

# MATERIAL SAFETY DATA SHEET

## SECTION 1 - PRODUCT IDENTIFICATION AND USE

<b>PRODUCT IDENTIFIER</b>	<b>NO. 40 FIBREGLASS BASE SHEET NO. 28 FIBREGLASS BASE SHEET</b>	<b>PRODUCT IDENTIFICATION NUMBER (PIN)</b> NONE
<b>PRODUCT USE</b>	AS A BASE SHEET IN BOTH BUILT-UP ROOFING SYSTEM AND AN S.B.S MODIFIED SYSTEM	
<b>MANUFACTURER'S NAME</b>	HAL INDUSTRIES INC. B.C ROOFING PRODUCTS LTD.	<b>SUPPLIER'S NAME</b> HAL INDUSTRIES INC. B.C ROOFING PRODUCTS LTD.
<b>STREET ADDRESS</b>	9681 - 187TH STREET	<b>STREET ADDRESS</b> 9681 - 187TH STREET
<b>CITY</b>	SURREY	<b>PROVINCE</b> B.C
<b>POSTAL CODE</b> V4N - 3N3	<b>EMERGENCY TELEPHONE NO.</b> 1- 604 888 0777 1- 800 663 0076	<b>POSTAL CODE</b> V4N - 3N3
		<b>EMERGENCY TELEPHONE NO.</b> 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)
OXIDIZED ASPHALT	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/ M3)
INERT FILLER (PROPRIETARY)	NOT REGULATED	N/A	N/A
FIBER GLASS MAT	65997 - 17 - 3 for continuous filament glass fibers	OSHA FIBER LIMITS TO 5 PPM	
UREA FORMALDEHYDE BINDER ( used in fibreglass mat, is modified and cured)	9011 - 05 - 6	10 PPM for the formaldehyde monomer	

## SECTION 3 - PHYSICAL DATA

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

<b>PH</b> NOT APPLICABLE	<b>SPECIFIC GRAVITY</b> NOT AVAILABLE	<b>COEFF. WATER/OIL DIST.</b> INSOLUBLE IN WATER	<b>DENSITY</b> 1.08 - 1.12 G/CC AT 15 DEG C
-----------------------------	--	---	--

### SECTION 4 - FIRE AND EXPLOSION DATA

<b>FLAMMABILITY?</b> YES ( X ) NO ( )	<b>IF YES, UNDER WHICH CONDITION?</b> COMBUSTIBLE IF EXPOSED TO HIGH HEAT AND OPEN FLAMES, (SIMILAR TO OTHER ORGANIC COMPOUNDS).	
<b>MEANS OF EXTINCTION:</b> 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.		
<b>FLASH POINT (DEG C) AND METHOD (ASTM D93)</b> 265 DEG C	<b>UPPER FLAMMABLE LIMIT (%) BY VOLUME</b> NOT AVAIL.	<b>LOWER FLAMMABLE LIMIT (% BY VOLUME)</b> NOT AVAIL.
<b>ASPHALT'S BOILING POINT :</b> 400 DEG C	<b>HAZARDOUS COMBUSTION PRODUCTS</b> SMOKE, CARBON DIOXIDE, CARBON MONOXIDE AND TRACES OF OXIDES OF SULPHUR	
<b>EXPLOSION DATA</b> NA	<b>SENSITIVITY TO IMPACT</b> NONE	<b>SENSITIVITY TO STATIC DISCHARGE</b> NONE

### SECTION 5 - REACTIVITY DATA

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

### SECTION 6 - TOXICOLOGICAL PROPERTIES

<b>ROUTE OF ENTRY</b> ( ) SKIN CONTACT	( ) SKIN ABSORPTION	( ) EYE CONTACT	( ) INHALATION	( ) INGESTION
<b>EFFECT OF ACUTE EXPOSURE TO PRODUCT:</b> THIS MANUFACTURED PRODUCT AS PRODUCED AND WHEN USED UNDER AMBIENT CONDITIONS POSES NO HEALTH HAZARD. <b>HOWEVER,</b> 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. <b>SKIN / EYE CONTACT :</b> EXPOSURE TO HOT MATERIAL CAUSE THERMAL BURNS. ASPHALT FUMES ARE MODERATELY IRRITATING TO EYES. <b>INHALATION:</b> PROLONG IHHALATION OF FUMES FROM HOT ASPHALT CAUSES NAUSEA, HEADACHE AND DIZZINESS. <b>INGESTION:</b> INGESTION IS UNLIKELY.				
<b>EXPOSURE LIMITS</b> NOT LISTED BY NIOSH	<b>IRRITANCY OF PRODUCT</b> NOT AVAIL.	<b>SENSITIZATION TO PRODUCT</b> NOT AVAIL.	<b>CARCINOGENICITY</b> NOT LISTED AS CARCINOGENS (IARC)	
<b>TERATOGENICITY</b> NOT AVAIL.	<b>REPRODUCTIVE TOXICITY</b> NOT AVAIL.	<b>MUTAGENICITY</b> NOT AVAIL	<b>SYNERGISTIC PRODUCTS</b> NOT AVAIL	

## 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**  
1 604 - 888 0777  
1 800 - 663 0076

**DATE** June 24, 2009

**IMPORTANT:** The technical information herein is believed to be accurate. It is offered for your consideration, investigation and verification. Buyer assumes all risk of storage, handling and use of product. NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE INCLUDING, BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein shall be constructed as license to operate under recommendation to infringe any patents.