

MATERIAL SAFETY DATA SHEET

MSDS # 1132 - IKO MB FLASHING CEMENT FOR COLD APPLICATION OF MOD BIT FLASHING

BramCal Production Co.

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WHMIS: D-1B, D-2A

I – PRODUCT INFORMATION

PRODUCT NAME	IKO MB FLASHING CEMENT FOR COLD APPLICATION OF MOD BIT FLASHING
PRODUCT TYPE	ASPHALT/CHLORINATED SOLVENT CUTBACK
PRODUCT USE	ADHESIVE FOR BITUMEN MODIFIED MEMBRANE

II – HAZARDOUS INGREDIENTS

INGREDIENTS	%	CAS #	EXPOSURE LIMITS	LD50/LC50 (SPECIES & ROUTE)
Perchloroethylene	1-5	127-18-4	100 ppm (ACGIH)	LD50 (oral-rat) = 2600 mg/kg LC50 (inhalation-rat) = 7128 ppm/4 hours
Methylene Chloride	40-70	75-09-2	50 ppm TLV (ACGIH) 25/ppm/8 hours 125 ppm/15 minutes	LD50 (oral-rat) = 1600 mg/kg LC50 (inhalation-rat) = 52 g/m ³

III- PHYSICAL DATA

PHYSICAL STATE <input type="checkbox"/> GAS <input checked="" type="checkbox"/> LIQUID <input type="checkbox"/> SOLID	ODOUR & APPEARANCE Black liquid, chlorinated solvent odour	ODOUR THRESHOLD (ppm) 5-200 ppm	VOLATILE (VOL.) 34-38%
VAPOUR PRESSURE (mm Hg) 300-500 at 30°C	VAPOUR DENSITY (AIR=1) 3-6	EVAPORATION RATE (BuAc=1) Approx. 2-5	BOILING POINT (°C) Approx. 40
FREEZING POINT (°C) Not applicable	SPEC. GRAVITY (WATER – 1) 1.18	DENSITY (g/ml) 1.18	SOLUBILITY (IN WATER) Insoluble
COEF. OF WATER/OIL DIST. Not available	pH Not applicable		

IV – FIRE & EXPLOSION HAZARD

FLAMMABILITY <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	CONDITIONS OF FLAMMABILITY Not applicable	AUTO-IGNITION TEMP (°C) None
FLASH POINT (°C) None	FLAMMABLE LIMITS (% VOLUME) LOWER: None UPPER: None	SENSITIVITY TO MECHANICAL IMPACT None
METHOD: -----	TDG FLAMMABILITY CLASS Not regulated	SENSITIVITY TO STATIC DISCHARGE None
HAZARDOUS COMBUSTION PRODUCTS Exposure to flames or fire may cause thermal degradation with evolution of hydrogen chloride, phosgene and chlorine.	MEANS OF EXTINCTION Non-flammable as supplied.	SPECIFIC FIRE FIGHTING PROCEDURES Self-contained equipment and full protective clothing when product is exposed to flames or fire as it will emit very toxic fumes on thermal degradation.

V – PREPARATION OF M.S.D.S.

PREPARED BY: HSE Department	PHONE NUMBER (905) 457-2880 EXT. 3354	DATE August 3, 2015
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VI – REACTIVITY DATA

CHEMICAL	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
CONDITIONS TO AVOID:	Very high temperature such as fire, flames, etc. Toxic gas will be evolved.
INCOMPATIBILITY (SUBSTANCE TO AVOID)	Can react violently with Barium, Beryllium, Lithium, Sodium/Potassium Alloys and Potassium-T-Butoxide. May react with Aluminum, Magnesium and their alloys.
CONDITIONS OF REACTIVITY	Not applicable.
HAZARDOUS DECOMPOSITION PRODUCTS	If exposed to very high temperature, thermal degradation will give off hydrogen chloride, phosgene and chlorine.

VII – TOXICOLOGICAL PROPERTIES

THRESHOLD LIMIT VALUE 50 ppm for solvent portion.	LC50/LD50 (estimated) LD50 (oral-rat) = 1600 mg/kg LC50 (inhalation-rat) = 52 g/m ³		
ROUTE OF ENTRY	<input checked="" type="checkbox"/> SKIN CONTACT	<input type="checkbox"/> SKIN ABS	<input checked="" type="checkbox"/> EYES <input checked="" type="checkbox"/> INGESTION <input checked="" type="checkbox"/> INHALATION
EFFECTS OF ACUTE EXPOSURE	Exposure to higher concentrations than 50 ppm may cause irritation, lachrymation and burning of the eyes. Irritation of the nose and throat. There may be vomiting, nausea, drowsiness, alcoholic like intoxication, etc.		
EFFECTS OF CHRONIC EXPOSURE	Prolonged or repeated contact with skin will cause irritation, defatting, dermatitis. May also be injurious to liver and kidneys. Central nervous system effects at 260-280 ppm.		
IRRITANCY	After prolonged or frequent contact.	SENSITIZATION Not available	SYNERGISTIC MATERIALS Not available
<input checked="" type="checkbox"/> CARCINOGENICITY	<input type="checkbox"/> REPRODUCTIVE EFFECTS	<input type="checkbox"/> TERATOGENICITY	<input type="checkbox"/> MUTAGENICITY
Methylene chloride is classified as a carcinogen.			
WARNING: This product may contain oxidized bitumens. The International Agency for Research on Cancer (the "IARC") published a monograph in 2013 which concluded that "occupational exposure to oxidized bitumens and their emissions during roofing operations are probably carcinogenic to humans." The IARC found that there is "limited evidence" in humans for the carcinogenicity of occupational exposures to bitumens and bitumen emissions during roofing and mastic-asphalt work. The IARC also found that there is "sufficient evidence" in experimental animals for carcinogenicity of fume condensates generated from oxidized bitumen. All other evidence of cancer in humans and experimental animals was judged "inadequate" or "limited." The physical nature of this product may help limit any inhalation hazard from oxidized asphalt during application in its hardened state. However, physical forces such as grinding, drilling and other demolition work on this product may liberate dust containing oxidized asphalt. Burning or heating of the product may cause fumes, vapors or mists.			

VIII – FIRST AID MEASURES

SKIN	Thoroughly wash exposed areas with soap and water or waterless hand cleaner. Get medical attention if irritation or injury occurs.
EYES	Flush eyes thoroughly with plenty of lukewarm water. Get medical attention.
INHALATION	Remove to fresh air. Keep warm and quiet and get medical attention. If breathing is difficult, give oxygen.
INGESTION	DO NOT INDUCE VOMITING. If vomiting, take care to prevent aspiration into lungs. Obtain medical attention urgently.

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IX – PREVENTIVE MEASURES	
PERSONAL PROTECTIVE EQUIPMENT	EYES: Safety goggles if applied by spray. GLOVES: Required solvent resistant type. CLOTHING: Coveralls. RESPIRATORY: Approved organic vapour mask in confined areas or if applied by spray.
ENGINEERING CONTROLS (VENTILATION, ETC.)	Exhaust ventilation required in confined areas.
LEAK AND SPILL PROCEDURE	Use proper protective equipment. Provide adequate ventilation. Scrape up to disposal containers.
WASTE DISPOSAL	If material is spread out to allow evaporation of solvents, residue may be disposed of in a sanitary landfill. DO NOT INCINERATE.
HANDLING PROCEDURES	Handle with reasonable care and caution.
STORAGE REQUIREMENTS	Avoid excessive heat.
SHIPPING INFORMATION	Poisonous liquids, N.O.S., UN2810, Class 6.1 (9.2) PG III

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