



chemists helping chemists in research & industry

**aldrich chemical co.**

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OCT 11 1991

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DATE: 10/07/91  
CUST#: 523216  
PO#: UNB21383

M A T E R I A L S A F E T Y D A T A S H E E T PAGE 1

IDENTIFICATION

PRODUCT #: 33105-8  
CAS #: 10102-40-6  
MF: MONA204

NAME: SODIUM MOLYBDATE(VI) DIHYDRATE, 99+%,  
A.C.S. REAGENT

SYNONYMS

DISODIUM MOLYBDATE DIHYDRATE \* SODIUM MOLYBDATE DIHYDRATE \*

TOXICITY HAZARDS

RTECS NO: QA5085000

MOLYBDIC ACID, DISODIUM SALT, DIHYDRATE

TOXICITY DATA

IPR-RAT LD50: 520 MG/KG  
IPR-MUS LD50: 257 MG/KG

AIPTAK 154,243,65  
AIPTAK 154,243,65

REVIEWS, STANDARDS, AND REGULATIONS

ACGIH TLV-TWA 10 MG(MO)/M3 85INAB 5,415,86  
MSHA STANDARD-AIR: TWA 10 MG(MO)/M3 DTLVS\* 3,173,71  
OSHA PEL: 8H TWA 15 MG(MO)/M3, TOTAL DUST FEREAC 54,2923,89  
OSHA PEL: 8H TWA 5 MG(MO)/M3, RESPIRABLE FRACTION FEREAC 54,2923,89  
OSHA PEL FINAL: 8H TWA 10 MG(MO)/M3, TOTAL DUST FEREAC 54,2923,89  
OSHA PEL FINAL: 8H TWA 5 MG(MO)/M3, RESPIRABLE FRACTION FEREAC 54,2923,89

NOES 1983: HZD X1599000; TNF 2; NIS 78; NOS 3; TNE 1490; TFE 1059

TARGET ORGAN DATA

BEHAVIORAL (SOMNOLENCE)  
BEHAVIORAL (COMA)

ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

HEALTH HAZARD DATA

ACUTE EFFECTS

MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.  
CAUSES EYE IRRITATION.  
CAUSES SKIN IRRITATION.  
MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.  
TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

FIRST AID

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.  
IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER.  
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL

CONTINUED ON NEXT PAGE

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M A T E R I A L   S A F E T Y   D A T A   S H E E T   P A G E   2

CUST#: 523216  
PO#: UNB21383

PRODUCT #: 33105-8  
CAS #: 10102-40-6  
MF: MONA204

NAME: SODIUM MOLYBDATE (VI) DIHYDRATE, 99+%,  
A.C.S. REAGENT

----- HEALTH HAZARD DATA -----

RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.  
IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.  
CALL A PHYSICIAN.

----- PHYSICAL DATA -----

SPECIFIC GRAVITY: 3.280  
APPEARANCE AND ODOR  
WHITE CRYSTALS

----- FIRE AND EXPLOSION HAZARD DATA -----

EXTINGUISHING MEDIA  
NONCOMBUSTIBLE.  
USE EXTINGUISHING MEDIA APPROPRIATE TO SURROUNDING FIRE CONDITIONS.  
SPECIAL FIREFIGHTING PROCEDURES  
WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO  
PREVENT CONTACT WITH SKIN AND EYES.

----- REACTIVITY DATA -----

INCOMPATIBILITIES  
STRONG OXIDIZING AGENTS  
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS  
NATURE OF DECOMPOSITION PRODUCTS NOT KNOWN.

----- SPILL OR LEAK PROCEDURES -----

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED  
WEAR SELF-CONTAINED BREATHING APPARATUS, 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.  
WASTE DISPOSAL METHOD  
CAUTIOUSLY ACIDIFY A 3% SOLUTION OR A SUSPENSION OF THE MATERIAL TO  
PH 2 WITH SULFURIC ACID. GRADUALLY ADD A 50% EXCESS OF AQUEOUS SODIUM  
BISULFITE WITH STIRRING AT ROOM TEMPERATURE. AN INCREASE IN TEMPERA-  
TURE INDICATES THAT A REACTION IS TAKING PLACE. IF NO REACTION IS

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----- SPILL OR LEAK PROCEDURES -----

OBSERVED ON THE ADDITION OF ABOUT 10% OF THE SODIUM BISULFITE SOLUTION INITIATE IT BY CAUTIOUSLY ADDING MORE ACID. IF MANGANESE, CHROMIUM, OR MOLYBDENUM ARE PRESENT ADJUST THE PH OF THE SOLUTION TO 7 AND TREAT WITH SULFIDE TO PRECIPITATE FOR BURIAL AS HAZARDOUS WASTE. DESTROY EXCESS SULFIDE, NEUTRALIZE AND FLUSH THE SOLUTION DOWN THE DRAIN.

--- PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE ---

CHEMICAL SAFETY GOGGLES.  
USE PROTECTIVE CLOTHING, GLOVES AND MASK.  
SAFETY SHOWER AND EYE BATH.  
MECHANICAL EXHAUST REQUIRED.  
DO NOT BREATHE DUST.  
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.  
WASH THOROUGHLY AFTER HANDLING.  
IRRITANT.  
HARMFUL SOLID.  
KEEP TIGHTLY CLOSED.

STORE IN A COOL DRY PLACE.  
LABEL PRECAUTIONARY STATEMENTS

HARMFUL  
HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.  
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.  
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.  
WEAR SUITABLE GLOVES AND EYE/FACE PROTECTION.

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