

Obtainment of health and environmental data – Evaluation report

Technical approval number: 20114	Product Name: Foam-LOK FL 2000 varmeisolasjon
Project number: 102000663-21	
Date of environmental evaluation: 23.8.2017	Environmental evaluation has been performed by: Thale Plesser
Conclusion of environmental evaluation (approved/not approved): Approved	
Comments:	
If not approved, then state the arguments:	

Table 1. Requested documentation.

System components	Documentation	Status documentation	A brief summary of documentation content and evaluation
Foam-Lok FL 2000	Product description	TDS 2016	Closed-cell spray PUR foam.
	Safety data sheet	3.5.2016	Contains: <ul style="list-style-type: none"> • 7-13 % 2-Propanol, 1-chloro-, phosphate (3:1), CAS 13674-84-5. Notified: Acute Tox. 4 H302, Aquatic Chronic 3 H412. • 7-13 % Ethanol, 2-[(2-aminoethyl)amino], polymer with methyloxirane, CAS 31568-06-6. Notified: Skin Sens. 1 H317, Eye Irrit. 2 H319. • 7.125-8.025 % Diethylene glycol, CAS 111-46-6. Harmonized: Acute Tox. 4 H302. Notified: STOT Re 2 H373. • 0.5-3 1,3-Propanediamine, N,N-bis[3-(dimethylamino)propyl]-N',N'-dimethyl, CAS 33329-35-0. Notified: Acute Tox. 4, Eye Dam. 1 H318, Skin Corr. 1B H314, Aquatic Chronic 3 H412. • 0.125-0.75 % Ethylene glycol, CAS 107-21-1. Harmonized: Acute Tox. 4 H302. Notified: STOT RE 2 H373. • 0.17-0.23 % Bis(2-dimethyl aminoethyl) ether, CAS 3033-62-3. Notified: Acute Tox. 3 H311, Acute Tox. 4 H302, Skin Corr. 1 B H314, Acute Tox. 4 H332, Eye Dam. 1 H318.
	Manufacturer's declaration	7.4.2017	See Safety data sheet.
	Emission tests	Not relevant	Foam-Lok is used outside the vapour barrier.
	Leaching tests	See Foam-Lok FL 2000-4G	The chemical composition of Foam-Lok FL 2000 is similar to the composition of Foam-Lok FL 2000-4G. The leaching test performed with Foam-Lok FL 2000-4G also cover Foam-Lok FL 2000.

Table 1 continues on the next page.

Table 1. Requested documentation.

System components	Documentation	Status documentation	A brief summary of documentation content and evaluation
Foam-Lok LPA 2800-4G	Product description	TDS 2016	Two-component, closed-cell PUR roofing foam.
	Safety data sheet	30.3.2017	Contains: <ul style="list-style-type: none"> • 17-22 % Ethanol, 2-[(2-aminoethyl)amino]-, polymer with methyloxirane, CAS 31568-06-6. Notified: skin Sens 1 H317, Eye Irrit. 2 H319. • 16-21 % 2-Propanol, 1-chloro-, phosphate (3:1), CAS 13674-84-5. Notified: Acute Tox. 4 H302, Aquatic Chronic 3 H412. • 9-15 % (E)-1-Chloro-3,3,3-trifluoroprop-1-ene, CAS 102687-65-0. Notified: Aquatic Chronic 3 H412, Press. Gas (Liq.) H280. • 4.8-5.7 % Diethylene glycol, CAS 111-46-6. Harmonized: Acute Tox. 4 H302. Notified: STOT Re 2 H373. • 0.5-2 % 1,3-Propanediamine, N,N-bis[3-(dimethylamino)propyl]-N',N'-dimethyl-, CAS 33329-35-0. Notified: Acute Tox. 4 H312, Eye Dam. 1 H318, Skin Corr. 1B H314, Aquatic Chronic 3 H412. • 0.125-1 % Ethylene glycol, CAS 107-21-1. Harmonized: Acute Tox. 4 H302. Notified: STOT RE 2 H373.
	Manufacturer's declaration	7.4.2017	See safety data sheet.
	Emission tests	Not relevant	Foam-Lok is used outside the vapour barrier.
	Leaching tests	See Foam-Lok FL 2000-4G	The chemical composition of Foam-Lok LPA 2800-FG is similar to the composition of Foam-Lok FL 2000-4G. The leaching test performed with Foam-Lok FL 2000-4G also cover Foam-Lok LPA 2800-4G.

Table 1 continues on the next page.

Table1. Requested documentation.

System components	Documentation	Status documentation	A brief summary of documentation content and evaluation
Foam-Lok FL 2000-4G	Product description	TDS 2016	Closed-cell PUR foam.
	Safety data sheet	2.6.2015	Contains: <ul style="list-style-type: none"> • 15-25 % 2-Propanol, 1-chloro-, phosphate (3:1), CAS 13674-84-5. Notified: Acute Tox. 4 H302, Aquatic Chronic 3 H412. • 8-10 % Diethylene glycol, CAS 111-46-6. Harmonized: Acute Tox. 4 H302. Notified: STOT Re 2 H373. • < 5 % Ethylene glycol, CAS 107-21-1. Harmonized: Acute Tox. 4 H302. Notified: STOT RE 2 H373.
	Manufacturer's declaration	16.2.2017	See Safety Data Sheet
	Emission tests	Not relevant	Foam-Lok is used outside the vapour barrier.
	Leaching tests	SINTEF rapport 201700218, 17.8.2017	<p>Cumulative release, 64 days:</p> <ul style="list-style-type: none"> • As: < 0.03 mg/m2 => OK • Cd: < 0.002 mg/m2 => OK • Cr: < 0.014 mg/m2 => OK • Cu: < 0.88 mg/m2 => OK • Hg: < 0.001 mg/m2 => OK • Ni: < 0.04 mg/m2 => OK • Pb: < 0.035 mg/m2 => OK • Zn: < 0.3 mg/m2 => OK <p>Organics, step 8 leachate:</p> <ul style="list-style-type: none"> • 2-Propanol, 1-chloro-, phosphate (3:1), CAS 13674-84-5: 500 µg/L. PNEC freshwater (ECHA): 420-640 µg/L. => OK • Bis(1-chloro-2-propyl)(3-chloro-1-propyl) phosphate, CAS 137909-40-1: 180 µg/L. No PNEC, substance not registered in ECHA. • Other compounds: None found in concentrations above PNEC freshwater.

Table 1 continues on the next page.

Table 1. Requested information.

System components	Documentation	Status documentation	A brief summary of documentation content and evaluation
Foam-Lok FL 3C	Product description	TDS, 07/04/16	Rigid sprayed applied PUR closed-cell foam.
	Safety data sheet	30.3.2017	Contains: <ul style="list-style-type: none"> • 7-13 % 2-Propanol, 1-chloro-, phosphate (3:1), CAS 13674-84-5. Notified: Acute Tox. 4 H302, Aquatic Chronic 3 H412. • 7-13 % Ethanol, 2-[(2-aminoethyl)amino], polymer with methyloxirane, CAS 31568-06-6. Notified: Skin Sens. 1 H317, Eye Irrit. 2 H319. • 7.125-8.025 % Diethylene glycol, CAS 111-46-6. Harmonized: Acute Tox. 4 H302. Notified: STOT Re 2 H373. • 0.5 – 3 % 1,3-Propanediamine, N,N-bis[3-(dimethylamino) propyl]-N',N'-dimethyl-, CAS 33329-35-0. Notified: Acute Tox. 4, Eye Dam. 1 H318, Skin Corr. 1B H314, Aquatic Chronic 3 H412. • 0.125-0.75 % Ethylene glycol, CAS 107-21-1. Harmonized: Acute Tox. 4 H302. Notified: STOT RE 2 H373. • 0.17-0.23 % Bis(2-dimethyl aminoethyl) ether, CAS 3033-62-3. Notified: Acute Tox. 3 H311, Acute Tox. 4 H302, Skin Corr. 1 B H314, Acute Tox. 4 H332, Eye Dam. 1 H318.
	Manufacturer's declaration	7.4.2017	See Safety Data Sheet
	Emission tests	Not relevant	Foam-Lok is used outside the vapour barrier.
	Leaching tests	See Foam-Lok FL 2000-4G	The chemical composition of Foam-Lok FL 3C is similar to the composition of Foam-Lok FL 2000-4G. The leaching test performed with Foam-Lok FL 2000-4G also cover Foam-Lok FL 3C.

Table 2. Texts to be inserted into the section 6 of the TG document.

Section	Text
Chemicals hazardous to health and environment	<p>Produktet inneholder ingen prioriterte miljøgifter, eller andre relevante stoffer i en mengde som vurderes som helse- og miljøfarlige. Prioriterte miljøgifter omfatter CMR, PBT og vPvB stoffer.</p> <p>The product contains no hazardous substances with priority in quantities that pose any increased risk for human health and environment. Chemicals with priority include CMR, PBT or vPvB substances.</p>
Effect on indoor environment	-
Effect on soil, surface water and ground water	<p>Utlekkingen fra produktet er bedømt til å ikke påvirke jord og vann negativt.</p> <p>The leaching properties of the product are evaluated to have no negative effects on soil or water.</p>
Waste treatment/recycling	<p>Herdet produkt skal sorteres som restavfall ved avhending. Produktet skal leveres til godkjent avfallsmottak der det kan energigjenvinnes.</p> <p>Ikke herdete komponenter er definert som farlig avfall (jfr Avfallsforskriften) og skal sorteres som farlig avfall på byggeplass og leveres godkjent mottak for farlig avfall.</p> <hr/> <p>Hardened product shall be sorted as residual waste. The product shall be delivered to an authorized waste treatment plant for energy recovery.</p> <p>Non hardened components are defined as hazardous waste (according to the Norwegian Waste Regulation (Avfallsforskriften)), and must be sorted as hazardous waste on the building site, and be delivered to an authorized treatment plant for hazardous waste.</p>
Environmental declaration	<p>Det er ikke utarbeidet miljødeklarasjon (EPD) for produktet.</p> <p>No environmental declaration (EPD) has been worked out for the product.</p>