

# MATERIAL SAFETY DATA SHEET

## SECTION 1 - PRODUCT IDENTIFICATION AND USE

<b>PRODUCT IDENTIFIER</b> <b>ASPHALT FELTS</b>		<b>PRODUCT IDENTIFICATION NUMBER (PIN)</b> NONE	
INCLUDES: ALL ROOFING FELTS INCLUDING ASTM AND CSA APPROVED. ASPHALT FELT NO. 15 ASTM, ASPHALT FELT PLAIN, NO. 15 PERFORATED ASPHALT FELT, NO. 30 ASPHALT FELT PLAIN AND ASTM, B.U.R. FELT, SHINGLE UNDERLAYMENT FELT, SHEATHING FELT.			
<b>PRODUCT USE</b>		ON FLAT ROOFING:                    FOR BUILT UP ROOFING. ON SLOPED ROOFS:                 AS AN UNDERLAYMENT UNDER SHINGLES. ON WALLS:                             AS EXTERNAL SHEATHING, BREATHER TYPE.	
<b>MANUFACTURER'S NAME</b> <b>HAL INDUSTRIES INC.</b>		<b>SUPPLIER'S NAME</b> <b>HAL INDUSTRIES INC.</b>	
<b>STREET ADDRESS</b> 9681 - 187TH STREET		<b>STREET ADDRESS</b> 9681 - 187TH STREET	
<b>CITY</b> SURREY		<b>PROVINCE</b> B.C	
<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)
ASPHALT                                         50 - 60 %	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)
ORGANIC FELT                                 40 - 50 %	NOT REGULATED		

## SECTION 3 - PHYSICAL DATA

<b>PHYSICAL STATE</b> SHEET FORMS	<b>ODOUR AND APPEARANCE</b> BLACK WITH SLIGHT PETROLEUM ODOUR			<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 60°C	<b>FREEZING /POUR POINT</b> NA	
<b>PH</b> NOT APPLICABLE	<b>SPECIFIC GRAVITY</b> NOT AVAILABLE	<b>COEFF. WATER/OIL DIST.</b> INSOLUBLE IN WATER		<b>DENSITY</b> 1.8- 2.5 G/CC AT 15 °C	

## SECTION 4 - FIRE AND EXPLOSION DATA

**FLAMMABILITY?** YES ( X ) NO ( ) **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.

<b>FLASH POINT (DEG C) AND METHOD (ASTM D93)</b> 265 °C	<b>UPPER FLAMMABLE LIMIT (% BY VOLUME)</b> NOT AVAIL.	<b>LOWER FLAMMABLE LIMIT (% BY VOLUME)</b> NOT AVAIL.
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<b>ASPHALT'S BOILING POINT :</b> 400 °C	<b>HAZARDOUS COMBUSTION PRODUCTS</b> SMOKE, CARBON DIOXIDE, CARBON MONOXIDE AND TRACES OF OXIDES OF SULPHUR
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<b>EXPLOSION DATA</b> NA	<b>SENSITIVITY TO IMPACT</b> NONE	<b>SENSITIVITY TO STATIC DISCHARGE</b>	NONE
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## SECTION 5 - REACTIVITY DATA

**CHEMICAL STABILITY** YES ( X ) NO ( ) **IF NO, UNDER WHICH CONDITION?** STABLE, (PRODUCT IS IN A SHEET FORM)

**INCOMPATIBILITY WITH OTHER SUBSTANCES** YES ( X ) NO ( ) **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** STABLE UNDER NORMAL CONDITIONS.  
SEE HAZARDOUS COMBUSTION PRODUCTS FOR PRODUCTS OF THERMAL DECOMPOSITION

## 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°C OR IF IT CATCHES FIRE, THEN THE MAJOR CONSTITUENT ASPHALT (BITUMEN) WILL EMANATE SLIGHTLY IRRITATING FUMES. MELTED ASPHALT (BITUMEN) FROM THE PRODUCT AND THE KRAFT PAPER COULD ACT AS A FUEL AND CONTRIBUTE TO FIRE.  
**SKIN / EYE CONTACT :** EXPOSURE TO HOT MATERIAL CAUSES THERMAL BURNS. ASPHALT FUMES ARE MODERATELY IRRITATING TO THE EYES.  
**INHALATION:** PROLONG INHALATION OF FUMES FROM HOT ASPHALT CAUSES NAUSEA, HEADACHE AND DIZZINESS.  
**INGESTION:** 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 INCASE OF CONTACT WITH HOT MOLTEN 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** Jan 29, 2009

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