

## **SULFUR DIOXIDE**

### **MSDS Number**

BLBPR

### **National Stock Number**

6830-00N016369

### **Product Name**

SULFUR DIOXIDE

### **Manufacturer**

AIR PRODUCTS AND CHEMICALS CO

### **Product Identification**

Product ID:SULFUR DIOXIDE

MSDS Date:02/01/1991

FSC:6830

NIIN:00N016369

MSDS Number: BLBPR

### **Responsible Party**

AIR PRODUCTS & CHEMICALS CO

7201 HAMILTON BLVD

ALLENTOWN , PA 18195-1501

US

Emergency Phone: 800-322-9092 OR 800-523-9374

Info Phone: 215-481-8257

Cage: 00742

### **Contractor**

AIR PRODUCTS AND CHEMICALS INC

ALLENTOWN, PA 18195-1501

US

800-345-3148/ 800-752-1597

Cage: 00742

### **Ingredients**

PROMPTLY IF CRYOGENIC "BURN" HAS RESULTED IN

RTECS: 9999999ZZ

OUTLET SEALS SECURED & VALVE PROT CAP IN

RTECS: 9999999ZZ

PHONE NUMBER LISTED HEREIN.

RTECS: 9999999ZZ

DISCHARGE LINE TO PVNT HAZ BACKFLOW INTO CYL.

RTECS: 9999999ZZ

TECH INFO SECTION/COMPRESSED GAS ASSOC PAMPHLET P-1.

RTECS: 9999999ZZ

OTHER COMMON CONSTRUCTION METALS EXCEPT ZINC.MOST

RTECS: 9999999ZZ

& SULFUR DIOXIDE. STAINLESS STEEL TYPE 316 CAN BE

RTECS: 9999999ZZ

CYLS SHOULD NOT BE REFILLED EXCEPT BY QUALIFIED

RTECS: 9999999ZZ

GAS CYL WHICH HAS NOT BEEN FILLED BY OWNER OR

RTECS: 9999999ZZ

MAY ADD FULL LENGTH FACESHIELD TO GOGGLES .

RTECS: 9999999ZZ

SULFUR DIOXIDE (SARA III)

CAS: 7446-09-5

RTECS: WS4550000

OSHA PEL5 PPM/5 STEL

ACGIH TLV: 2 PPM/5 STEL; 9293

EXTREMELY DESTRUCTIVE TO TISS OF AIRWAY, EYES &

RTECS: 9999999ZZ

OF SPASM, INFLAMM & EDEMA OF LARYNX & BRONCHI, CHEM

RTECS: 9999999ZZ

MAY RESULT IN ULCERATION OF CONJUNCTIVA & CORNEA &

RTECS: 9999999ZZ

SEVERE BURNS. SYSTEMIC TOX DUE TO SULFUR DIOXIDE IS

RTECS: 9999999ZZ

COLOR OF SKIN TO GRAY OR WHITE, POSSIBLY FOLLOWED BY

RTECS: 9999999ZZ

FLUSH W/LG QTYS OF WATER FOR AT LEAST 15

RTECS: 9999999ZZ

FLUSH W/LG QTYS OF WATER. REMOVE CLTHG

RTECS: 9999999ZZ

REMOVE CONTAMD CLTHG & FLUSH W/LUKEWARM

RTECS: 9999999ZZ

## Hazards

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:CORR/IRRIT TO UPPER/LOWER RESP TRACTS, SKIN/EYES. SYMPS DEPEND ON CONC/DURATION OF EXPOS & VARY FROM MILD IRRIT TO SEVERE DESTRUCTION OF TISS. MAY ALSO INCLD BURNING SENSATIONS, COUGH, WHEEZING, LARYN GITIS, SHORT OF BREATH, HDCH, NAUSEA & VOM. IF SULFUR DIOXIDE PENETRATES LOWER AIRWAY, CAN PRDCE (SEE EFTS OF OVEREXP)

Explanation of Carcinogenicity:NOT RELEVANT

Effects of Overexposure:HLTH HAZ:BRONCH, CHEM PNEUM/PULM EDEMA. EYE CNTCT RESULTS IN PAIN, TEARING, INFLAMM, SWELLING OF TISS & POSS DESTRUCTION OF EYE. SKIN CNTCT CAUSES IRRIT/CHEM-LIKE BURNS. CNTCT W/RAPIDLY EVAP LIQ CAN CAUSE CRYOGENIC "BURNS"/FROSTBITE. EXPOSTO ATM CONTAMD W/SULFUR DIOXIDE IS EXTREMELY IRRIT. ODOR & PROMPT (SUPP DATA)

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

## First Aid

First Aid:PROMPT MD ATTN IS REQ IN ALL CASES OF OVEREXP. RESCUE PERSONNEL SHOULD BE EQUIPPED W/APPROP PROT EQUIP (SCBA) TO PVNT UNNEC EXPOS. INHAL:MOVE TO UNCONTAMD AREA. IF NOT BRTHG GIVE ARTF RESP, PREF MOUTH -TO-MOUTH. IF BRTHG DFCLT, GIVE O\*2. KEEP WARM/QUIET. ASSUME MUCUS/VOMITED MATL DOES NOT OBSTRUCT AIRWAY BY POSITIONAL DRAINAGE. MD SHOULD BE INFORMED THAT PATIENT INHALED ACIDIC VAPS. (SEE ING 7)

## Fire Fighting

Extinguishing Media:NONFLAMMABLE GAS. WILL EXTINGUISH FIRE.

Fire Fighting Procedures:IF POSS W/O RISK, MOVE CYLS AWAY FROM FIRE AREA. FROM SAFE DISTANCE, COOL CYLS W/WATER SPRAY UNTIL WELL AFTER FIRE OUT. WEAR NIOSH/MSHA APPRVD SCBA &(SUPP DATA)

Unusual Fire/Explosion Hazard:CYLINDERS THAT HAVE BEEN EXPOSED TO FIRE OR HEAT MAY VENT RAPIDLY OR EXPLODE.

## Accidental Release

Spill Release Procedures:EVACUATE PERSONNEL FROM AFFECTED AREA. USE APPROP PROT EQUIP. IF LEAK IS IN USER'S EQUIP, BE CERTAIN TO PURGE PIPING W/AN INERT GAS PRIOR TO ATTEMPTING REPAIRS. IF LEAK IS IN CYLINDER/CYLINDER VALVE, CALL THE "800" EMER PHONE NUMBER LISTEDHEREIN.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

## Handling

Handling and Storage Precautions:USE ONLY IN WELL-VENT AREAS. VALVE PROT CAPS MUST REMAIN IN PLACE UNLESS CYL IS SECURED W/VALVE OUTLET PIPED TO USE PT. DO NOT DRAG/SLIDE/ROLL CYLS.

Other Precautions:USE SUITABLE HAND TRUCK FOR CYL MOVEMENT. USE PRESS REDUCING REGULATOR WHEN CONNECTING CYL TO LOWER PRESS (PIPING/SYS. DO NOT HEAT CYL BY ANY MEANS TO INCR DISCHARGE RATE OF PROD FROM CYS. USE CHECK VALVE/TRAP IN (SEE ING 13)

## Exposure Controls

Respiratory Protection:NIOSH/MSHA APPROVED POSITIVE PRESSURE AIR LINE W/RESPIRATOR OR SCBA SHOULD BE AVAILABLE FOR EMERGENCY USE.

Ventilation:USE HOOD W/FORCED VENT &/OR LOC EXHAUST TO PVNT ACCUMULATION ABOVE TWA. HEAVY VAPS REQUIRE GOOD FLOOR-LEVEL VENT.

Protective Gloves:PLASTIC OR RUBBER GLOVES.  
Eye Protection:CHEMICAL WORKERS GOGGLES, (SEE ING 19)  
Other Protective Equipment:SAFETY SHOES, SAFETY SHOWER, EYEWASH  
FOUNTAIN, CHEMICAL RESISTANT OVERGARMENTS. DELUGE SHOWER .  
Work Hygienic Practices:PERSONS W/POTENTIAL EXPOSURE TO SULFUR DIOXIDE  
SHOULD NOT WEAR CONTACT LENSES.  
Supplemental Safety and Health  
MATLS TO AVOID:W/CHLORATES TO FORM CHLORINE WHICH AT ELEVATED TEMP MAY  
BECOME EXPLO RXN. SULFUR DIOXIDE DISSOLVES IN WATER TO FORM  
SULFUROUS ACID WHICH IS UNSTABLE WHEN EXPSD TO HEAT. FIRE FIGHT  
PROC: FULL PROT EQUIP .EFTS OF OVEREXP:IRRITANT ACTION PROVIDE  
WARNING OF EXPOS TO TOX CONDS. HIGH CONCS ARE (SEE ING 2)

## Chemical Properties

HCC:G1  
Boiling Pt:B.P. Text:14F,-10C  
Vapor Pres:49.7 PSIG  
Spec Gravity:2.249  
Solubility in Water:SOLUBLE  
Appearance and Odor:COLORLESS GAS WITH HIGHLY IRRITATING, PUNGENT ODOR.

## Stability

Stability Indicator/Materials to Avoid:YES  
ZINC. REACTS VIOLENTLY W/PEROXIDES, CHROMATES, BICHROMATES,  
PERMANGANATES, & OXYGEN DIFLUORIDE. ALSO REACTS (SUPP DATA)  
Stability Condition to Avoid:AVOID MOISTURE IN PROCESS SYSTEMS.

## Disposal

Waste Disposal Methods:ALL FED, STATE, & LOCAL REGS REGARDING HLTH &  
POLLUTION SHOULD BE FOLLOWED IN WASTE DISP. CNTCT MFR FOR SPECIFIC  
RECOMMENDATIONS. DO NOT DISPOSE OF UNUSED QTY. RETURN PROPERLY  
LABELED SHIPPING CNTNR T O MFR FOR DISP W/VALVE TIGHTLY CLOSED,(SEE  
ING 11)

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