

MATERIAL SAFETY DATA SHEET SELENIUM SULPHIDE - USP

SECTION 1 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

IDENTIFICATION OF SUBSTANCE	SELENIUM SULPHIDE - USP
SYNONYMS	SELENIUM DISULPHIDE
NAME OF THE SUPPLIER / MANUFACTURER	M/S. OMKAR SPECIALITY CHEMICALS LTD.
ADDRESS FOR CORRESPONDANCE	B-34, M.I.D.C. BADLAPUR, DIST: THANE – 421 503 STATE: MAHARASHTRA INDIA
TELEPHONE NO.	91-251-2690651
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SECTION 2 : COMPOSITION AND INFORMATION ON INGREDIENT

CHEMICAL NAME	SELENIUM SULPHIDE
CAS NO	7488-56-4
NIOSH NO	VS89Z5000
HAZCHEM CODE	2Z

SECTION 3 : HAZARD IDENTIFICATION

APPEARANCE	REDDISH BROWN TO ORANGE FINE POWDER
TARGET ORGANS	LUNGS

POTENTIAL HEALTH EFFECTS

EYE	CAUSES EYE IRRITATION. HIGH CONCENTRATION IS VERY DESTRUCTIVE TO EYES. MAY CAUSE PALPERBRAL CONJUNCTIVITIES.
SKIN	CAUSES SKIN IRRITATION. HIGH CONCENTRATION IS VERY DESSTRUCTIVE TO SKIN.
INHALATION	VERY HAZARDOUS IN CASE OF INHALATION. HIGH CONCENTRATION IS VERY DESTRUCTIVE TO TISSUES OF UPPER RESPIRATORY TRACT. IT MAY CAUSE COUGHING, DYSPONEA, LARYNGITIS, HEADACHE, NAUSEA, VOMITING.
INGESTION	VERY HAZARDOUS IN CASE OF INGESTION

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SECTION 4 : FIRST – AID MEASURES

EYE	IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER AT LEAST FOR 15 MINUTES OCCASIONALLY OPENING UPPER / LOWER EYELIDS. DO NOT USE AN EYE OINTMENT.
SKIN	WASH IMMEDIATELY WITH PLENTY OF WATER AND USE NON-ABRASIVE SOAP. COVER THE SKIN WITH EMOLLIENT / ANTIBACTERIAL CREAM.
INGESTION	IF THE PERSON IS CONSCIOUS AND ALERT, RINSE MOUTH WITH PLENTY OF WATER AND DRINK 2-4 CUPFULS OF WATER. IF UNCONSCIOUS, DO NOT INDUCE VOMITING.
INHALATION	REMOVE TO FRESH AIR IMMEDIATELY, IF BREATHING IS DIFFICULT GIVE OXYGEN. INDUCE ARTIFICIAL RESPIRATION WITH APPROVED RESPIRATORY MEDICAL DEVICE.

ALWAYS REMOVE CONTAMINATED CLOTHING, SHOES, SAFETY EQUIPMENTS AND WASH, CLEAN AND DRY BEFORE REUSE

ALWAYS SEEK MEDICAL AID IMMEDIATELY. CONSULT NEAREST POISON CONTROL CENTRE OR PHYSICIAN WHO IS FAMILIAR WITH CHEMICALS AND ITS AFTER EFFECTS. TREAT SYMPTOMATICALLY AND SUPPORTIVELY. ALL FIRST – AID PROCEDURES SHOULD BE PERIODICALLY REVIEWED BY AN EXPERIENCED PHYSICIAN]

REFER TO HANDBOOK OF TOXIC AND HAZARDOUS CHEMICALS AND CARCINOGENS BY MARSHALL SITTING, NOYES PUBLICATION, NJ, USA / DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS BY IRWIN / SAX V EDITION.

SECTION 5 : FIRE – FIGHTING MEASURES

GENERAL INFORMATION	AS IN ANY FIRE, WEAR A SELF CONTAINED BREATHING APPARATUS IN PRESSURE DEMAND MSHA / NIOSH (APPROVED OR EQUIVALENT) AND FULLY PROTECTIVE SAFETY EQUIPMENTS. DURING FIRE IRRITATING AND TOXIC FUMES OF SELENIUM AND SULFUR DIOXIDE ARE PRODUCED.
EXTINGUISHING MEDIA	DRY CHEMICAL POWDER, FOG OR FOAM, WATER SPRAY.
AUTO IGNITION TEMPERATURE	NOT AVAILABLE
FLASH POINT	NOT AVAILABLE
FLAMMABILITY	NOT FLAMMABLE

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SECTION 6 : ACCIDENTAL RELEASE MEASURES

GENERAL INFORMATION	USE PROPER PERSONAL PROTECTIVE SAFETY EQUIPMENTS AS INDICATED IN SECTION 8 PROVIDE VENTILATION.
SMALL / LARGE SPILL	USE APPROPRIATE TOOLS TO PUT THE SPILLED SOLID IN A LABELED WASTE DISPOSAL CONTAINER.
THE REGULATION IN 49CFR171.15 & 171.16 TO BE FOLLOWED UNDER 40CFR302.6 (CERCLA), ANY RELEASE TO SOIL, WATER OR AIR INFORMATION SHOULD BE GIVEN TO APPROPRIATE AGENCIES IN EACH JURISDICTION.	

SECTION 7 : HANDLING AND STORAGE

HANDLING	USE ONLY IN A WELL VENTILATED AREA. AVOID DUST GENERATION. USE ALL PROTECTIVE SAFETY EQUIPMENTS.
STORAGE	KEEP CONTAINERS TIGHTLY CLOSED AT AMBIENT TEMPERATURE, AND AT DRY PLACE AWAY FROM HEAT, FLAME, SOURCES OF IGNITION AND INCOMPATIBLE MATERIALS VIZ: NITRIC ACID, SILVER OXIDES.

SECTION 8 : EXPOSURE CONTROL, PERSONAL PROTECTION

EXPOSURE TO THIS MATERIAL CAN BE CONTROLLED IN MANY WAYS. THE MEASURES APPROPRIATE FOR A PARTICULAR WORKSITE DEPEND ON HOW THIS MATERIAL IS USED AND ON TO THE EXTENT OF EXPOSURE. THIS GENERAL INFORMATION CAN BE USED TO HELP DEVELOP SPECIFIC CONTROL MEASURES. ENSURE THAT, THE CONTROL SYSTEMS ARE PROPERLY DESIGNED AND MAINTAINED. AVOID PROLONGED OR REPEATED EXPOSURE. COMPLY WITH OCCUPATIONAL, ENVIRONMENTAL, FIRE AND OTHER APPLICABLE REGULATIONS.

USE ALL PROTECTIVE SAFETY EQUIPMENTS SUCH AS SAFETY GOGGLES, OR EYE GLASS [AS PER OSHA'S EYE & FACE PROTECTION REGULATIONS IN 29CFR 1910.133 OR EUROPEAN STANDARD EN166], PROPER CLOTHINGS, SAFETY SHOES, APPROVED RESPIRATORS THAT MEETS OSHA'S 29CFR 1910.134 & ANSIZ88.2 REQUIREMENTS OR EUROPEAN STANDARD EN 149 REQUIREMENTS. ALL WAYS CLEAN USED SAFETY EQUIPMENT BEFORE REUSE.

ENGINEERING METHODS TO CONTROL EXPOSURE TO WORK PLACE CHEMICALS ARE PREFERRED. METHODS INCLUDE MECHANICAL [LOCAL EXHAUST] VENTILATION, PROCESS – PERSONNEL ENCLOSURES AND CONTROL OF PROCESS CONDITIONS. ADMINISTRATIVE CONTROL MAY ALSO BE REQUIRED. SUPPLY SUFFICIENT REPLACEMENT AIR TO MAKE – UP FOR AIR REMOVED BY EXHAUST SYSTEM.

FACILITIES SHOULD BE EQUIPPED WITH EYEWASH AND SAFETY SHOWER FACILITIES. APPROPRIATE EQUIPMENTS SHOULD BE AVAILABLE FOR USE IN EMERGENCIES SUCH AS SPILLS OR FIRE EXPOSURE LIMITS.

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SECTION : 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	REDDISH ORANGE FINE POWDER
MOLECULAR FORMULA	SeS ₂
MOLECULAR WEIGHT	143.10
MELTING POINT O C	ABOUT 121.5 O C (250.7 O F)
VAPOUR PRESSURE	NOT APPLICABLE
VAPOUR DENSITY	NOT AVAILABLE
DECOMPOSITION TEMPERATURE	NOT AVAILABLE

SECTION : 10 STABILITY AND REACTIVITY

CHEMICAL STABILITY	STABLE UNDER NORMAL CONDITIONS
CONDITIONS TO AVOID	HEAT, FLAME, SOURCES OF IGNITION, NITRIC ACID, SILVER OXIDE.
INCOMPATIBILITIES WITH OTHER MATERIALS	AS ABOVE
HAZARDOUS DECOMPOSITION PRODUCTS	VAPOURS OF SELENIUM AND SULFUR
HAZARDOUS POLYMERIZATION	WILL NOT OCCUR

SECTION : 11 TOXICOLOGICAL INFORMATION

EXPOSURE LIMITS : TWA 0.2 (mg/m³) [US TLV / TWA]
ORAL LD 50 IN RATS : 138 mg/kg

UK EXPOSURE LIMITS (OES)

LONG TERM (8 HRS TW VALUE) : 0.1 mg/M³ (AS Se)
SHORT TERM (10 MIN TWA VALUE) : NOT AVAILABLE
GERMAN – MAK : 0.1 mg/m³
FRANCE – VME/VIE : NOT AVAILABLE

SWEDEN

SHORT TERM LIMIT : NOT AVAILABLE DERMAL TOXICITY : 155 mg/kg
LEVEL LIMIT : 0.1 mg/m³ (AS Se) INHALATION TOXICITY : 5 mg/L

SINCE THE MANNER IN WHICH EXPOSURE LIMITS ARE ESTABLISHED, INTERPRETED CAN VARY, OBTAIN DETAILED INFORMATION FROM APPROPRIATE AGENCIES IN EACH JURISDICTION. TO THE BEST OF OUR KNOWLEDGR SPECIFIC TOXICITY DATA / THRESHOLD LIMITS ARE NOT ESTABLISHED.

SECTION : 12 ECOLOGICAL INFORMATION

SELENIUM SULFIDE IS BIOLOGICALLY REACTIVE. BOTH DEFICIENCY AND TOXICITY HAVE BEEN OBSERVED.

SECTION : 13 DISPOSAL CONSIDERATIONS

WASTE GENERATORS MUST DETERMINE WHETHER DISCARDED CHEMICAL WASTE IS CLASSIFIED AS A HAZARDOUS WASTE. US – EPA GUIDE LINES FOR THE CLASSIFICATION DETERMINATION ARE LISTED IN 40 CFR PARTS 261.3. COLLECT ALL THE COASTE IN A WELL COVERED / LEAK PROOF / LABELED CONTAINERS AND REVIEW FEDERAL / STATE / LOCAL GOVERNMENT REQUIREMENT PRIOR TO DISPOSAL.

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SECTION : 14 TRANSPORT INFORMATION

PROPER SHIPPING NAME	SELENIUM DISULPHIDE
UN NO.	2657
HAZARD CLASS	6.1
PACKING GROUP	II
IMDG NO.	6249
EMS NO.	6.1 - 04
MFAG NO.	175, 225

SECTION : 15 REGULATORY INFORMATION

FEDERAL, STATE INTERNATIONAL REGULATIONS

CALIFORNIS PROP. 65 : THIS PRODUCT CONTAINS THE FOLLOWING INGREDIENTS FOR WHICH STATE OF CALIFORNIS HAS FOUND TO CAUSE CANCER, BIRTH EFFECTS OR OTHER REPRODUCTIVE HARMS, WHICH WOULD REQUIRE A WARNING UNDER THE STATUTE : SELENIUM SULFIDE / TSCA 8 (b) INVENTORY : SELENIUM SULFIDE.

OTHER CLASSIFICATIONS:

WHMIS (CANADA)

CLASS D-1A: MATERIAL CAUSES IMMEDIATE AND SERIOUS TOXIC EFFECTS (VERY TOXIC)
CLASS D-2A: MATERIAL CAUSES OTHER TOXIC EFFECTS (VERY TOXIC)

DSCL (EEC) : R -25 – TOXIC IF SWALLOWED
R -38 – IRRITATING TO SKIN
R -41 – RISK OF SERIOUS DAMAGE TO EYES

HMIS (U.S.A.)

HEALTH HAZARD : 3
FIRE HAZARD: 1
REACTIVITY: 0
PERSONAL PROTECTION : E

NATIONAL FIRE PROTECTION ASSOCIATION (U.S.A.)

HEALTH : 3

FLAMMABILITY: 1

REACTIVITY : 0

SECTION : 16 ADDITIONAL INFORMATION.

THIS DOCUMENT IS INTENDED ONLY AS A GUIDE TO THE APPROPRIATE PRECAUTIONARY HANDLING OF MATERIAL BY A PERSON TRAINED IN CHEMICAL HANDLING. THE USER IS RESPONSIBLE FOR DETERMINING THE PRECAUTIONS & DANGERS OF THIS CHEMICAL FOR HIS OR HER PARTICULAR APPLICATION DEPENDING ON USAGE. ADEQUATE PROTECTIVE CLOTHING, INCLUDING EYE / FACE GUARDS, APPROVED RESPIRATORS MUST BE USED TO AVOID CONTACT WITH THE MATERIAL OR BREATHING CHEMICAL VAPOURS / FUMES. EXPOSURE TO THIS PRODUCT MAY CAUSE ADVERSE HEALTH EFFECTS. THIS CHEMICAL MAY INTERACT WITH OTHER SUBSTANCES. SINCE THE POTENTIAL USES ARE SO VARIED, M/S. OMKAR SPECIALITY CHEMICALS LTD. CANNOT WARN OF ALL OF THE POTENTIAL DANGERS OF USE OR INTERACTION WITH CHEMICALS OR MATERIALS. M/S. OMKAR SPECIALITY CHEMICALS LTD. WARRANTS THAT, THE CHEMICAL MEETS THE SPECIFICATIONS SET FORTH ON THE TEST REPORT. M/S. OMKAR SPECIALITY CHEMICALS LTD. DISCLAIMS ANY OTHER WARRANTIES EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR PURPOSE. THE USER SHOULD RECOGNISE THAT, THIS PRODUCT CAN CAUSE SEVERE INJURY, ESPECIALLY IF IMPROPERLY HANDLED OR THE KNOWN DANGERS OF USE ARE NOT HEEDED.

"READ ALL PRECAUTIONARY INFORMATIONS"
