

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER		PERMA-BOARD		PRODUCT IDENTIFICATION NUMBER (PIN)		NONE	
PRODUCT USE				HIGH QUALITY RECOVERY BOARD OR ROOF BASE BOARD OR A PROTECTION BARRIER OVER MEMBRANE WATERPROOFING.			
MANUFACTURER'S NAME		HAL INDUSTRIES INC. B.C ROOFING PRODUCTS LTD.		SUPPLIER'S NAME		HAL INDUSTRIES INC. B.C ROOFING PRODUCTS LTD.	
STREET ADDRESS		9681 - 187TH STREET		STREET ADDRESS		9681 - 187TH STREET	
CITY		SURREY		PROVINCE		B.C	
POSTAL CODE		EMERGENCY TELEPHONE NO.		POSTAL CODE		EMERGENCY TELEPHONE NO.	
V4N - 3N3		1- 604 888 0777 1- 800 663 0076		V4N - 3N3		1- 604 888 0777 1- 800 663 0076	

SECTION 2 - HAZARDOUS AND OTHER INGREDIENTS

INGREDIENTS	CAS NUMBER	LD50 OF INGREDIENT (SPECIFY SPECIES AND ROUTE)	LC50 OF INGREDIENT (SPECIFIC SPECIES)
ASPHALT 65 - 75%	8052 - 42 - 4	ORAL: LD50> 5000 MG/ KG (RAT) DERMAL: LD50> 2000 MG/KG (RABBIT)	N/A, ACGIH RECOMMENDS FOR ASPHALT FUMES: 5 MG/ M ³ HYDROGEN SULPHIDE, 10 PPM (14 MG/ M ³)
INERT FILLER (PROPRIETARY)	NOT REGULATED	N/A	N/A
FIBER GLASS MAT 10-17%	65997 - 17 - 3 for continuous filament glass fibers	OSHA FIBER LIMITS TO 5 PPM	
UREA FORMALDEHYDE BINDER 2-4% (used in fibreglass mat, is modified and cured)	9011 - 05 - 6	10 PPM for the formaldehyde monomer	

SECTION 3 - PHYSICAL DATA

PHYSICAL STATE SOLID (ASPHALT COATED, SURFACED SHEETS)		ODOUR AND APPEARANCE BLACK WITH SLIGHT PETROLEUM ODOUR - SHEET FORMS. FILM SURFACE OR SAND SURFACE.			ODOUR THRESHOLD (PPM) NOT AVAIL	
VAPOUR PRESSURE: SOLID FORM FOR ASPHALT <1 KPA AT 38 DEG C		VAPOUR DENSITY NOT APPLICABLE	EVAPORATION RATE: < 1 1 = n- butylacetate	SOFTENING PT. ASPHALT 90-98 DEG C	FREEZING /POUR POINT MELT	
PH		SPECIFIC GRAVITY		COEFF. WATER/OIL DIST.		DENSITY

NOT APPLICABLE	NOT AVAILABLE	INSOLUBLE IN WATER	1.8- 2.5 G/CC AT 15 DEG C
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SECTION 4 - FIRE AND EXPLOSION DATA

FLAMMABILITY? YES (<input checked="" type="checkbox"/>) NO (<input type="checkbox"/>)	IF YES, UNDER WHICH CONDITION?	COMBUSTIBLE IF EXPOSED TO HIGH HEAT AND OPEN FLAMES, (SIMILAR TO OTHER ORGANIC COMPOUNDS).	
MEANS OF EXTINCTION: WATER SPRAY, DRY CHEMICAL, CARBON DIOXIDE FOR SMALL FIRES. USE WATER SPRAY TO COOL FIRE-EXPOSED CONTAINERS AND AS A PROTECTIVE SCREEN. DO NOT POINT SOLID WATER DIRECTLY INTO BURNING ASPHALT TO AVOID SPREADING. SELF-CONTAINED BREATHING APPARATUS SHOULD BE WORN TO PROTECT AGAINST POSSIBLE RELEASE OF HYDROGEN SULPHIDE AND SULPHUR DIOXIDE IF MATERIAL IS BURNING.			
FLASH POINT (DEG C) AND METHOD (ASTM D93) 265 DEG C	UPPER FLAMMABLE LIMIT (% BY VOLUME)	NOT AVAIL.	LOWER FLAMMABLE LIMIT (% BY VOLUME) NOT AVAIL.
ASPHALT'S BOILING POINT : 400 DEG C	HAZARDOUS COMBUSTION PRODUCTS SMOKE, CARBON DIOXIDE, CARBON MONOXIDE AND TRACES OF OXIDES OF SULPHUR		
EXPLOSION DATA NA	SENSITIVITY TO IMPACT NONE	SENSITIVITY TO STATIC DISCHARGE NONE	

SECTION 5 - REACTIVITY DATA

CHEMICAL STABILITY YES (<input checked="" type="checkbox"/>) NO (<input type="checkbox"/>)	IF NO, UNDER WHICH CONDITION?	STABLE. (PRODUCT IS IN A SHEET FORM)
INCOMPATIBILITY WITH OTHER SUBSTANCES YES (<input checked="" type="checkbox"/>) NO (<input type="checkbox"/>) IF SO, WHICH ONES)		
STRONG OXIDIZING AGENTS AND SOLVENTS EFFECT ASPHALT.		
REACTIVITY, AND UNDER WHAT CONDITIONS		
HAZARDOUS POLYMERIZATION WILL NOT OCCUR, DOES NOT REACT WITH WATER		
HAZARDOUS DECOMPOSITION PRODUCTS SEE HAZARDOUS COMBUSTION PRODUCTS FOR PRODUCTS OF THERMAL DECOMPOSITION		
STABLE UNDER NORMAL CONDITIONS.		

SECTION 6 - TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY () SKIN CONTACT	() SKIN ABSORPTION	() EYE CONTACT	() INHALATION	() INGESTION
EFFECT OF ACUTE EXPOSURE TO PRODUCT: THIS MANUFACTURED PRODUCT AS PRODUCED AND WHEN USED UNDER AMBIENT CONDITIONS POSES NO HEALTH HAZARD. HOWEVER, IF THE PRODUCT IS HEATED BEYOND 200 DEG C OR IF IT CATCHES FIRE, THEN THE MAJOR CONSTITUENT ASPHALT (BITUMEN) WILL EMANATE SLIGHTLY TOXIC FUMES. MELTED ASPHALT (BITUMEN) FROM THE PRODUCT COULD ACT AS A FUEL AND CONTRIBUTE TO FIRE. SKIN / EYE CONTACT : EXPOSURE TO HOT MATERIAL CAUSE THERMAL BURNS. ASPHALT FUMES ARE MODERATELY IRRITATING TO EYES. INHALATION: PROLONG IHHALATION OF FUMES FROM HOT ASPHALT CAUSES NAUSEA, HEADACHE AND DIZZINESS. INGESTION: INGESTION IS UNLIKELY.				
EXPOSURE LIMITS NOT LISTED BY NIOSH	IRRITANCY OF PRODUCT NOT AVAIL.	SENSITIZATION TO PRODUCT NOT AVAIL.	CARCINOGENICITY NOT LISTED AS CARCINOGENS (IARC)	
TERATOGENICITY NOT AVAIL.	REPRODUCTIVE TOXICITY NOT AVAIL.	MUTAGENICITY NOT AVAIL	SYNERGISTIC PRODUCTS NOT AVAIL	

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SECTION 7 - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT: FOR PRODUCT AS PRODUCED AND USED, NO SPECIAL PROCEDURES OF SAFETY ARE ESSENTIAL. SHOULD PRODUCT CATCH FIRE THROUGH EXTERNAL SOURCE REMAIN UPWIND OF THE FIRE. AVOID SKIN AND EYE CONTACT, AVOID INHALATION OF FUMES.

SECTION 8 - FIRST AID MEASURES

SPECIFIC MEASURES IN CASE OF CONTACT WITH HOT MOLETEN ASPHALT.

EYE CONTACT: FLUSH WITH LARGE AMOUNTS OF WATER WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION IMMEDIATELY.

SKIN CONTACT: WASH WITH SOAP AND WATER, OR USE BABY OIL OR WATER-LESS HAND CLEANER. DO NOT USE SOLVENTS THINNERS TO CLEAN THE SKIN, GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

INGESTION: IF SWALLOWED, DO NOT INDUCE VOMITING. KEEP AT REST. GET IMMEDIATE MEDICAL ATTENTION.

INHALATION: REMOVE VICTIM TO FRESH AIR. IF BREATHING IS DIFFICULT, GIVE OXYGEN AND GET MEDICAL ATTENTION IMMEDIATELY.

SECTION 9 - PREPARATION DATE OF MSDS

PREPARED BY : " TECHNICAL GROUP"

PHONE NUMBER
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1 800 - 663 0076

DATE June 24, 2009

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