

MSDS MATERIAL SAFETY DATA SHEET HB S-200® INDUSTRIAL

According to Regulation (EC) 1907/2006

SECTION I MATERIAL IDENTIFICATION

TRADE NAME: LIQUID RUBBER® HB S-200 INDUSTRIAL - MATERIAL USE: Protective Coating - EMERGENCY TEL +31 (0)297 587866 - CHEMICAL FAMILY: Water suspension of petroleum derived hydrocarbons (polymer modified emulsified asphalt) and inert fillers. - T.D.G. CLASSIFICATION: NON REGULATED - WHIMIS CLASSIFICATION: NON REGULATED

SECTION II HAZARDS IDENTIFICATION

Hazards: n/a

SECTION III COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENT	CAS#	% (BY MASS)	LC50 (ppm)	LD50 (mg/kg)
			(rat inhal)	(rat oral)
Complex mixture of bitumens	n/a	40-70	n/a	n/a
Anionic surfactants	n/a	0.5-2.0	n/a	n/a
Water	7732-18-5	30-60	n/a	n/a
Polymer dispersion	n/a	5-25	n/a	n/a

SECTION IV EMERGENCY AND FIRST AID PROCEDURES

Inhalation: n/a - Skin: This is an alkaline product. If splashed on the skin immediately wash thoroughly with fresh water. If the product has dried on the skin massage the area with medical grade mineral oil, baby oil or edible oil, then wash with soap and water. If irritation persists seek medical attention. - Eyes: Flush thoroughly with fresh water for at least ten minutes. Seek medical attention. Ingestion: DO NOT INDUCE VOMITING. Seek medical attention. **Notes to Physician:** No attempt should be made to remove firmly adhering bitumen from the skin. Once the bitumen has cooled, it will do no further harm and in fact provides a sterile covering over a burnt area. As healing takes place, the bitumen plaque will detach itself, usually after a few days. If solvent treatment is used, it should be followed by washing with soap and water, then the application of a proprietary refatting agent or skin cleansing cream. Only medically approved solvents may be used to remove bitumen from burns, as other solvents could cause further skin damage.

SECTION V FIRE & EXPLOSION DATA

Means of extinction: n/a - Sensitivity to mechanical impact/static discharge: n/a - Flash point (method): n/a (non-combustible)
Upper flammable limits % : n/a - Lower flammable limits % : n/a - Auto-ignition temperature: n/a - Special fire fighting instructions: n/a - Unusual fire and explosion hazards: Product will not burn but may splatter if temperature exceeds the boiling point of water.

SECTION VI SPILL PROCEDURES

In the event of a spill: Dike and contain, transfer to containers for recovery or disposal. Keep out of sewers. Waste disposal method: Follow federal, provincial and local regulations regarding disposal.

SECTION VII SPECIAL PRECAUTIONS

Storage and handling conditions: Keep containers tightly closed when not in use. KEEP FROM FREEZING. Special shipping information: Not regulated by the Transportation of Dangerous Goods Regulations.

SECTION VIII HEALTH INFORMATION

Exposure limit: n/a - Inhalation: n/a - Skin: Adhesion - Eyes: Adhesion, irritation - Ingestion: Blockage of digestive and/or respiratory tract. Chronic effects: n/a

SECTION IX PHYSICAL PROPERTIES

Odour and appearance: Brown liquid, slight resinous odour. - Odour threshold: n/a - Specific gravity: 1.00 (approx.)
Coefficient of water/oil distribution: n/a - Vapour pressure (mm Hg): 17 @20°C (water) - Boiling point: 100°C (water) - Freezing point: 0°C
pH: 7-13 - Vapour density (air = 1): >1 - Evaporation rate (nBuAcetate = 1): <1 - Volatiles %: 30-60 (water) - Solubility in water: partially soluble

SECTION X REACTIVITY DATA

Chemical stability: Stable - Incompatible materials: n/a - Hazardous decomposition products: Avoid heating above 200°C. At elevated temperatures hazardous vapours can be released, including carbon monoxide, hydrogen chloride, organic acids and aldehydes. - Hazardous polymerization: Will not occur.

SECTION XI SPECIAL PROTECTION

Respiratory protection: n/a - Ventilation: n/a - Protective gloves: Recommended - Eye protection: safety glasses/splash goggles recommended - Other protective equipment: Long sleeves, loose clothing recommended.

SECTION XII ECOLOGICAL INFORMATION

Ecological information: Toxicity: n/a - Ecotoxicity effects: n/a

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SECTIE XIII DISPOSAL CONSIDERATIONS

Instructions for removal: Use soap and warm water to clean tools. Waste disposal method: Keep out of sewers. Dispose of in accordance with applicable legal provisions. Comply with federal, state or local regulations regarding disposal.

SECTIE XIV TRANSPORT INFORMATION

Transport information: No dangerous goods as defined by the transport regulations - ADR/RID, IMDG, ICAO/IATA-DGR. - VN-number: n.v.t. - Loadingname: n.v.t. - Transport hazard class(es): n.v.t. - Packing group: n.v.t. - Special precautions for users: n.v.t.

SECTIE XV REGULATORY INFORMATION

Regulatory information: n/a

SECTIE XVI PREPARED BY

LRE Coatings B.V. – Preparation date: 1-jan-2015

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HB S-200 Industrial

HIGH BUILD WATERPROOFING ADHESIVE SEALANT & COATING

HB S-200 Industrial is a modified elastomeric asphalt emulsion specifically formulated to be applied by brush, squeegee or specially designed spray equipment. HB S-200 Industrial is a cold applied single component product designed for a wide range of protective coating applications. The product technology employed in HB S-200 Industrial provides a solvent-free, quick setting coating that yields a membrane with excellent strength, elasticity and adhesion.

HB S-200 Industrial is an environmentally friendly waterproofing product which can be applied indoors and outdoors with no special protective equipment. HB S-200 Industrial is used as a protective coating to prevent water and corrosion damage. HB S-200 Industrial can be used for rust protection of ferrous materials and is also of value for noise and vibration dampening. It may also be applied to concrete structures, slabs and parking decks. The high viscosity of HB S-200 Industrial allows it to be used to cover small cracks, or to coat vertical surfaces

- FREE OF FLAMMABLE SOLVENTS
- NON-TOXIC
- ODOURLESS AND WATER BASED

APPLICATION

HB S-200 Industrial is a water based environmentally safe alternative to conventional hot-applied or solvent based waterproofing systems. When cured it will form a seamless flexible membrane. HB S-200 Industrial is a single component product that may be applied using a brush, roller or squeegee. It may also be spray applied using a specially designed spray system. Since HB S-200 Industrial cures by evaporation, an application temperature of 15-20°C is recommended. Apply in thin coats. The product fully cures within 24 hours at 20°C (70°F) and 50% relative humidity, when applied at a thickness of 40 mils (1 mm). HB S-200 Industrial should be applied to a dry surface which is free of dirt, debris, oil or grease. Application is not recommended if heavy rains are imminent, or in high humidity environments. For best results apply in thin coats. With joints or cracks in the surface a fabric reinforcing layer may be recommended. See application manual or consult with your Liquid Rubber Europe representative for further details. HB S-200 Industrial is applied between 0.3-0.7 m²/litre (15-30 ft²/gal) to produce a 40-120 mil (1-3 mm) protective membrane. Typically HB S-200 Industrial dries to the touch in one minute @20°C and is completely cured in 48 hrs. This curing time may vary depending on temperature and relative humidity. **Important:** During curing process there is formed a greasy layer on the HB S-200. Degrease the membrane before the next layer will be applied.

LIMITATIONS

HB S-200 Industrial is mildly alkaline. When applying this product observe appropriate safety precautions, wear gloves, eye protection and other suitable protective equipment. For further information please consult the product MSDS

CAUTION

HB S-200 Industrial should not be applied when the ambient temperature is below 15°C. The uncured membrane may be damaged if frozen. Do not apply to wet surfaces or directly before a rain. Some surface base coat materials such as coal tar are unsuitable for use with HB S-200 Industrial. For industrial use only. Keep out of the reach of children. Do not apply if rain is imminent within 24 hrs. Do not store in direct sunlight max 32°C (90°F) or below 5°C (41°F).

PHYSICAL PROPERTIES (Liquid)				PERFORMANCE DATA (Cured membrane)			
PROPERTY		TYPICAL RESULTS		PROPERTY		TYPICAL RESULTS	
Colour		Brown to black		Colour		Black	
Specific gravity (liquid) g/cm ³		Approx. 1.0		Specific gravity, g/cm ³		Approx. 1.0	
Odour		None		Chemical resistance ASTM G 20		Resistant to most inorganic solutions. Not recommended for gasoline or other petroleum products. Consult Chemical Resistance chart for further information.	
Volatile Organic Compound		Contains no solvents		Biological resistance ASTM E 154, ASTM 0412		Passed (> 90% original value)	
% Solids (wt)		53 - 58%		Impact resistance CSB37 -GP-500 23°C, in-lbs		Passed (168)	
Viscosity, Brookfield (sp. #5, 20 rpm)		15.000 - 25.000		Water tightness after impact		Passed (no leakage)	
pH		10 - 12		Water tightness CGSB 37-GP-56		Zero leakage	
COVERAGE				Tensile strength ASTM 0412, psi		90	
Cured Membrane		Coverage		Elongation, %		850	
Mils	mm	ft ² /l	m ² /l	Accelerated weathering, ASTM G 155, 0 412		Passed (No deterioration of film)	
40	1.00	7.93	0.74	Tensile strength		Passed (> 90% original value)	
80	2.00	3.96	0.37	Hardness, Ourometer Type 00		85-87	
120	3.00	2.64	0.24	Salt Fog Corrosion, Steel ASTM D412		1000 hours passing	
				Surface Corrosion ASTM D610		No Corrosion after 500 hours, 0.03% after 1000 hours	
				Adhesion to concrete ASTM C907, psi		111	
				Hardness ASTM D2246		50 Type A	
				Puncture resistance CGSB 37-GP-56		No perforations	
				Water Vapour Transmissions ASTM E96		0.04	

TECHNICAL SERVICE

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