

CONTROL of SUBSTANCES HAZARDOUS TO HEALTH (CoSHH) RISK ASSESSMENT

Facade cladding system **Raketerm**

AS Rake

A.H.Tammsaare 47

11316 Tallinn

Estonia

Phone: +372 6314 461

rake@rake.ee

www.raketerm.eu

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1. TASK/PROCEDURE

Raketerm is a finishing and insulation system based on a stone-surface and foam polyurethane-based insulating sub-layer on reinforced joint panel, its facade cladding is formed of row panels and corner elements.

The panel's coating is made of tiles joined by cement mortar. The coating gives the products their mechanical strength, fire resistance and protects from the external environmental influences. Coating brick tiles have low water absorption levels and are acid and alkali-proof.

The main component of the insulating layer of the panel is polyurethane foam; foam polystyrene used as filler adds strength and stability to the product while maintaining lightness and good insulation properties.

Specially cut facade panels are fitted with screws/washers to the base structure, or to the frame, using special clamps. Two additional fixing screws will be installed to the center of each panels. For avoiding hazardous dust, it is advisable to use water jet cutter, if possible.




A complete peg-connection between the panels ensures moisture and weather resistance of the cover. During the installation work, a sealant of neutral silicone is added in the peg.



To maintain a stone pattern, the stone brick tile above the vertical joint should extend from one panel to another. Since this can not be done in production, these tiles must be glued on during the installation, using a neutral silicone or assembly glue.




For filling glued stone tiles, panel joints and screw holes, use only a special (post-jointing) pointing mixture made with water mixed with the dry mixture supplied with the product. The joint mixture is pushed into the joints and smoothed with a joint mixture spreader to achieve a clean joint line and an invisible interface.

Products are non-degradable, odorless and non-toxic in normal usage and weather conditions. They do not contain moldy or rotten components and do not expose gases harmful for health or the environment.

2. SUBSTANCE INFORMATION

	Product name	Manufacturer/Supplier % by weight	Warning symbols	Warning and danger statements
	Facade panel:			
1	EPS beams (solids in product)	Rake AS 0,5-1,5 %		<p>Non-hazardous in finished form. Residual quantities of process chemicals and blowing agents are insignificant.</p> <p>Dust during sawing: H332: Harmful if inhaled. H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H373inh: Prolonged or repeated inhalation may result in damage to organs.</p> <p>Warning statements P260: Do not breathe dust/fume/gas/mist/vapors/spray. P280 Wear protective gloves/ protective clothing/eye protection/face protection. P285: In case of inadequate ventilation wear respiratory protection. P304 + P340: In the case of inhalation: transport the person outside and keep them in a position which facilitates easy breathing P305 + P351 + P338: In case of eye contact: Rinse thoroughly with water for several minutes. Remove contact lenses if used and if they are easy to remove. Rinse again. P309 + P311: In the event of an exposure or if feeling unwell: call a POISON CENTER or doctor/physician.</p>
2	PUR foam (solids in the product)	Rake AS 4-8 %	 	<p>Non-hazardous in finished form. Residual quantities of process chemicals and blowing agents are insignificant.</p> <p>Dust on sawing: H332: Harmful if inhaled. H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H373inh: Prolonged or repeated inhalation may result in damage to organs.</p> <p>Warning statements</p>

	Product name	Manufacturer/Supplier % by weight	Warning symbols	Warning and danger statements
	Facade panel:			
				<p>P260: Do not breathe dust/fume/gas/mist/vapors/spray. P280 Wear protective gloves/ protective clothing/eye protection/face protection. Prolonged or repeated inhalation may result in damage to organs. Warning statements P285: In case of inadequate ventilation wear respiratory protection. P304+P340: IN CASE OF INHALATION: transport the person outside and keep them in a position which facilitates easy breathing. P305+P351+P338: IN CASE OF EYE CONTACT: Rinse thoroughly with water for several minutes. Remove contact lenses if used and if they are easy to remove. Rinse again. P309+P311: In the event of an exposure or if feeling unwell: call a POISON CENTER or doctor/physician.</p>
3	Brick tiles (solid form, installed on the product)	Rake AS 68-78 %		<p>Non-hazardous in finished form. Dust on sawing: H335 May cause respiratory irritation. P260: Do not breathe dust/fume/gas/mist/vapors/spray. P280 Wear protective gloves/ protective clothing/eye protection/face protection. P305/351/338 IN CASE OF EYE CONTACT: Rinse thoroughly with water for several minutes. Remove contact lenses if used and if they are easy to remove. Rinse again. P310 Immediately call a POISON CENTER or doctor/physician.</p>
4	Joint mortar hardened (solid form) factory installed	Rake AS 12-17 %		<p>Non-hazardous in finished form. Dust on sawing: H317 May cause an allergic skin reaction. P261 Avoid breathing dust/fume/ gas/mist/vapours/spray. P272 Contaminated work clothing should not be allowed out of the workplace.</p>

	Product name	Manufacturer/Supplier % by weight	Warning symbols	Warning and danger statements
	Facade panel:			
				<p>P280 Wear protective gloves/ protective clothing/eye protection/face protection.</p> <p>P308 + P313 IF exposed or concerned: Get medical advice/ attention.</p> <p>P310 Immediately call a POISON CENTER or doctor/physician.</p> <p>P363 Wash contaminated clothing before reuse.</p> <p>P501 Containers/packaging to be discarded in accordance with the local regulations.</p>
	Product name Façade panel:	Manufacturer/Supplier % by weight	Warning symbol	Warning and danger statements
	On installation:			
1	Premium Neutral Silicone (sealant, liquid in a tube)	Penosil Estonia AS Various suppliers 0,5-1,5 %		<p>H317 – May cause allergic skin reactions</p> <p>P101: If medical advice is needed, have product container or label at hand.</p> <p>P102: Keep out of reach of children.</p> <p>P261 Avoid breathing dust/fume/ gas/mist/vapours/spray.</p> <p>P280 Wear protective gloves/ protective clothing/eye protection/face protection.</p> <p>P302+P352: IN CASE OF SKIN CONTACT: rinse thoroughly</p> <p>P501: Remove content/containers in accordance with valid waste management laws.</p>
2	Dry pointing mortar (dry powder, mixed with water on site)	Rake AS 3,5-4,5 %	 	<p>H317 May cause an allergic skin reaction.</p> <p>H318 Causes serious eye damage</p> <p>P261 Avoid breathing dust/fume/ gas/mist/vapours/spray.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P280 Wear protective gloves/ protective clothing/eye protection/face protection.</p> <p>P308 + P313 IF exposed or concerned: Get medical advice/ attention.</p> <p>P310 Immediately call a POISON CENTER or doctor/physician.</p> <p>P363 Wash contaminated clothing before reuse.</p> <p>P501 Container/packaging to be removed in accordance with the local regulations.</p>

GHS-labelling (explanations to danger symbols):



GHS05 – **corrosive**.



GHS07 – **irritant**, toxic on oral ingestion, skin contact, inhalation; danger category 4 - skin and/or eye irritation, skin sensitization, toxic on single target organ contact, respiratory irritation and narcotic effects.



GHS08- **Health hazard**. Indicates respiratory sensitization, gamete mutagenicity, carcinogenicity, reproductive toxicity, toxicity in case of single and repeated exposure to specific target organ, and respiratory damage.

3. PERSONAL PROTECTIVE EQUIPMENT



*anti-slip protection shoes with safety caps



*protective clothing (preferably with knee protectors)



*hearing aids (headphones or ear plugs)



*protective eye-wear



*gloves



*respiratory / respiratory protective mask (for cutting)

4. ASSESSMENT OF RISK FACTORS

the risk assessment was performed semi-quantitatively using a 3×3 risk matrix (BS8800:1996 Annex D)

Risk = T (likelihood) x K (amount of damage)

Risk grade:

Nonexistent, low I (1p)

Acceptable, tolerable II (2p)

Average III (3-4 p)

High IV (6p)

Very high, unacceptable (9p)

No	Activity/work	Risk factor	Nature of the risk, health impact, prevention	Place of occurrence	T	K	R
1	Installation work	Slipperiness (joint mixture or silicone entering the soil in the installation process), precipitation, working at a height	Slipping, stumbling, falling (at a height-ladder-scaffold), the surface must be level and strengthened for stairs/scaffolds, in order to prevent risk of persons feet sinking into the ground and falling. Accident risk!	On site	1	2	II
		Components of chemical substances and their contact with uncovered skin	If work gloves are not used potential skin damage (inflammation of the skin, excessive dryness, dermatitis, allergy), when mixing the jointing mixture on site, it is necessary to use respiratory protective equipment, protective gloves, since the joint compound is corrosive to the eye and skin. First Aid: eye wash.	Mixing the joint mixture with water on site	1	2	II
		DUST (occurs when cutting the panel)	Respiratory tract irritation and related disorders (allergic reactions). Risk of eye	Mixing the jointing mixture with a	2	2	III

No	Activity/work	Risk factor	Nature of the risk, health impact, prevention	Place of occurrence	T	K	R
		Concentration of chemical components and/or dust and other solid particles in the air	exposure. Dust occurs when cutting the panel. Volatile chemicals and compounds. Long-term effects may be carcinogenic. Use a respirator, face shield, eye protection or glasses.	blender and later on cutting the hardened mixture, the panel.			
		Noise	Noise generated by equipment, distracted attention, hearing loss if hearing protection is not used. Working at a noise level of more than 85 dBA produces irreversible damage to hearing. Use ear protection!	Cutting the panels with a circular saw	2	2	III
		Electrical hazards	Damp environment, temporary extension cords, broken cables, cardiac arrest due to electrical shock, skin burns. Check electrical equipment and cables before starting work!	Cutting the panels with a circular saw	1	3	III
		Moving parts of equipment, sharp objects	Failure to take safety measures when working with circular saws and other power tools may result in serious injuries (skin piercing cuts, bleeding, etc. The circular saw must have a protective sheath and a proper cutting plane.	Cutting, grinding	1	3	III

5. HEALTH SURVEILLANCE

The installer is required to use the personal protective equipment described above in order to reduce the impact of the risk factors. Choose them according to the working section at hand: hearing protection and respirator for cutting work.

First-aid is provided according to the information provided in the safety data sheet. It is recommended to equip the first aid kit with an eye washing container.

The health examination is carried out by the occupational physician at the expense of the Employer once every three years, unless determined otherwise on case by case basis.