATER,REDUCING AGENTS,FLAMM MATL,HG,TI,&AL.

Hazardous Decomposition Products:EMITS FUMES OF BROMINE & BROMIDES UPON  
THRML DECOMPOSITION.

===== Disposal Considerations =====

Waste Disposal Methods:\*NEUTRLZ LIQ BROMINE W/SOLNS OF POT

CARBONATE,SOD CARBONATE OR SOD BICARBONATE.COLLECT OR FLUSH TO SUMP  
FOR DISPOSAL; DISPOSAL:NEUTRALIZED WASTE MAY BE CONTRNZD & DIS  
POSD

IN AN APPRVD WASTE DISPOSAL FACILITY I/AW LOC,ST,FED REGS;SALVAGE  
BROMIN WASTE

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