

MATERIAL SAFETY DATA SHEET

SECTION 1 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION	
IDENTIFICATION OF SUBSTANCE	METHYL IODIDE
SYNONYM	IODOMETHANE
NAME OF THE MANUFACTURER/ SUPPLIER	OMKAR SPECIALITY CHEMICALS LTD.
ADDRESS FOR CORRESPONDENCE	F-24, MIDC, Badlapur (E), Dist.Thane – 421503 State: Maharashtra (India)
TEL.NO.:	91-251-2690651/2691602/2697340
FAX NO.:	91-251-2691572/2697673
EMAIL ID:	info@omkarchemicals.com

SECTION 2 : COMPOSITION AND INFORMATION ON INGREDIENT	
CHEMICAL NAME	METHYL IODIDE
CAS NO.	74 – 88 – 4
EINECS / ELINCS NO.	200 – 819 – 5
RTECS NO.	PA 9450000

SECTION 3 : HAZARD IDENTIFICATION	
APPEARANCE	COLOURLESS LIQUID
TARGET ORGANS	CENTRAL NERVOUS SYSTEM
POTENTIAL HEALTH EFFECTS	
EYE	CAUSES EYE IRRITATION, REDNESS, PAIN, CONJUNCTIVITIS
SKIN	CAUSES SKIN IRRITATION, PAIN, STINGING, REDDENING OF THE SKIN.
INHALATION	CAUSES RESPIRATORY TRACT IRRITATION. MAY CAUSE LUNG DAMAGE. MAY CAUSE SPLEEN & LIVER DAMAGE.
INGESTION	HARMFUL IF SWALLOWED. ASPIRATION HAZARD. MAY CAUSE IRRITATION OF DIGESTIVE TRACT. MAY CAUSE CNS EFFECT.
INITIAL SYMPTOMS INCLUDE LETHARGY, DROWSINESS, SLURRED SPEECH. ATAXIA, MUSCULAR INCOORDINATION, VISUAL DISTURBANCES. MAY PROGRESS TO CONVULSIONS, COMA, DEATH. OTHER SYMPTOMS INCLUDE GIDDINESS, DIARRHEA, SLEEPINESS, IRRITABILITY. VOMITING, PALLOR, MUSCULAR TWITCHING & KIDNEY EFFECTS.	

SECTION 4 : FIRST-AID MEASURES	
EYE	GET MEDICAL AID IMMEDIATELY. DO NOT ALLOW VICTIM TO RUB EYES OR KEEP EYES CLOSED. IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER ATLEAST FOR 30 MINUTES OCCASIONALLY LIFTING LOWER & UPPER EYELIDS.
SKIN	IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER, WHILE REMOVING CONTAMINATED CLOTHINGS & SHOES.
INHALATION	REMOVE TO FRESH AIR IMMEDIATELY. IF BREATHING IS DIFFICULT, GIVE OXYGEN. INDUCE ARTIFICIAL RESPIRATION WITH THE AID OF APPROVED RESPIRATORY MEDICAL DEVICE.
INGESTION	IF CONSCIOUS & ALERT, ALLOW VICTIM TO RINSE / WASH MOUTH WITH PLENTY OF WATER & DRINK 2 – 4 CUPFULS OF WATER OR MILK. DO NOT INDUCE VOMITING.

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

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) & FULL PROTECTIVE GEAR. SUBSTANCE IS NONCOMBUSTIBLE. DECOMPOSES AT HIGH TEMPERATURES, RESULTING IN TOXIC & CORROSIVE PRODUCTS. CONTAINERS MAY EXPLODE IN THE HEAT OF A FIRE. VAPOURS MAY BE HEAVIER THAN AIR. THEY CAN SPREAD ALONG THE GROUND & COLLECT IN LOW OR CONFINED AREAS.
EXTINGUISHING MEDIA	IT SHOULD BE APPROPRIATE FOR THE SURROUNDING FIRE CONDITIONS.
FLASH POINT °C	270.0
AUTOIGNITION TEMPERATURE °C	352.0
EXPLOSION LIMITS (LOWER / UPPER)	N/A

SECTION 6 : ACCIDENTAL RELEASE MEASURES

GENERAL INFORMATION	USE PROPER PERSONAL PROTECTIVE EQUIPMENTS AS INDICATED IN SECTION 8. PROVIDE VENTILATION.
SPILLS/LEAK	SWEEP-UP MATERIAL. PLACE INTO A SUITABLE LABELED DISPOSAL CONTAINER. AVOID GENERATING DUST. WASH SPILL SITE, AFTER MATERIAL PICK-UP IS COMPLETE. NOTIFY GOVERNMENT OCCUPATIONAL, HEALTH, SAFETY AND ENVIRONMENTAL AUTHORITIES. REVIEW FEDERAL / STATE / LOCAL GOVERNMENT AUTHORITIES REQUIREMENT PRIOR TO DISPOSAL.

SECTION 7 : HANDLING & STORAGE

HANDLING	MINIMIZE DUST GENERATION & ACCUMULATION. USE ONLY IN A WELL VENTILATED AREA. USE ALL PROTECTIVE SAFETY EQUIPMENTS. KEEP CONTAINER TIGHTLY CLOSED.
STORAGE	STORE IN A COOL, DRY, WELL – VENTILATED AREA AWAY FROM HEAT, SPARK, OPEN FLAME, SOURCES OF IGNITION, INCOMPATIBLE MATERIALS, CORROSIVE AREA. DO NOT EXPOSE TO AIR, LIGHT. STORE UNDER INERT ATMOSPHERE.

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SECTION 8 : EXPOSURE CONTROLS & 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 OSHS'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] VENTILLATION, 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.

EXPOSURE LIMITS

CHEMICAL NAME	ACGIH	NIOSH	OSHA – FINAL PELS	OSHA VACATED PELS
METHYL IODIDE	2ppm TWA; SKIN-POTENTIAL FOR CUTANEOUS ABSORPTION	2ppmTWA; 10mg/m3 TWA 100 ppm IDLH	5ppm TWA, 28mg/m3 TWA	2ppm TWA, 10mg/m3 TWA

SECTION 9 : PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE	: COLOURLESS TRANSPARENT LIQUID
MOLECULAR FORMULA	: CH ₃ I
MOLECULAR WEIGHT	: 141.94
VAPOUR PRESSURE	: 4.97kPa @ -25C
VAPOUR DENSITY	: 4.89 (air = 1)
BOILING POINT °C	: 41 TO 43
MELTING POINT °C	: -66.0
DECOMPOSITION TEMPERATURE °C	: 270.0
SOLUBILITY	: Slightly Soluble In Water, Miscible with alchohol,
DENSITY	: Ether & with Hexane. 2.28 (ABOUT)

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SECTION 10 : STABILITY & REACTIVITY

CHEMICAL STABILITY	:	STABLE UNDER NORMAL STORAGE CONDITIONS.
CONDITIONS TO AVOID	:	LIGHT, MOISTURE, HEAT, SPARKS, FLAME ETC.
INCOMPATIBILITIES WITH OTHER MATERIALS	:	OXYGEN, SILVER CHLORITE, SODIUM & TRIALKYLPHOSPHINES.
HAZARDOUS DECOMPOSITION PRODUCTS	:	CARBON MONOXIDE, CARBON DIOXIDE, HYDROGEN IODIDE.
HAZARDOUS POLYMERIZATION	:	WILL NOT OCCUR

SECTION 11 : TOXICOLOGICAL INFORMATION

LD50 / LC50 :

DERMAL, GUINEA PIG, LD50	:	800 mg / kg
DRAIZE TEST, RABBIT, EYE	:	100 mg Severe
DRAIZE TEST, RABBIT, SKIN	:	500 mg Severe
INHALATION, MOUSE LC50	:	5 gm / m3 / 57M – C
INHALATION, RAT LC50	:	1300 mg / m3 / 4H
ORAL, RAT, LD50	:	76 mg / kg
NIOSH	:	POTENTIAL OCCUPATIONAL CARCINOGEN
IARC GROUP 3	:	NOT CLASSIFIABLE
EPIDEMIOLOGY	:	NIOSH HAS DETERMINED THAT THERE IS SUFFICIENT EVIDENCE OF CARCINOGENICITY IN ANIMALS TO INDICATE A POTENTIAL FOR HUMAN CARCINOGENICITY. IARC STATES THAT THERE IS LIMITED EVIDENCE FOR THE CARCINOGENICITY OF METHYL IODIDE TO EXPERIMENTAL CHEMICALS, BUT NO EVALUATION COULD BE MADE OF THE CARCINOGENICITY OF METHYL IODIDE TO HUMANS.
TERATOGENICITY	:	NO INFORMATION AVAILABLE
REPRODUCTIVE EFFECTS	:	NO INFORMATION AVAILABLE
NEUROTOXICITY	:	NO INFORMATION AVAILABLE
MUTAGENICITY	:	MUTATION DATA HAS BEEN REPORTED

SECTION 12 : ECOLOGICAL INFORMATION

NO DATA AVAILABLE. HOWEVER, DO NOT ALLOW MATERIAL TO BE RELEASED TO THE ENVIRONMENT, WITHOUT PROPER GOVERNMENTAL PERMITS.

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 WASTE IN 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	: METHYL IODIDE
UN NO.	: 2644
HAZARD CLASS	: 6.1
PACKING GROUP	: I

SECTION : 15 REGULATORY INFORMATION	
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<u>US FEDERAL</u>	
TSCA	: CAS # 74-88-4 IS LISTED ON THE TSCA INVENTORY.
HEALTH & SAFETY REPORTING LIST	: NONE OF THE CHEMICALS ARE ON THE HEALTH & SAFETY REPORTING LIST
CHEMICAL TEST RULES	: NONE OF THE CHEMICALS IN THIS PRODUCT ARE UNDER A CHEMICAL TEST RULE.
SECTION 12b	: NONE OF THE CHEMICALS ARE LISTED UNDER TSCA SECTION 12b
TSCA SIGNIFICANT NEW USE RULE	: NONE OF THE CHEMICALS IN THIS MATERIAL HAVE A SNUR UNDER TSCA.
<u>SARA</u>	
CERCLA HAZARDOUS SUBSTANCES AND CORRESPONDING RQs	: CAS # 74-88-4: 100 lb FINAL RQ : 45.4 kg final RQ.
SARA SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES	: NONE OF THE CHEMICALS IN THIS PRODUCT HAVE A TPO
SARA CODES	: CAS # 74-88-4 : ACUTE, CHRONIC.
SECTION 313	: THIS MATERIAL CONTAINS METHYL IODIDE (CAS # 74-88-4, 100.0%) , WHICH IS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF SARA TITLE III and 40 CFR part 373.
CLEAN AIR ACT	: CAS # 74-88-4 IS LISTED AS A HAZARDOUS AIR POLLUTANT (HAP). THIS MATERIAL DOES NOT CONTAIN ANY CLASS 1 OZONE DEPLETORS. THIS MATERIAL DOES NOT CONTAIN ANY CLASS 2 OZONE DEPLETORS.
CLEAN WATER ACT	: NONE OF THE CHEMICALS IN THIS PRODUCT ARE LISTED AS HAZARDOUS SUBSTANCES UNDER THE CWA. NONE OF THE CHEMICALS IN THIS PRODUCT ARE LISTED AS PRIORITY POLLUTANTS UNDER THE CWA. NONE OF THE CHEMICALS IN THIS PRODUCT ARE LISTED AS TOXIC POLLUTANTS UNDER THE CWA.
OSHA	: NONE OF THE CHEMICALS IN THIS PRODUCT ARE CONSIDERED HIGHLY HAZARDOUS BY OSHA.
<u>STATE</u>	: CAS # 74-88-4 CAN BE FOUND ON THE FOLLOWING STATE RIGHT TO KNOW LISTS: CALIFORNIA, NEW JERSEY, PENNSYLVANIA, MINNESOTA, MASSACHUSETTS.
THE FOLLOWING STATEMENT IS MADE IN ORDER TO COMPLY WITH THE CALIFORNIA SAFE DRINKING WATER ACT	
THIS PRODUCT CONTAINS METHYL IODIDE, A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER. CALIFORNIA NO SIGNIFICANT RISK LEVEL. NONE OF THE CHEMICALS IN THIS PRODUCT ARE LISTED.	

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EUROPEAN / INTERNATIONAL REGULATIONS

EUROPEAN LABELING IN ACCORDANCE WITH EC DIRECTIVES

WGK (WATER DANGER / PROTECTION) CAS # 74-88-4 : 2

CANADA – DSL / NDSL CAS # 74-88-4 IS LISTED ON CANADA’S DSL LIST.

CANADA – WHMIS THIS PRODUCT HAS WHMIS CLASSIFICATION OF D1A,D2B

CANADIAN INGREDIENT DISCLOSURE LIST

CAS # 74-88-4 IS LISTED ON THE CANADIAN INGREDIENT DISCLOSURE LIST.

EXPOSURE LIMITS CAS # 74-88-4 :

OEL - AUSTRALIA : TWA 2 ppm (10mg/m³) ; Skin; Carcinogen

OEL - BELGIUM : TWA 2ppm(12 mg/m³) ; Skin ; Carcinogen

OEL - CZECHOSLOVAKIA : TWA 1 mg/m³ ; STEL 2mg/m³

OEL – DENMARK : TWA 1 ppm (5.6 mg/m³) ; SKIN

OEL – FINLAND : TWA_5 ppm (28mg /m³) ; STEL 10ppm (56mg/m³) ; Skin

OEL – GERMANY : Carcinogen

OEL - THE NETHERLANDS : TWA 2 ppm (10 mg/m³); Skin

OEL - THE PHILIPPINES : TWA 5 ppm (28mg/m³) ; Skin

OEL – POLAND : TWA 10mg/m³

OEL – SWEDEN : TWA 1 ppm (6mg/m³) ; STEL 5 ppm (30 mg/m³) ; Skin;

CAR OEL- SWITZERLAND : TWA 2ppm (12mg/m³) ; Skin

OEL - UNITED KINGDOM : TWA 5 ppm (28mg/m³) ; STEL 10 ppm; Skin

OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

SECTION: 16 ADDITIONAL INFORMATION

THIS DOCUMENT IS INTENDED ONLY AS A GUIDE TO THE APPROPRIATE PRECAUTIONARY HANDLING OF MATERIAL BY A PERSON TAimed IN CHEMICAL HANDLING. THE USER IS RESPONSIBLE FOR A DETERMING 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 OF 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 HEDEED.

READ ALL PRECAUTIONARY INFORMATIONS.
