RUBBERISED BITUMEN WATERPROOFING COMPOUND

MATERIAL SAFETY DATA SHEETS (MSDS)

<u>1. PRODUCT AND COMPANY IDENTIFICATION</u>

Product Name:	Rubberised Bitumen Waterproofing Compound		Updated:	12 August 2007
Manufacturer:	DALVEN PRODUCTS	CAS Number:	Mix	ture - NA
	P.O. Box 371			
	EPPINDUST			
	South Africa			

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical names and synonyms:	Dispersion of bitumen in a water phase containing emulsifiers. Modified by the addition of synthetic nubber
	latex emulsion and inert mineral fillers.

Ingredients considered hazardous to health:

Substance Name	Approx Wt %	
PETROLEUM ASPHALT	36	
RUBBER LATEX	5	
See section 8 for exposure limits (if applicable).		

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<u>3. HAZARDS IDENTIFICATION</u>

EFFECTS OF OVEREXPOSURE:	Skin irritation can occur under conditions of poor personal hygiene.	
EMERGENCY RESPONSE DATA: Dark brown thixotropic soft paste. An emulsion of bitumen and rubber latex suspended in an aqueous phase Material is water based and is not flammable		
See Section 11 for additional Biological hazards (if applicable)		

.4. FIRST AID MEASURES

EYE CONTACT:	Flush thoroughly with water. If irritation occurs, call a doctor.	
SKIN CONTACT:	Wash contact areas immediately with water before the product sets. After	
	the product has set, clean with hand-cleaner suitable for heavy grease and	
	bitumen. Residue is soluble in petroleum solvents such as turpentine,	
	paraffin and white spirits Remove contaminated clothing. Launder	
	contaminated clothing before reuse.	
INHALATION:	Vapours not considered to be a problem	
INGESTION:	Not expected to occur in normal industrial use. However do not induce	
	vomiting. Give 1 to 2 glasses of water. Get medical assistance.	

5. FIRE-FIGHTING MEASURES

Product is not flammable

6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES:	Report spills as required to appropriate authorities.
PROCEDURES IF MATERIAL IS	Adsorb on fire retardant treated sawdust, diatomaceous
RELEASED OR SPILLED:	earth, etc. Shovel up and dispose of at an appropriate waste
	disposal facility in accordance with current applicable laws
	and regulations, and product characteristics at time of
	disposal.
ENVIRONMENTAL	Prevent spills from entering storm sewers or drains and
PRECAUTIONS:	contact with soil.
PERSONAL PRECAUTIONS:	See section 8

7. HANDLING AND STORAGE

HANDLING:	Avoid contact with skin.
STORAGE:	Store in a cool area. Avoid sub-zero temperatures

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EYE PROTECTION:	Normal industrial eye protection practices should be employed
SKIN PROTECTION:	Impervious gloves should be worn.

.9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical properties are given below.

APPEARANCE:	Dark brown thixotropic soft paste.
	Black highly viscous material when set
COLOUR:	Dark brown. Becomes black when set.
ODOUR:	Mild
ODOUR THRESHOLD-ppm:	NA
pH:	5 - 11
BOILING POINT C:	$100^{\circ}\mathrm{C}$
MELTING POINT C:	NA
FLASH POINT C:	NA
FLASH POINT C:	NA
AUTO FLAMMABILITY:	NA
EXPLOSIVE PROPERTIES:	NA
OXIDIZING PROPERTIES:	NA
VAPOUR PRESSURE-mmHg 20 C:	< 0.1
VAPOUR DESNSITY:	NA
EVAPORATION RATE:	NA
RELATIVE DESNITY, 20 C, kg/1:	1.01
SOLUBILITY IN WATER:	Dispersible in water
PARTITION COEFFICIENT:	NE
VISCOSITY AT 60 C, cSt:	NE
VISCOSITY AT 100C, cSt:	NE
POUR POINT C:	NA

FREEZING POINT C:		0 °C	
VOLATILE ORGANIC COMPOUND:		NE	
NA=NOT APPLICABLE	NE=NOT EST.	ABLISHED	D=DECOMPOSES
FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING			
REPRESENTATIVE			

10. STABILITY AND REACTIVITY

STABILITY (Thermal, Light, ETC.):	Stable.
CONDITIONS TO AVOID:	Freezing and boiling.
INCOMPATIBILITY: (Materials to avoid):	Strong oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide.
HAZARDOUS POLYMERIZATION:	Will not occur.

11. TOXICOLOGICAL DATA

ACUTE TOXICOLOGY		
ORAL TOXICITY (RATS):	practically non-toxic - Based on testing of	
	similar products and/or the components.	
DERMAL TOXICITY (RABBITS):	Practically non-toxic - Based on testing of	
	similar products and/or the components.	
INHALATION TOXICITY (RATS):	Practically non-toxic - Based on testing of	
	similar products and/or the components.	
EYE IRRITATION (RABBITS):	Practically non-irritating Based on testing on	
	similar products and/or the components.	
SKIN IRRITATION (RABBITS):	IRRITANT Based on testing of similar	
	products and/or the components.	
OTHER ACUTE TOXICITY DATA:	Inhalation of vapours/mists unlikely to cause	
	respiratory system irritation.	
GENETIC TOXICOLOGY (SUMMARY)		
Mutagenicity studies with petroleum bitumen based materials in the ames, mouse lymphoma, rat		
bone marrow cytogenetics and dominant lethal assays showed no adverse effects.		
REPRODUCTIVE TOXICOLOGY (SUMMARY)		
Teratology studies with petroleum bitumen based materials were negative.		
NEUROTOXICOLOGY (SUMMARY)		
Animal studies with petroleum bitumen based materials by inhalation for 12 months showed no		
significant neurotoxic, blood, kidney or other effects.		

<u>12. ECOLOGICAL INFORMATION</u>

ENVIRONMENTAL FATE AND EFFECTS:		
Fish: Juvenile Rainbow Trout:	Harmful if immersed in water before the product has set. Non-	
	toxic if product has set before immersion in water.	

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:	Dispose of at an appropriate waste disposal facility in

	accordance with current applicable laws and regulations and product characteristics at time of disposal.
RCRA INFORMATION:	The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, part 261D), nor is it formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity, or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic leaching Procedure (TCLP).
FLASH:	N/A

14. TRANSPORT INFORMATION

SHIPPING NAME:	Non Flammable, bitumen emulsion	
	n.o.s.(contains ASPHALT)	
HAZARD CLASS & DIV:	Non-hazardous	
STCC:	NE	
DANGEROUS WHEN WET:	NO	
POISON:	NO	
LABEL(s):	NA	
PRODUCT RQ:	NA	
MARPOL III STATUS:	NA	

15. REGULATORY INFORMATION

Symbol:	Non Hazardous
Risk Phrase(s):	Mildly irritating to skin. Harmful to aquatic organisms while in
	semi liquid state (before product has set). May cause long-term
	adverse effects in the aquatic environment if immersed in water
	before the product has set.
Safety phrase(s):	Wear suitable protective clothing and gloves. Avoid release to
	the environment. Refer to special instructions / Safety data
	sheets. If swallowed, do not induce vomiting: seek medical
	advice immediately and show this document.
Contains:	Bitumen emulsion, rubber latex and inert mineral fillers.
U.S. Super fund Amendments	This product contains no "EXTREMELY HAZARDOUS
and Reauthorization Act	SUBSTANCES".
(SARA) Title III:	
This product contains no chemicals reportable under SARA (313) Toxic Release Programme.	

16. OTHER INFORMATION

USE: General purpose waterproofing compound.

INGREDIENT DESCRIPTION	CAS NUMBER	
OXIDIZED PETROLEUM ASPHALT	64742-93-4	
INFORMATION GIVEN HEREIN IS OFFERED IN GOOD FAITH AS ACCURATE BUT		

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