NORDIC WATERPROOFING

SAFETY DATA SHEET

prepared by ALECTIA A/S

Revision: 20th December 2016
Supersedes: -
Version: 1

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier:

KERABIT KATUSAUMO
Article no. 15737

1.2. Relevant identified uses of the substance or mixture and uses advised against:

For sealing joints and cracks in asphalt and concrete, as well as for the joints between rails and their concrete foundation.

1.3. Details of the supplier of the safety data sheet:

Nordic Waterproofing Oy, Puistokatu 25-27, 08150 Lohja, Finland,
Telephone: 00358 10 851 1000, E-mail: info@kerabit.fi

1.4. Emergency telephone number:

In case of a medical emergency following exposure to a chemical call NHS 111 - only available in certain areas of England (outside of these areas call NHS Direct on 0845 4647). The National Poisons Information Service emergency number is 0344 892 0111 (only available to health professionals).

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture:

The product is not classified as hazardous according to the classification and labelling rules for substances and mixtures.

CLP- classification: Not classified.

2.2. Label elements:		**Hazard pictograms** **Signal word**
Contains:	-	
Hazard statements:	-	
Precautionary statements:	-	
Supplemental information:	None.	

2.3. Other hazards:

Risk of burns and risk of breathing bitumen fumes due to the high handling temperature.
Bitumen fumes can cause irritation of the respiratory system, eyes and skin.
This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures:
Contains:

CAS no. EC no.	REACH reg.no.	Chemical name	%	CLP- classification	Note:
8052-42-4 232-490-9	01-2119480172-44	Bitumen (Asphalt)	> 50	Not classified	-

For full text of Hazard statements: see section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation: Fresh air. Seek medical attention if symptoms persist.

Skin: Remove contaminated clothing. Always wash skin thoroughly with soap and water and apply skin cream. If necessary, use a skin cleansing agent. Seek medical advice in case of eczema or other skin discomforts.
If contact with hot product: See under "Burns".

Eyes: In case of eye irritation: Fresh air. Eye irritation can be relieved by rinsing with water.
If contact with hot product: See under "Burns".

Ingestion: Rinse mouth thoroughly and drink water. Do not induce vomiting. Seek medical attention if symptoms persist.

Burns: Immediately cool with water. Immerse the burnt area in a bucket with water or pour water over the burnt area constantly. Cold running water gives the best pain relief. Remove clothing, shoes or gloves if it does not stick to the burnt area.
Keep cooling with water also while transporting or during waiting time (if necessary bring a bucket with water). Keep cooling until the pain stops, it may last for hours. Leave bitumen in place.

Other information: When obtaining medical advice, show the safety data sheet or label.

4.2. Most important symptoms and effects, both acute and delayed: Contact with hot product causes burns.
Bitumen fumes can cause respiratory tract or eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed: Do not attempt to remove adhering bitumen. It does not hamper the healing of the wound. Continue to cool with water until the pain stops. Wash with cold water and soap. It is not recommended to use steroid spray on bitumen burns.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media: Extinguish with carbon dioxide, powder, foam or water mist.
Do not use water jet, as it may result in an explosive boil-over.

5.2. Special hazards arising from the substance or mixture: Hazardous fumes containing carbon monoxide and sulphur oxides may be formed under fire conditions.

5.3. Advice for firefighters: Firefighters should wear a full-face positive-pressure self-contained breathing apparatus and protective equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:	Provide adequate ventilation. Use personal protection.
6.2. Environmental precautions:	Do not discharge into drains and/or water courses.
6.3. Methods and material for containment and cleaning up:	Contain spillage and allow it to cool and solidify. Collect spillage and place in container for disposal according to local regulations.
6.4. Reference to other sections:	See section 8 for type of protective equipment. See section 13 for instructions on disposal.

SECTION 7: HANDLING AND STORAGE

General information:	For quality, technical, health, safety and environmental reasons, bitumen should not be over-heated. Bitumen temperature should be kept at least 30 °C below flash point and should never exceed the industry recommended maximum temperature of 200 °C. Excessive heating above the maximum recommended handling and storage temperature may cause degradation of the substance and evolution of irritant vapours and fumes.
7.1. Precautions for safe handling:	Do not breathe bitumen fumes. Avoid contact with skin and eyes. Maximum handling temperature: 210 °C.
7.2. Conditions for safe storage, including any incompatibilities:	Store in a cool and dry place. Protect from heat and direct sunlight. Stacking of pallets is not recommended.
7.3. Specific end use(s):	See section 1.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters:

Occupational exposure limit value

Chemical name	**CAS number**	**Workplace exposure limits (WELs)**		**Note**
		Long-term exposure limit (8-hour TWA reference period)	Short-term exposure limit (15-minute reference period)	
Bitumen	8052-42-4	5 mg/m^3	10 mg/m^3	-
Legal basis:	EH40/2005 Workplace exposure limits (second edition, published 2011).			
Note:	None.			
Monitoring procedures:	Compliance with the stated occupational exposure limits may be checked by occupational hygiene measurements.			

DNEL values

Chemical name	**DNEL value**
Bitumen	Workers: 2.9 mg/m³/8h (aerosol - inhalation) General Population: 0.6 mg/m³/24h (aerosol - inhalation)

8.2. Exposure controls

Appropriate engineering controls:	Provide adequate ventilation. Keep the temperature as low as possible. The temperature of the product should not exceed 210 °C, as it may result in unnecessary generation of fume. The use of a thermostatically controlled boiler is recommended to ensure the bitumen is not overheated. Possibility of measuring the product temperature should be available. Provide mechanical ventilation for indoor use. When filling blocks of bitumen into the boiler: Beware of splashes of the molten product. Wash hands before breaks, eating, toilet visits and after work. Use mild soap and water and apply skin cream after washing. Water and means of cleaning should be brought along if work is not carried out near mobile site huts or permanent common rooms.

Personal protective equipment

Respiratory protection:	If the temperature of the product is warmer than 200 °C (but never warmer than 210 °C), respiratory protection equipment with combined filters A2P2 should be worn. Respiratory protection must be available at the workplace.
Hand protection:	Use heat-resistant gloves when working with the hot product.
Skin protection:	Overalls and/or long-sleeved jackets and full length trousers should be worn to protect skin from burns.
Eye/face protection:	Wear face shield where splashing is possible.
Environmental exposure controls:	No special requirements.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance:	Black, solid (25 °C) Black, liquid (at handling temperature)	**Vapour pressure:**	No available data
Odour:	Bitumen	**Vapour density:**	No available data
Odour threshold:	No available data	**Relative density:**	Ca. 1.3 g/cm^3
pH:	Not applicable	**Solubility(ies):**	Insoluble in water
Melting point/freezing point:	No available data	**Partition coefficient n-octanol/water:**	No available data
Initial boiling point and boiling range:	No available data	**Auto-ignition temperature:**	No available data
Flash point:	≥ 250 °C	**Decomposition temperature:**	No available data
Evaporation rate:	No available data	**Viscosity:**	No available data
Flammability (solid, gas):	No available data	**Explosive properties:**	Not explosive
Upper/lower flammability or explosive limits:	No available data	**Oxidising properties:**	Not applicable

9.2. Other information:

Softening point:	95-110 °C	**Penetration (1/10 mm):**	25-55 (25 °C)

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:	Non-reactive.
10.2. Chemical stability:	The product is stable when used in accordance with the supplier's directions.
10.3. Possibility of hazardous reactions:	Heating above the flash point will produce vapours, which may form explosive mixtures with air.
10.4. Conditions to avoid:	Avoid overheating.
10.5. Incompatible materials:	Avoid contact with strong oxidizing agents. Do not allow water or any liquid to come into contact with hot product since this could cause splashing and boil-over of hot material.
10.6. Hazardous decomposition products:	The product may emit hazardous thermal decomposition products if overheated.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation:	Too high a temperature causes generation of fume, which under conditions of poor ventilation is irritating to the respiratory system.
Skin:	Skin contact with hot product causes burns. Bitumen fumes condensing on skin may cause irritation.
Eyes:	Hot bitumen splash in the eyes causes burns. Bitumen fumes may cause eye irritation.
Ingestion:	Ingestion of cold product may possibly cause discomfort. Ingestion of heated product causes burns.
Chronic effects:	Long term exposure to high concentrations of bitumen fume may result in chronic bronchitis and, possibly, other respiratory disorders.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity:	Bitumen is not regarded as harmful to the environment. The product does not have to be classified. Test data are not available.
12.2. Persistence and degradability:	The product is not readily biodegradable**.**
12.3. Bioaccumulative potential:	Data on bioaccumulation are not available. 8052-42-4: Although all constituents of bitumen have log Kow in excess of 6 and hence, are potentially bio-accumulative, the low water solubility and high molecular weight make the bio-availability to aquatic organisms limited. Bio-accumulation of bitumen is unlikely.
12.4. Mobility in soil:	The product is not mobile and will remain on the soil surface.
12.5. Results of PBT and vPvB assessment:	This product does not contain any PBT or vPvB substances.
12.6. Other adverse effects:	None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods:

Waste, residual material etc. should be disposed of in accordance with national and local regulations.

EWC-code: 17 03 02

SECTION 14: TRANSPORT INFORMATION

Cold product (< 100 °C): Not classified as dangerous for transport.
Hot product: If transported ≥ 100 °C the product is classified as dangerous goods.

ADR/RID

14.1. UN number	14.2. UN proper shipping name	14.3. Transport hazard class(es)	14.4. Packing group	14.5. Environmental hazards	Other information
3257	ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt)	9	III	None	Hazard identification No. 99

IMDG

14.1. UN number	14.2. UN proper shipping name	14.3. Transport hazard class(es)	14.4. Packing group	14.5. Environmental hazards	Other information
3257	ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt)	9	III	None	EmS: F-E, S-E

ADN

14.1. UN number	14.2. UN proper shipping name	14.3. Transport hazard class(es)	14.4. Packing group	14.5. Environmental hazards	Other information
3257	ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt)	9	III	None	-

IATA

14.1. UN number	14.2. UN proper shipping name	14.3. Transport hazard class(es)	14.4. Packing group	14.5. Environmental hazards	Other information
3257	ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt) Forbidden for transport on passenger and cargo aircraft	9	III	None	-

14.6. Special precautions for user: None.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code: Not relevant.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture: No special.

15.2. Chemical safety assessment: No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Changes:	Issue 1: No changes.
Abbreviations and acronyms:	PBT: Persistent, Bioaccumulative and Toxic. vPvB: very Persistent and very Bioaccumulative. CLP: CLP-Regulation (EC) No 1272/2008 (Classification, Labelling and Packaging). DNEL: Derived No Effect Level. Log Kow: Partition coefficient (octanol/water).
Method of classification:	Calculation based on the hazards of the known components.
H-statements:	None.
Training advice:	Follow national rules applying for work with bitumen products. The user must be instructed in the proper work procedure and be familiar with the contents of this safety data sheet.
Further information:	Kerabit Katusaumo is an elastic, hot-applied sealing compound containing rubber. This product must be stored, handled and used in accordance with good industrial work hygiene and safety practice.
Person responsible for the Safety Data Sheet (e-mail):	Susanne Brandt Hansen (sbha@alectia.com).

Disclaimer:	As we do not know nor can control the specific work conditions of the user, the user are cautioned to take the necessary provisions in order to comply with the rules in force. This safety data sheet is devised on the information presented by the supplier as well as under the existing EU and national laws.