

1. IDENTIFICATION OF THE SUBSTRATE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name/designation: Eurorooft SB Bitumen Primer.

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

Identified uses: Adhesive.

1.3 Supplier details

Alumasc Building Products Ltd
White House Works, Bold Road, Sutton, St Helens, Merseyside, United Kingdom, WA9 4JG
Tel: +44 (0)1744 648400
e-mail: technical@alumascroofing.com

1.4 Emergency telephone numbers

Association / Organisation: National Poisons Information Service
Emergency telephone numbers: 0344 892 0111 (Healthcare professionals only)

Other emergency telephone numbers: Alumasc Building Products: +44 17 4464 8400 (Mon-Thurs 8.30-17.00, Fri 08.30-16.00)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classified according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567 [1]

H226 - Flammable Liquids Category 3, H336 - Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3, H411 - Hazardous to the Aquatic Environment Long-Term Hazard Category 2, H372 - Specific Target Organ Toxicity - Repeated Exposure Category 1, H304 - Aspiration Hazard Category 1.

Legend:

1. Classified by Chemwatch; 2. Classification drawn from GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567.

2.2 Label elements

Hazard pictures:



Signal word:

Warning.

Hazard statements:

H226 Flammable liquid and vapour.
H332 Harmful if inhaled.
H315 Causes skin irritation.
H412 Harmful to aquatic life with long lasting effects.

Supplementary statements:

EUH208: Contains tall oil/polyethylenepolyamides. May produce an allergic reaction.

Precautionary statements prevention:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P271 Use only a well-ventilated area.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P261 Avoid breathing mist/vapours/spray.
P273 Avoid release to the environment.
P280 Wear protective gloves and protective clothing.
P264 Wash all exposed external body areas thoroughly after handling.

Precautionary statements response: P370+P378 In case of fire: Use alcohol resistant foam or fine spray/water fog to extinguish.
P312 Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.
P302+P352 IF ON SKIN: Wash with plenty of water and soap.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

Precautionary phrases storage: P403+P235 Store in a well-ventilated place. Keep cool.

Precautionary phrases disposal: P501 Dispose of contents/container to an authorised hazardous or special waste collection point in accordance with any local regulation.

2.3 Other hazards

Xylene: Listed in the Europe Regulation (EC) No 1907/2006 - Annex XVII (restrictions may apply).

3. COMPOSITION AND INFORMATION ABOUT THE COMPONENTS

3.1 Substances

See 'composition on ingredients' in Section 3.2.

3.2 Mixtures

1. CAS No 2. EC No 3. Index No 4. REACH No	% [weight]	Name	Classified according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567	Nanoform Particle Characteristics
1. 1330-20-7 2. 215-535-7 3. 601-022-00-9 4. Not available	50-60	Xylene *	Flammable Liquids Category 3, Acute Toxicity (Dermal) Category 4, Acute Toxicity (Inhalation) Category 4, Skin Corrosion/Irritation Category 2; H226, H312, H332, H315 [2]	Not available
1. 68910-93-0 2. 272-756-1 3. Not available 4. Not available	0-0.5	Tall Oil/ Polyethylenepoly amides	Acute Toxicity (Oral) Category 4, Acute Toxicity (Inhalation) Category 5, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 1, Sensitisation (Skin) Category 1, Hazardous to the Aquatic Environment Long-Term Hazard Category 1; H302, H333, H315, H318, H317, H410 [1]	Not available
1. 64742-93-4* 2. 265-196-4 3. Not available 4. 01-2119498270-36-XXXX	30-40	Bitumen (blown)	Not applicable	Not available
Legend:	1. Classified by Chemwatch; 2. Classification drawn from GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567; 3. Classification drawn from C&L; * EU IOELVs available; [e] Substance identified as having endocrine disrupting properties			

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact: If this product comes in contact with the eyes:
Wash out immediately with fresh running water.
Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
Seek medical attention without delay; if pain persists or recurs seek medical attention.
Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

- Skin contact:** If skin contact occurs:
Immediately remove all contaminated clothing, including footwear.
Flush skin and hair with running water (and soap if available).
Seek medical attention in the event of irritation.
- Inhalation:** If fumes or combustion products are inhaled remove from contaminated area.
Lay the patient down. Keep warm and rested.
Prostheses such as false teeth, which may block the airway, should be removed, where possible, prior to initiating first aid procedures.
Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained.
Perform CPR if necessary.
Transport to hospital, or doctor.
- Ingestion:** If spontaneous vomiting appears imminent or occurs, hold the patient's head down, lower than their hips to help avoid possible aspiration of vomitus.
If swallowed do NOT induce vomiting.
If vomiting occurs, lean patient forward or place on the left side (head-down position, if possible) to maintain an open airway and prevent aspiration.
Observe the patient carefully.
Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
Seek medical advice.
Avoid giving milk or oils.
Avoid giving alcohol.

4.2 Most important symptoms and effects, both acute and delayed.

See Section 11.

4.3 Indication of any immediate medical attention and special treatment needed

Any material aspirated during vomiting may produce lung injury. Therefore, emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

For acute or short term repeated exposures to Xylene:

- Gastro-intestinal absorption is significant with ingestions. For ingestions exceeding 1-2 ml (Xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal.
- Pulmonary absorption is rapid with about 60-65% retained at rest.
- Primary threat to life from ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases ($pO_2 < 50$ mm Hg or $pCO_2 > 50$ mm Hg) should be intubated.
- Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.

BIOLOGICAL EXPOSURE INDEX - BEI

These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

Determinant	Index	Sampling Time
Methylhippu-ric acids in urine	1.5 gm/gm creatinine 2 mg/min	End of shift Last 4 hrs of shift

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Water spray or fog.
Foam.
Dry chemical powder.

5.2 Special hazards arising from the substance or mixture

Fire incompatibility:

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

5.3 Advice for fire-fighters

Fire-fighting:

- Alert fire brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear full body protective clothing with breathing apparatus.

Fire/explosion hazard:

Liquid and vapour are flammable.
Moderate fire hazard when exposed to heat or flame.
Vapour forms an explosive mixture with air.
Combustion products include:-

- Carbon Monoxide (CO)
- Carbon Dioxide (CO₂)
- Other pyrolysis products typical of burning organic material.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See Section 8.

6.2 Environmental precautions

See section 12

6.3 Methods and material for containment and cleaning up

Minor spills:

- Remove all ignition sources.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.

Major spills:

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.

6.4 Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the SDS.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Safe handling:

- Containers, even those that have been emptied, may contain explosive vapours.
- Do NOT cut, drill, grind, weld or perform similar operations on or near containers.
- Electrostatic discharge may be generated during pumping - this may result in fire.
- Ensure electrical continuity by bonding and grounding (earthing) all equipment.

- Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (≤ 1 m/sec until fill pipe submerged to twice its diameter, then ≤ 7 m/sec).
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of overexposure occurs.
- Use in a well-ventilated area.
- **DO NOT allow clothing wet with material to stay in contact with skin**

Fire & explosion protection:

See Section 5.

Other information:

- Store in original containers in approved flammable liquid storage area.
- Store away from incompatible materials in a cool, dry, well-ventilated area.
- **DO NOT store in pits, depressions, basements or areas where vapours may be trapped.**

7.2 Conditions for safe storage, including any incompatibilities.

Suitable container:

- Packing as supplied by manufacturer.
- Plastic containers may only be used if approved for flammable liquid.
- Check that containers are clearly labelled and free from leaks.
- For low viscosity materials (i): Drums and jerry cans must be of the non-removable head type. (ii): Where a can is to be used as an inner package, the can must have a screwed enclosure.

Storage incompatibility:

Xylenes:

- may ignite or explode in contact with strong oxidisers, 1,3-dichloro-5,5-dimethylhydantoin, uranium fluoride.
- attack some plastics, rubber and coatings.
- may generate electrostatic charges on flow or agitation due to low conductivity.
- Vigorous reactions, sometimes amounting to explosions, can result from the contact between aromatic rings and strong oxidising agents.
- Aromatics can react exothermically with bases and with diazo compounds.

For Alkyl Aromatics:

- The alkyl side chain of aromatic rings can undergo oxidation by several mechanisms. The most common and dominant one is the attack by oxidation at benzylic carbon as the intermediate formed is stabilised by resonance structure of the ring.
- Following reaction with oxygen and under the influence of sunlight, a hydroperoxide at the alpha-position to the aromatic ring, is the primary oxidation product formed (provided a hydrogen atom is initially available at this position) - this product is often short-lived but may be stable dependent on the nature of the aromatic substitution; a secondary C-H bond is more easily attacked than a primary C-H bond whilst a tertiary C-H bond is even more susceptible to attack by oxygen.
- Monoalkylbenzenes may subsequently form monocarboxylic acids; alkyl naphthalenes mainly produce the corresponding naphthalene carboxylic acids.

						
+	X	+	X	+	+	+

X - Must not be stored together.

O - May be stored together with specific preventions.

+ - May be stored together.

Note: Depending on other risk factors, compatibility assessment based on the table above may not be relevant to storage situations, particularly where large volumes of dangerous goods are stored and handled. Reference should be made to the Safety Data Sheets for each substance or article and risks assessed accordingly.

7.3 Specific end uses(s)

See Section 1.2.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure limit values:

Ingredient	DNELs Exposure Pattern Worker	PNECs Compartment
	Inhalation 442 mg/m ³ (Systemic, Acute) Inhalation 442 mg/m ³ (Local, Acute) Dermal 125 mg/kg bw/day (Systemic, Chronic) * Inhalation 65.3 mg/m ³ (Systemic, Chronic) * Oral 12.5 mg/kg bw/day (Systemic, Chronic) * Inhalation 65.3 mg/m ³ (Local, Chronic) * Inhalation 260 mg/m ³ (Systemic, Acute) * Inhalation 260 mg/m ³ (Local, Acute) *	12.46 mg/kg sediment dw (Sediment (Fresh Water)) 12.46 mg/kg sediment dw (Sediment (Marine)) 2.31 mg/kg soil dw (Soil) 6.58 mg/L (STP)
Tall Oil/ Polyethylenepolyamides:	Dermal 0.25 mg/kg bw/day (Systemic, Chronic) Inhalation 1.7 mg/m ³ (Systemic, Chronic) Dermal 0.18 mg/kg bw/day (Systemic, Chronic) * Inhalation 0.6 mg/m ³ (Systemic, Chronic) * Oral 0.18 mg/kg bw/day (Systemic, Chronic) *	42.8 µg/L (Water (Fresh)) 4.28 µg/L (Water - Intermittent release) 9.78 µg/L (Water (Marine)) 167.1 mg/kg sediment dw (Sediment (Fresh Water)) 16.71 mg/kg sediment dw (Sediment (Marine)) 9.44 mg/kg soil dw (Soil) 10.4 mg/L (STP) 5.3 mg/kg food (Oral)
Bitumen (blown):	Inhalation 2.88 mg/m ³ (Local, Chronic) Inhalation 0.61 mg/m ³ (Local, Chronic) *	Not available

* Values for general population.

Occupational Exposure Limits (OEL):

Ingredient data:

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
EU Consolidated List of Indicative Occupational Exposure Limit Values (IOELVs)	Xylene	Xylene (mixed isomers, pure)	50 ppm / 221 mg/m ³	442 mg/m ³ / 100 ppm	Not available	Skin
UK Workplace Exposure Limits (WELs)	Xylene	Xylene, o-,m-,p- or mixed isomers	50 ppm / 220 mg/m ³	441 mg/m ³ / 100 ppm	Not available	Sk, BMGV


Emergency limits:

Ingredient	TEEL-1	TEEL-2	TEEL-3
Xylene	Not available	Not available	Not available

Ingredient	Original IDLH	Revised IDLH
Xylene	900 ppm	Not available
Tall Oil/ Polyethylenepolyamides	Not available	Not available
Bitumen (blown)	Not available	Not available

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
Tall Oil/ Polyethylenepolyamides	E	≤ 0.1 ppm
Notes:	Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.	

8.2 Exposure controls

8.2.1 Appropriate engineering controls:	<p>CARE: Use of a quantity of this material in confined space or poorly ventilated area, where rapid build-up of concentrated atmosphere may occur, could require increased ventilation and/or protective gear. Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.</p> <p>The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk.</p>
8.2.2 Personal protection:	
Eye and face protection:	<p>Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.</p>
Skin protection:	See Hand Protection below.
Hands/feet protection:	<p>Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber</p> <p>NOTE: The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed. The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.</p>
Body protection:	See Other Protection below.
Other protection:	<p>Overalls. PVC Apron. PVC protective suit may be required if exposure severe. Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity. For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets). Non sparking safety or conductive footwear should be considered.</p>

Recommended material(s):

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the: "Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the computer generated selection:
Eurorooft SB Bitumen Primer.

Material	CPI	Material	CPI
PE/EVAL/PE	A	HYPALON	C
PVA	A	NAT+NEOPR+NITRILE	C
TEFLON	A	NATURAL+NEOPRENE	C
VITON	A	NEOPRENE	C
BUTYL	C	NEOPRENE/NATURAL	C
BUTYL/NEOPRENE	C	NITRILE	C
PVC	C	NITRILE+PVC	C
PVDC/PE/PVDC	C		

* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

Respiratory protection:

Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.

The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used.

8.2.3. Environmental exposure controls

See Section 12.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 General information

Appearance:	Black	Relative density (Water = 1)	0.85-0.95
Physical state	Liquid	Partition coefficient n-octanol / water	Not available
Odour	Characteristic	Auto-ignition temperature (°C)	>300
Odour threshold pH (as supplied)	Not available	Decomposition temperature	Not available
Melting point / freezing point (°C)	Not available	Viscosity	>30 x 10 ⁻⁶ m ² /s @ 40°C
Initial boiling point and boiling range (°C)	>137	Molecular weight (g/mol)	Not available
Flash point (°C)	>27	Taste	Not available
Evaporation rate	Not available	Explosive properties	Not available
Flammability	Flammable.	Oxidising properties	Not available
Upper Explosive Limit (%)	Not available	Surface Tension (dyn/cm or mN/m)	Not available
Lower Explosive Limit (%)	Not available	Volatile Component (%vol)	Not available
Vapour pressure (kPa)	Not available	Gas group	Not available
Solubility in water	Immiscible	pH as a solution (%)	Not available
Vapour density (Air = 1)	Not available	VOC g/L	<620
Nanoform Solubility	Not available	Nanoform Particle Characteristics	Not available
Particle Size	Not available		

9.2 Other information

Not available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

See Section 7.2.

10.2 Chemical stability

- Unstable in the presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

10.3 Possibility of hazardous reactions

See Section 7.2.

10.4 Conditions to avoid

See Section 7.2.

10.5 Incompatible materials

See Section 7.2.

10.6 Hazardous decomposition products

See Section 5.3

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Inhaled:	<p>The material is not thought to produce respiratory irritation (as classified by EC Directives using animal models). Nevertheless inhalation of vapours, fumes or aerosols, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress.</p> <p>Inhalation hazard is increased at higher temperatures.</p> <p>Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.</p> <p>Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and incoordination.</p> <p>Headache, fatigue, tiredness, irritability and digestive disturbances (nausea, loss of appetite and bloating) are the most common symptoms of Xylene overexposure. Injury to the heart, liver, kidneys and nervous system has also been noted amongst workers.</p> <p>Xylene is a central nervous system depressant The acute toxicity of inhaled alkylbenzene is best described by central nervous system depression. These compounds may also act as general anaesthetics. Whole body symptoms of poisoning include light-headedness, nervousness, apprehension, a feeling of well-being, confusion, dizziness, drowsiness, ringing in the ears, blurred or double vision, vomiting and sensations of heat, cold or numbness, twitching, tremors, convulsions, unconsciousness, depression of breathing, and arrest.</p>
Ingestion:	<p>The material is not thought to produce adverse health effects following ingestion (as classified by EC Directives using animal models).</p> <p>Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum.</p> <p>Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result.</p> <p>(ICSC13733)</p> <p>Accidental ingestion of the material may be damaging to the health of the individual.</p> <p>Not a likely route of entry into the body in commercial or industrial environments. The liquid may produce considerable gastrointestinal discomfort and be harmful or toxic if swallowed.</p>

Skin contact:	<p>The material may accentuate any pre-existing dermatitis condition. Open cuts, abraded or irritated skin should not be exposed to this material. Entry into the blood-stream, through for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.</p> <p>Skin contact with the material may be harmful; systemic effects may result following absorption. The material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.</p>
Eye:	<p>There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain. The liquid produces a high level of eye discomfort and is capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated.</p>
Chronic:	<p>Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.</p> <p>Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.</p> <p>This material can cause serious damage if one is exposed to it for long periods. It can be assumed that it contains a substance which can produce severe defects.</p> <p>Ample evidence exists from experimentation that reduced human fertility is directly caused by exposure to the material.</p> <p>Long term exposure to coal tar dusts may produce chronic bronchitis or lung cancer. Dust or fume contact with skin may result in photosensitisation of skin areas and sunburn on frequent exposure to sunlight or ultraviolet radiation.</p> <p>There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment.</p> <p>Women exposed to Xylene in the first 3 months of pregnancy showed a slightly increased risk of miscarriage and birth defects. Evaluation of workers chronically exposed to Xylene has demonstrated lack of genetic toxicity.</p>

Euroroof SB Bitumen Primer:

Toxicity	Irritation
Not available	Not available

Xylene:

Toxicity	Irritation
Dermal (rabbit) LD50: >1700 mg/kg[2] Eye (human): 200 ppm irritant	Dermal (rabbit) LD50: >1700 mg/kg[2] Eye (human): 200 ppm irritant
Inhalation(Rat) LC50; 5922 ppm4h[1] Eye (rabbit): 5 mg/24h SEVERE	Inhalation(Rat) LC50; 5922 ppm4h[1] Eye (rabbit): 5 mg/24h SEVERE
Oral(Mouse) LD50; 2119 mg/kg[2] Eye (rabbit): 87 mg mild	Oral(Mouse) LD50; 2119 mg/kg[2] Eye (rabbit): 87 mg mild
	Eye: adverse effect observed (irritating)[1]

Tall Oil / Polyethylenepolyamides:

Toxicity	Irritation
Dermal (rat) LD50: >2000 mg/kg[1]	Not available
Oral(Rat) LD50; ~4000 mg/kg[1]	

Bitumen (blown):

Toxicity	Irritation
Dermal (rabbit) LD50: >2000 mg/kg[2]	Eye: no adverse effect observed (not irritating) ^[1]
Oral (rat) LD50: >5000 mg/kg[2]	Skin: no adverse effect observed (not irritating) ^[1]

Legend:

1. Value obtained from Europe ECHA Registered Substances - Acute toxicity; 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances.

Euroroof SB Bitumen Primer:	<p>The production of creosotes and coal tars stems from the incomplete combustion of carbon-containing materials. Physically, they are usually viscous liquids or semisolids that are black or dark brown with a naphthalene-like odour. They have an oily liquid consistency and range in colour from yellowish-dark green to brown and largely contain a mixture of polycyclic aromatic hydrocarbons (PAHs) including phenol.</p> <p>For "distillates of coal tar" or 'creosotes.</p>
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	<p>Critical Health Effects The critical health effects for risk characterisation are systemic long-term effects including carcinogenicity, mutagenicity, reproductive toxicity and developmental toxicity. The chemicals are also considered to be phototoxic and have the potential to cause skin irritation and sensitisation and mild respiratory irritation.</p> <p>Toxicokinetics Limited data are available.</p>
Xylene:	<p>Reproductive effector in rats. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing.</p>
Tall Oil/ Polyethylenepolyamides:	<p>For imidazoline surfactants (amidoamine/ imidazoline - AAls). All substances within the AAl group show the same reactive groups, show similar composition of amide, imidazoline, and some dimer structures of both, with the length of original EA amines used for production as biggest difference. Inherent reactivity and toxicity is not expected to differ much between these substances. All in vivo skin irritation/corrosion studies performed on AAl substances all indicate them to be corrosive following 4 hour exposure. There do not seem to be big differences in response with the variation on EA length used for the production of the AAl. For quaternary ammonium compounds (QACs): Quaternary ammonium compounds are synthetically made surfactants. Studies show that its solubility, toxicity and irritation depend on chain length and bond type while effect on histamine depends on concentration. QACs may cause muscle paralysis with no brain involvement. The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. The main criteria for diagnosing RADS include the absence of previous airway disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant.</p>
Bitumen (blown):	<p>WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans. as extracts of steam-refined and air-refined bitumens.</p>
Euroroof SB Bitumen Primer & Tall Oil/ Polyethylenepolyamides:	<p>The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions.</p>
Tall Oil/ Polyethylenepolyamides & bitumen (blown):	<p>No significant acute toxicological data identified in literature search.</p>

Acute Toxicity	✓	Carcinogenicity	✗
Skin Irritation/Corrosion	✓	Reproductivity	✗
Serious Eye Damage/Irritation	✗	STOT - Single Exposure	✗
Respiratory or Skin Sensitisation	✗	STOT - Repeated Exposure	✗
Mutagenicity	✗	Aspiration Hazard	✗

Legend:

- ✗ - Data either not available or does not fill the criteria for classification.
- ✓ - Data available to make classification.

11.2.1 Endocrine Disruption Properties

Not available.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Euroroof SB Bitumen Primer:

End point	Test duration (Hr)	Species	Value	Source
Not available	Not available	Not available	Not available	Not available

Xylene:

End point	Test duration (Hr)	Species	Value	Source
EC50	72h	Algae or other aquatic plants	4.6mg/l	2
LC50	96h	Fish	2.6mg/l	2
EC50	48h	Crustacea	1.8mg/l	2
NOEC(ECx)	73h	Algae or other aquatic plants	0.44mg/l	2

Tall Oil/Polyethylenepolyamides:

End point	Test duration (Hr)	Species	Value	Source
EC50	72h	Algae or other aquatic plants	1.43mg/l	2
LC50	96h	Fish	0.19mg/l	2
EC50	48h	Crustacea	0.18mg/l	2
EC50(ECx)	48h	Crustacea	0.18mg/l	2

Bitumen (blown):

End point	Test duration (Hr)	Species	Value	Source
Not available	Not available	Not available	Not available	Not available

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

For Aromatic Substances Series:

Environmental Fate: Large, molecularly complex polycyclic aromatic hydrocarbons, or PAHs, are persistent in the environment longer than smaller PAHs.

Atmospheric Fate: PAHs are 'semi-volatile substances' which can move between the atmosphere and the Earth's surface in repeated, temperature-driven cycles of deposition and volatilization. Terrestrial Fate: BTEX compounds have the potential to move through soil and contaminate ground water, and their vapours are highly flammable and explosive.

For Xylenes:

log Koc : 2.05-3.08; Koc : 25.4-204; Half-life (hr) air : 0.24-42; Half-life (hr) H2O surface water : 24-672; Half-life (hr) H2O ground : 336-8640; Half-life (hr) soil : 52-672; Henry's Pa m³ /mol : 637-879; Henry's atm m³ /mol - 7.68E-03; BOD 5 if unstated - 1.4,1%; COD - 2.56,13% ThOD - 3.125 : BCF : 23; log BCF : 1.17-2.41.

Environmental Fate: Most Xylenes released to the environment will occur in the atmosphere and volatilisation is the dominant environmental fate process. Soil - Xylenes are expected to have moderate mobility in soil evaporating rapidly from soil surfaces.

DO NOT discharge into sewer or waterways.

12.2 Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Xylene	HIGH (Half-life = 360 days)	LOW (Half-life = 1.83 days)

12.3 Bioaccumulation potential

Ingredient	Bioaccumulation
Xylene	MEDIUM (BCF = 740)

12.4 Mobility in soil

No data available for all ingredients.

12.5 Results of PBT and vPvB assessment

	P	B	T
Relevant available data	Not available	Not available	Not available
PBT	X	X	X
vPvB	X	X	X

PBT Criteria fulfilled?	No
vPvB	No

12.6. Endocrine Disruption Properties

Not available.

12.7. Other adverse effects

Not available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product / packaging disposal:	<p>Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/ recycling if possible. Otherwise: If container cannot be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Recycle wherever possible. Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified. Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or incineration in a licensed apparatus (after admixture with suitable combustible material).</p>
Waste treatment options:	Not available.
Sewage disposal options:	Not available.

14. TRANSPORT INFORMATION

Labels required:



Marine Pollutant : No.

Hazchem: 2W.

Land transport (ADR):

14.1 UN number	1999
14.2 UN proper shipping name	TARS, LIQUIDS, including road oils, and cutback bitumens (contains Xylene)
14.3 Transport hazard class(es)	Class: 3 Subrisk: N/A
14.4 Packing group	III
14.5 Environmental hazard	Not applicable

14.6 Special precautions for user	Hazard identification (Kemler):	30
	Classification code:	F1
	Hazard label:	3
	Special provisions:	N/A
	Limited quantity:	5L
	Tunnel restriction code:	3 (D/E)

Air transport (ICAO-IATA/DGR):

14.1 UN number	1999
14.2 UN proper shipping name	TARS, LIQUIDS, including road asphalt and oils, bitumen and cut backs (contains Xylene)
14.3 Transport hazard class(es)	ICAO/IATA class: 3
	ICAO/IATA subrisk: N/A
	ERG code: 3L
14.4 Packing group	III
14.5 Environmental hazard	Not applicable
14.6 Special precautions for user	Special provisions: A3
	Cargo only packing instruction: 366
	Cargo only maximum qty/pack: 220L
	Passenger and cargo packing instruction: 355
	Passenger and cargo maximum qty/pack: 60L
	Passenger and cargo limited qty packing instructions: Y344
	Passenger and cargo limited maximum qty/pack: 10L

Sea transport (IMDG-Code/GGVSee):

14.1 UN number	1999
14.2 UN proper shipping name	TARS, LIQUIDS, including road oils, and cutback bitumens (contains Xylene)
14.3 Transport hazard class(es)	IMDG class: 3
	IMDG subrisk: N/A
14.4 Packing group	III
14.5 Environmental hazard	Not applicable
14.6 Special precautions for user	EMS number: F-E, S-E
	Special provisions: 955
	Limited quantities: 5L

Inland waterways transport (ADN):

14.1 UN number	1999
14.2 UN proper shipping name	TARS, LIQUID, including road asphalt and oils, bitumen and cut backs (contains Xylene); TARS, LIQUID, including road oils, and cutback bitumens (having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 110 kPa) (contains Xylene); TARS, LIQUID, including road oils, and cutback bitumens (having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C not more than 110 kPa) (contains Xylene)
14.3 Transport hazard class(es)	Class: 3
	Subrisk: N/A
14.4 Packing group	III
14.5 Environmental hazard	Not applicable
14.6 Special precautions for user	Classification code: F1
	Special provisions: N/A
	Limited quantity: 5L
	Equipment required: PP, EX, A
	Fire cones numbers: 0

14.7. Transport in bulk according to Annex II of MARPOL and the IBC code

Not applicable.

14.8. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product Name	Group
Xylene	Not available
Tall Oil/ Polyethylenepolyamides	Not available
Bitumen (blown)	Not available

14.9. Transport in bulk in accordance with the ICG Code

Product Name	Ship Type
Xylene	Not available
Tall Oil/ Polyethylenepolyamides	Not available
bitumen (blown)	Not available

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Xylene is found on the following regulatory lists:

EU Consolidated List of Indicative Occupational Exposure Limit Values (IOELVs) European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)
EU European Chemicals Agency (ECHA) Community Rolling Action Plan (CoRAP) List of Substances European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI
EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
Europe EC Inventory

Tall Oil/ Polyethylenepolyamides is found on the following regulatory lists:

Europe EC Inventory European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)

Bitumen (blown) is found on the following regulatory lists:

Chemical Footprint Project - Chemicals of High Concern List International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
Europe EC Inventory European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2A: Probably carcinogenic to humans
Europe EC Inventory

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : Directives 98/24/EC, - 92/85/EEC, - 94/33/EC, - 2008/98/EC, - 2010/75/EU; Commission Regulation (EU) 2020/878; Regulation (EC) No 1272/2008 as updated through ATPs.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

ECHA Summary:

Ingredient	CAS number	Index No	ECHA Dossier
Xylene	1330-20-7	601-022-00-9	01-2119488216-32-XXXX

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Flam. Liq. 3; Acute Tox. 4; Skin Irrit. 2	GHS02; GHS07; Wng	H226; H312; H315; H332
2	Flam. Liq. 3; Acute Tox. 4; Skin Irrit. 2; Acute Tox. 4	GHS02; GHS07; Wng	H226; H312; H315; H332

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

Ingredient	CAS number	Index No	ECHA Dossier
Tall Oil/Polyethylenepolyamides	68910-93-0	Not available	01-2119492544-31-XXXX

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Skin Irrit. 2; Eye Dam. 1; Aquatic Acute 1; Aquatic Chronic 1	GHS09; GHS05; Dgr	H315; H318; H410
2	Skin Irrit. 2; Eye Dam. 1; Aquatic Acute 1; Aquatic Chronic 1	GHS09; GHS05; Dgr	H315; H318; H410
1	Skin Irrit. 2; Skin Sens. 1; Eye Irrit. 2; Skin Corr. 1C; Aquatic Chronic 1	GHS05; Dgr; GHS09	H314; H317; H410
2	Skin Sens. 1; Eye Irrit. 2; Skin Corr. 1C; Aquatic Chronic 1	GHS05; Dgr; GHS09	H314; H317; H410

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

National Inventory	Status
Australia - AIIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (Xylene; tall oil/ polyethylenepolyamides; bitumen (blown))
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	No (tall oil/ polyethylenepolyamides; bitumen (blown))
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	No (tall oil/ polyethylenepolyamides; bitumen (blown))
Vietnam - NCI	Yes
Russia - FBEPH	Yes
Legend:	Yes = All CAS declared ingredients are on the inventory. No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing (see specific ingredients in brackets).

16. OTHER INFORMATION

Full text risk and hazard codes:

- H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H333 May be harmful if inhaled.
H410 Very toxic to aquatic life with long lasting effects.

SDS version summary:

Version	Date of Update	Section Updated
2.0	02/10/2023	Template Change

Other information:

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios.

For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:

- EN 166: Personal eye-protection.
EN 340: Protective clothing.
EN 374: Protective gloves against chemicals and micro-organisms.
EN 13832: Footwear protecting against chemicals.
EN 133: Respiratory protective devices.

Definitions and abbreviations:

PC—TWA: Permissible Concentration-Time Weighted Average
PC—STEL: Permissible Concentration-Short Term Exposure Limit
IARC: International Agency for Research on Cancer
ACGIH: American Conference of Governmental Industrial Hygienists
STEL: Short Term Exposure Limit
TEEL: Temporary Emergency Exposure Limit
IDLH: Immediately Dangerous to Life or Health Concentrations
ES: Exposure Standard
OSF: Odour Safety Factor
NOAEL :No Observed Adverse Effect Level
LOAEL: Lowest Observed Adverse Effect Level
TLV: Threshold Limit Value
LOD: Limit Of Detection
OTV: Odour Threshold Value
BCF: BioConcentration Factors
BEI: Biological Exposure Index
AIIIC: Australian Inventory of Industrial Chemicals
DSL: Domestic Substances List
NDSL: Non-Domestic Substances List
IECSC: Inventory of Existing Chemical Substance in China
EINECS: European Inventory of Existing Commercial chemical Substances
ELINCS: European List of Notified Chemical Substances
NLP: No-Longer Polymers
ENCS: Existing and New Chemical Substances Inventory
KECI: Korea Existing Chemicals Inventory
NZIoC: New Zealand Inventory of Chemicals
PICCS: Philippine Inventory of Chemicals and Chemical Substances
TSCA: Toxic Substances Control Act
TCSI: Taiwan Chemical Substance Inventory.
INSQ: Inventario Nacional de Sustancias Químicas
NCI: National Chemical Inventory
FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

The contents and format of this SDS are in accordance with EEC Commission Directive 1999/45/EC, 67/548/EC, 1272/2008/EC and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

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