

SAFETY DATA SHEET

prepared by ALECTIA A/S

Revision: 29th June 2015

Supersedes: -



Version: 1

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

- 1.1. Product identifier:** **KERABIT BITUMIMAALI / TAKMASSA**
Article no. 347
- 1.2. Relevant identified uses of the substance or mixture and uses advised against:** For maintenance of bitumen roofs and for painting of steel plates.
- 1.3. Details of the supplier of the safety data sheet:** Nordic Waterproofing Oy, Puistokatu 25-27, 08150 Lohja, Finland, Tel. 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 0844 892 0111 (only available to health professionals).

SECTION 2: HAZARDS IDENTIFICATION

- 2.1. Classification of the substance or mixture:**
CLP- classification: Flam. Liq. 3; H226 STOT SE 3; H336 EUH066 (CLP 1272/2008).

2.2. Label elements:		Hazard pictograms Signal word
Contains:	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics.	  WARNING
Hazard statements:	Flammable liquid and vapour. (H226) May cause drowsiness or dizziness. (H336)	
Precautionary statements:	If medical advice is needed, have product container or label at hand. (P101) Keep out of reach of children. (P102) Keep away from heat/sparks/open flames/hot surfaces. — No smoking. (P210) Use only outdoors or in a well-ventilated area. (P271) Wear protective gloves. (P280) Dispose of contents/container to appropriate waste site in accordance with national and local regulations. (P501)	
Supplemental information:	Repeated exposure may cause skin dryness or cracking. (EUH066)	

- VOC-labelling:** EU limit value for the VOC content of this product (cat. A/i): 500 g/l.
The VOC content of this product is max. 324 g/l.

- 2.3. Other hazards:** 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	%	DSD-classification CLP- classification	Note:
8052-42-4 232-490-9	01- 2119480172- 44	Bitumen	55-65	Not classified	-
64742-48-9 919-857-5	01- 2119463258- 33	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	25-35	Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE 3; H336 EUH066	1, 2, 3
40027-38-1 254-754-2	-	Oleic acid, compound with (Z)- Noctadec-9-enylpropane-1,3- diamine	< 0.4	Skin. Corr. 1B; H314 Acute Tox. 4; H302 Aquatic Acute 1; H400 (M-factor = 10)	-

For full text of Hazard statements: see section 16.

- 1) The substance is an organic solvent.
- 2) The substance is volatile.
- 3) H304 is not applicable due to the high viscosity of the product.

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures**

Inhalation:	Fresh air and rest under surveillance. Seek medical advice if symptoms persist. If the person is unconscious, call an ambulance and apply artificial respiration. If breathing, place the person in recovery position and keep warm.
Skin:	Remove contaminated clothes. If necessary use a skin cleansing agent. Wash skin thoroughly with soap and water and apply skin cream. Seek medical advice in case of eczema or other skin discomforts.
Eyes:	Rinse immediately with plenty of water for at least 15 minutes. Open eyes wide. Remove any contact lenses. Seek medical advice if irritation persists.
Ingestion:	Rinse mouth thoroughly and drink water. Do not induce vomiting. Seek medical advice.
Burns:	Rinse with water until the pain stops. Do not attempt to remove adhering bitumen unless absolutely necessary. Remove clothes which do not adhere to the body – seek medical advice; if possible continue rinsing until a doctor takes over the treatment.
Other information:	When obtaining medical advice, show the safety data sheet or label.
4.2. Most important symptoms and effects, both acute and delayed:	Inhalation of vapours may cause respiratory irritation, dizziness and drowsiness, Splashes in the eyes may cause irritation. Defatting to the skin. Repeated exposure may cause skin dryness or cracking.
4.3. Indication of any immediate medical attention and special treatment needed:	No special immediate treatment required.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media:	Extinguish with powder, foam, carbon dioxide or water mist. Do not use water jet, as it may spread the fire.
5.2. Special hazards arising from the substance or mixture:	In fire conditions, the product may release oxides of carbon and soot.
5.3. Advice for firefighters:	Coordinate with fire in surroundings. In case of larger fires, wear a full-face positive-pressure self-contained breathing apparatus and protective suit. If possible without risk, containers close to fire should be removed or cooled with water/water mist.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1. Personal precautions, protective equipment and emergency procedures:** Provide adequate ventilation.
Use personal protection.
Be aware of the explosion hazard. Keep away from sources of ignition.
- 6.2. Environmental precautions:** Do not discharge into drains, water courses or onto the ground.
- 6.3. Methods and material for containment and cleaning up:** Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth, 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

- 7.1. Precautions for safe handling:** Avoid contact with skin and eyes.
Do not breathe vapour. Provide for effective ventilation if used indoor.
Smoking and naked flames prohibited.
- 7.2. Conditions for safe storage, including any incompatibilities:** Keep in tightly closed packaging. Store in a cool and ventilated place in accordance with local regulations for flammable liquids. Store safely, out of the reach of children and away from food, animal feeding stuff, medicine, etc.
- 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	Identification number	Workplace exposure limits (WELs)		Note
		Long-term exposure limit (8-hour TWA reference period)	Short-term exposure limit (15-minute reference period)	
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	CAS no.: 64742-48-9 EC no.: 919-857-5 REACH reg. no.: 01-2119463258-33	100 ppm 566 mg/m ³ (as turpentine)	150 ppm 850 mg/m ³ (as turpentine)	-
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/m ³ /8h (aerosol - inhalation) General Population: 0.6 mg/m ³ /24h (aerosol - inhalation)
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Worker: Inhalation (chronic exposure, systemic effects) 871 mg/m ³ Dermal (chronic exposure, systemic effects) 208 mg/kg bw/day Consumer: Inhalation (chronic exposure, systemic effects) 185 mg/m ³ Oral (chronic exposure, systemic effects) 125 mg/kg bw/day Dermal (chronic exposure, systemic effects) 125 mg/kg bw/day

DMEL values

Chemical name	DMEL value
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Consumer: Oral (chronic exposure, systemic effects) 16 Notes: NOAEL. Data source: ECHA Dermal (chronic exposure, systemic effects) 16 Notes: NOAEL. Data source: ECHA

8.2. Exposure controls**Appropriate engineering controls:**

Provide adequate ventilation.
Running water and eye wash equipment must be available.
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 the work is not carried out near mobile site huts or permanent common rooms.

Personal protective equipment**Respiratory protection:**

Use respiratory protective equipment with filter type A2. Respiratory equipment is not necessary when the product is used on small surfaces outdoor or if the vapours are blown away from your face by effective natural ventilation.
Wear an air-fed half face mask when applying the product indoor on large surfaces.
Always wear air-fed breathing apparatus (full face) when spraying the product.

Hand protection:

Wear protective gloves made of nitrile rubber possibly with a cotton glove underneath.

Skin protection:

Wear coveralls with a hood if there is a risk of splashing.

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, liquid	Vapour pressure:	Not determined
Odour:	Characteristic	Vapour density:	No available data
Odour threshold:	No available data	Relative density:	0.978 g/cm ³
pH:	Not applicable	Solubility(ies):	Soluble in organic solvents
Melting point/freezing point:	No available data	Partition coefficient n-octanol/water:	5-6.7 (solvent)
Initial boiling point and boiling range:	> 140 °C	Auto-ignition temperature:	Ca. 250 °C
Flash point:	38 °C	Decomposition temperature:	No available data
Evaporation rate:	No available data	Viscosity:	5520 cP (20 °C)
Flammability (solid, gas):	No available data	Explosive properties:	No available data
Upper/lower flammability or explosive limits:	0.6-6 vol. %	Oxidising properties:	Not applicable

9.2. Other information

Miscible with water: Not miscible

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:	Vapours may ignite at temperatures above flash point and may form explosive mixtures with air. Vapours from the product are heavier than air and may spread along floors.
10.4. Conditions to avoid:	Avoid heat, flames and ignition sources.
10.5. Incompatible materials:	Avoid contact with strong oxidising agents.
10.6. Hazardous decomposition products:	Hazardous decomposition products may be released at high temperatures.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

Inhalation:	Inhalation of vapours can cause irritation of airways, drowsiness, dizziness, headache, intoxication and delayed response ability and, at high concentrations, unconsciousness. 64742-48-9: LC50 (inhalation, rabbit): > 5000 mg/m ³ /8 h (OECD 403)
Skin:	Defatting to the skin. 64742-48-9: LD50 (dermal, rabbit): > 5000 mg/kg (OECD 402)
Eyes:	Splashes in the eyes can cause irritation.
Ingestion:	May cause irritation. May cause discomfort. 64742-48-9: LD50 (oral, rat): > 5000 mg/kg (OECD 401) 40027-38-1: LD50 (oral, rat): 200-2000 mg/kg
Chronic effects:	Prolonged or repeated inhalation of vapours may cause damage to the central nervous system with symptoms such as drowsiness, headache, concentration and memory problems. Repeated or prolonged skin contact can cause irritation and eczema. Prolonged and repeated skin contact with the product may possibly cause skin cancer. IARC (International Agency for Research on Cancer) evaluates that some animal tests of painting bitumen solution on skin have resulted in skin cancer.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity:	Only major local spillage of the solvent can pose a risk to water-living organisms. Bitumen is not regarded as harmful to the environment. 64742-48-9: LL50, fish (<i>Oncorhynchus mykiss</i>), 96 h: > 1000 mg/l. EL50, algae (<i>Pseudokirchnerella subcapitata</i>), 72 h: > 1000 mg/l. LC ₁₀ , algae (<i>Pseudokirchnerella subcapitata</i>), 72 h: 100 mg/l. EL50, daphnia (<i>Daphnia magna</i>), 24 h: > 1000 mg/l. 40027-38-1: LC50, daphnia, 48 h: 0.01-0.1 mg/l.
12.2. Persistence and degradability:	Bitumen is very slowly degradable. The organic solvent is readily biodegradable. 64742-48-9: Degradable (80 %, 28 days). 40027-38-1: Degradable (> 60 %, modified OECD screening test).
12.3. Bioaccumulative potential:	It is estimated, that the solvent may bioaccumulate in organisms. Log Pow: 5-6.7
12.4. Mobility in soil:	The solvent has low mobility in soil.
12.5. Results of PBT and vPvB assessment:	This product does not contain any PBT or vPvB substances.
12.6. Other adverse effects:	The product floats on water. May spread in the aquatic environment.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods:**

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

EWC-code: 08 01 11

Absorbents (sand, earth, vermiculite etc.) contaminated by the product, used protective equipment etc. EWC-code: 15 02 02.

SECTION 14: TRANSPORT INFORMATION

The product is not subject to ADR for receptacles < 450 litres cf. 2.2.3.1.5 (viscous substances).

The product is not subject to the provisions of IMDG for the marking, labelling and testing of packages for receptacles < 30 litres cf. 2.3.2.5 (viscous substances). The following statement shall be included in the transport document: "Transport in accordance with 2.3.2.5 of the IMDG Code."

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
1268	PETROLEUM PRODUCTS, N.O.S.	3	III	None	Hazard identification No. 30

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
1268	PETROLEUM PRODUCTS, N.O.S.	3	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
1268	PETROLEUM PRODUCTS, N.O.S.	3	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
1268	PETROLEUM PRODUCTS, N.O.S.	3	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:**

Young people under the age of 18 should not be allowed to work with the product unless the product is used as a necessary part of their education.
Spraying of the product should be avoided.

15.2. Chemical safety assessment:

No chemical safety assessment has been carried out for this mixture.

SECTION 16: OTHER INFORMATION

Changes:	Issue 1: No changes.
Abbreviations and acronyms:	PBT: Persistent, Bioaccumulative and Toxic. vPvB: very Persistent and very Bioaccumulative. VOC: Volatile Organic Compound. CLP: CLP-Regulation (EC) No 1272/2008 (Classification, Labelling and Packaging). DNEL: Derived No Effect Level. DMEL: Derived Minimal Effect Level. LD50: Lethal Dose 50 %. LC50: Lethal Concentration 50 %. LL50: Lethal Level 50 %. EL50: Effect Level 50 %. LClo: Lethal Concentration Low. Log Pow: Partition coefficient (octanol/water). Flam. Liq.: Flammable liquid. Acute Tox.: Acute toxicity. Skin Corr.: Skin corrosion. STOT SE: Specific target organ toxicity — single exposure. Asp. Tox.: Aspiration hazard. Aquatic Acute: Hazardous to the aquatic environment.
Method of classification:	Calculation based on the hazards of the known components.
H-statements:	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H314 Causes severe skin burns and eye damage. H336 May cause drowsiness or dizziness. H400 Very toxic to aquatic life. EUH066 Repeated exposure may cause skin dryness or cracking.
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:	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.