



Safety Data Sheet
according to Regulation (EC)
No. 453/2010

1. Identification of the Substance/Mixture and the Company/Undertaking

- | | | | |
|--|--|-------------------------|------------|
| 1.1 Product Identifier | PERAN LF BASE | Revision Date: | 17/06/2015 |
| | Product Name: PERAN LF Base | Supersedes Date: | New SDS |
| 1.2 Relevant identified uses of the substance or mixture and uses advised against | No Information | | |
| 1.3 Details of the supplier of the safety data sheet | <p>Supplier: Flowcrete UK Ltd.
 The Flooring Technology Centre
 Booth Lane
 Moston, Sandbach, Cheshire. UK
 CW11 3QF</p> <p>Tel: +44 (0)1270 753000
 Fax: +44 (0)1270 753333
 ehs.uk@flowcrete.com
 http://www.flowcrete.co.uk</p> <p>Datasheet Produced by: ehs.uk@flowcrete.com</p> | | |
| 1.4 Emergency telephone number: | CHEMTREC +001 703 5273887 (Outside US)
CHEMTREC 1-800-424-9300 (Inside US) | | |

2. Hazard Identification

2.1 Classification of the substance or mixture

Classification according to Classification, Labeling & Packaging Regulation (EC) 1272/2008

HAZARD STATEMENTS

Eye Irritation, category 2	H319
Hazardous to the aquatic environment, Chronic, category 2	H411
Other EU extensions	EUH205
Skin Irritation, category 2	H315
Skin Sensitizer, category 1	H317

2.2 Label elements

Symbol(s) of Product



Signal Word

Warning

Named Chemicals on Label

Formaldehyde, oligomeric reaction product with 1-chloro-2,3-epoxypropane and phenol, Polypropyleneglycol-epichlorhydrin copolymer, Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight \leq 700), Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

HAZARD STATEMENTS

Eye Irritation, category 2	H319	Causes serious eye irritation.
Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic to aquatic life with long lasting effects.
Other EU extensions	EUH205	Contains epoxy constituents. May produce an allergic reaction.
Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.

PRECAUTION PHRASES

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P391	Collect spillage.

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

3. Composition/Information On Ingredients

3.2 Mixtures

Hazardous Ingredients

<u>CAS-No.</u>	<u>EINEC No.</u>	<u>Name According to EEC</u>	<u>%</u>
25068-38-6	500-033-5	Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight \leq 700)	25-50
16389-88-1	240-440-2	Dolomite	10-25
9072-62-2	618-635-2	Polypropyleneglycol-epichlorhydrin copolymer	10-25
9003-36-5	500-006-8	Formaldehyde, oligomeric reaction product with 1-chloro-2,3-epoxypropane and phenol	10-25
68609-97-2	271-846-8	Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	2.5-10
14807-96-6	238-877-9	Talc	2.5-10
64742-47-8	265-149-8	Distillates (petroleum), hydrotreated light	1.0-2.5

<u>CAS-No.</u>	<u>REACH Reg No.</u>	<u>CLP Symbols</u>	<u>CLP Hazard Statements</u>	<u>M-Factors</u>
25068-38-6	01-2119456619-26	GHS07-GHS09	H315-317-319-411	

16389-88-1			
9072-62-2	polymer	GHS07	H315-317-319-412
9003-36-5	01-2119454392-40	GHS07-GHS09	H315-317-411
68609-97-2	01-2119485289-22	GHS07	H315-317
14807-96-6	N/A		
64742-47-8	01-2119484819-18	GHS08	H304

Additional Information: The text for CLP Hazard Statements shown above (if any) is given in Section 16.

4. First-aid Measures

4.1 Description of First Aid Measures

GENERAL NOTES: No Information
AFTER INHALATION: No Information
AFTER SKIN CONTACT: No Information
AFTER EYE CONTACT: No Information
AFTER INGESTION: No Information

Self protection of the first aider:

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

No Information

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

5. Fire-fighting Measures

5.1 Extinguishing Media:

Dry Chemical, Foam, Water Fog

FOR SAFETY REASONS NOT TO BE USED: Alcohol, Alcohol based solutions, any other media not listed above.

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

No Information

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

No Information

6.2 Environmental precautions

No Information

6.3 Methods and material for containment and cleaning up

No Information

6.4 Reference to other sections

FURTHER INSTRUCTIONS: Please refer to EU disposal requirements or country specific disposal requirements for this material. See Section 13 for further information.

7. Handling and Storage

7.1 Precautions for safe handling

No Information
No Information

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: No Information
STORAGE CONDITIONS: No Information

7.3 Specific end use(s)

No specific advice for end use available.

8. Exposure Controls/Personal Protection**8.1 Control parameters****Ingredients with Occupational Exposure Limits
(UK WELS)**

<u>Name</u>	<u>CAS-No.</u>	<u>LTEL ppm</u>	<u>STEL ppm</u>	<u>STEL mg/m3</u>	<u>LTEL mg/m3</u>	<u>OEL Note</u>
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	25068-38-6					
Dolomite	16389-88-1					
Polypropyleneglycol-epichlorhydrin copolymer	9072-62-2					
Formaldehyde, oligomeric reaction product with 1-chloro-2,3-epoxypropane and phenol	9003-36-5					
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	68609-97-2					
Talc	14807-96-6				1	
Distillates (petroleum), hydrotreated light	64742-47-8					

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified at the EU level under the dangerous substances and preparations regulation.

8.2 Exposure controls**Personal Protection****RESPIRATORY PROTECTION:** No Information**EYE PROTECTION:** No Information**HAND PROTECTION:** No Information**OTHER PROTECTIVE EQUIPMENT:** No Information**ENGINEERING CONTROLS:** No Information**Chemical Name:**

Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)

EC No.:
500-033-5**CAS-No.:**
25068-38-6**DNELs - Derived no effect level**

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required					0.75 mg/kg		0.75 mg/kg
Inhalation		12.25 mg/m ³		12.25 mg/m ³				
Dermal		8.33 mg/kg		8.33 mg/kg		3.571 mg/kg		3.571 mg/kg

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.006 mg/l
Fresh water sediments	0.996 mg/l
Marine water	0.0006 mg/l
Marine sediments	0.0996 mg/l
Food chain	
Microorganisms in sewage treatment	10 mg/l
soil (agricultural)	0.196 mg/kg
Air	

Chemical Name:

Formaldehyde, oligomeric reaction product with 1-chloro-2,3-epoxypropane and phenol

EC No.:
500-006-8**CAS-No.:**
9003-36-5**DNELs - Derived no effect level**

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							6.25 mg/kg bw/d
Inhalation				29.39 mg/m ³				8.7 mg/m ³
Dermal				104.15 mg/kg bw/d				62.5 mg/kg bw/d

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.003 mg/l
Fresh water sediments	0.294 mg/kg
Marine water	0.0003 mg/l
Marine sediments	0.0294 mg/kg
Food chain	
Microorganisms in sewage treatment	10 mg/l
soil (agricultural)	0.237 mg/kg
Air	

Chemical Name:

Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

EC No.:
271-846-8**CAS-No.:**
68609-97-2**DNELs - Derived no effect level**

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							1 mg/kg bw/d
Inhalation	9.8 mg/m ³	29 mg/m ³	0.98 mg/m ³	13.8 mg/m ³	2.9 mg/m ³	7.6 mg/m ³	1.46 mg/m ³	4.1 mg/m ³
Dermal	68 mg/cm ²	17 mg/kg bw/d	1.7 mg/cm ²	3.9 mg/kg bw/d	40 mg/cm ²	10 mg/kg bw/d	1 mg/cm ²	2.35 mg/kg bw/d

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.0072 mg/l
Fresh water sediments	66.77 mg/kg
Marine water	0.00072 mg/l
Marine sediments	6.677 mg/kg
Food chain	
Microorganisms in sewage treatment	10 mg/l
soil (agricultural)	80.12 mg/kg
Air	

9. Physical and Chemical Properties**9.1 Information on basic physical and chemical properties**

Appearance:	Variable Colour
Physical State	Liquid
Odor	No Information
Odor threshold	Not determined
pH	Not determined
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	146 - N.D.

Flash Point, (°C)	>100
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	0.6 - 8
Vapour Pressure	Not determined
Vapour density	Not determined
Relative density	~1.25
Solubility in / Miscibility with water	insoluble
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	Not determined
Decomposition temperature (°C)	Not determined
Viscosity	Not determined
Explosive properties	Not determined
Oxidising properties	Not Applicable

9.2 Other information

VOC Content g/l: <240

This is a calculated maximum VOC content for the mixed ready to use product (to Directive 2004/42/EC).

10. Stability and Reactivity

10.1 Reactivity

No Information

10.2 Chemical stability

No Information

10.3 Possibility of hazardous reactions

No Information

10.4 Conditions to avoid

No Information

10.5 Incompatible materials

No Information

10.6 Hazardous decomposition products

No Information

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: No Information

Inhalation LC50: No Information

Irritation: No information available.

Corrosivity: No information available.

Sensitization: No information available.

Repeated dose toxicity:	No information available.
Carcinogenicity:	No information available.
Mutagenicity:	No information available.
Toxicity for reproduction:	No information available.
STOT-single exposure:	No information available.
STOT-repeated exposure:	No information available.
Aspiration hazard:	No information available.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Name According to EEC</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
25068-38-6	Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	>5000 mg/kg (rat)	2001 mg/kg (rat) OECD 402	
9072-62-2	Polypropyleneglycol-epichlorhydrin copolymer	2001 mg/kg (rat)	2001 mg/kg (rabbit)	
9003-36-5	Formaldehyde, oligomeric reaction product with 1-chloro-2,3-epoxypropane and phenol	>5000 mg/kg (rat) OECD 401	>2000 mg/kg (rat) OECD 402	
68609-97-2	Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	26800 mg/kg (rat)		

Additional Information:

No Information

12. Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):	No information
IC50 72hr (Algae):	No information
LC50 96hr (fish):	No information

12.2 Persistence and degradability: No information

12.3 Bioaccumulative potential: No information

12.4 Mobility in soil: No information

12.5 Results of PBT and vPvB assessment: The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

12.6 Other adverse effects: No information

<u>CAS-No.</u>	<u>Name According to EEC</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
25068-38-6	Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	1.7 mg/l OECD 202	13.81 mg/l (Pseudokirchneriella subcapitata) OECD 201	1.5 mg/l (Oncorhynchus mykiss) OECD 203
16389-88-1	Dolomite	No information	No information	
9072-62-2	Polypropyleneglycol-epichlorhydrin copolymer	90 mg/L, immobilisation	No information	67 mg/L (Leuciscus iidus)
9003-36-5	Formaldehyde, oligomeric reaction product with 1-chloro-2,3-epoxypropane and phenol	1.6 mg/l	1.8 mg/l (Pseudokirchnerella subcapitata) OECD 201	0.55 mg/l
68609-97-2	Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	7.2 mg/l OECD 202	843.75 mg/l (Pseudokirchnerella subcapitata) OECD 201	>5000 mg/l (Oncorhynchus mykiss) OECD 203

14807-96-6	Talc	No information	No information
64742-47-8	Distillates (petroleum), hydrotreated light	No information	No information

Further Ecological Information

Contains the following ingredients which are classified as water dangerous according to EEC directive No. 76/464/EEC in percentages > 1%.

<u>CAS-No.</u>	<u>Name According to EEC</u>
25068-38-6	Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight \leq 700)
9072-62-2	Polypropyleneglycol-epichlorhydrin copolymer
9003-36-5	Formaldehyde, oligomeric reaction product with 1-chloro-2,3-epoxypropane and phenol

13. Disposal Considerations

13.1 WASTE TREATMENT METHODS: No Information

European Waste Code: 08 01 11*

Packaging Waste Code: 150110

14. Transport Information

14.1	UN number	UN3082
14.2	UN proper shipping name	Environmentally hazardous substance, liquid, N.O.S.
	Technical name	(Epoxy Resin MW<700)
14.3	Transport hazard class(es)	9
	Subsidiary shipping hazard	No Information
14.4	Packing group	III
14.5	Environmental hazards	No Information
14.6	Special precautions for user	Not applicable
	EmS-No.:	No Information
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Not applicable

15. Regulatory Information

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

National Regulations:

Denmark Product Registration Number:	No Information
Danish MAL Code:	00-5 (1993)
Sweden Product Registration Number:	No Information
Norway Product Registration Number:	No Information
WGK Class:	No Information

Chemical Safety Assessment:

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

16. Other Information

Text for CLP Hazard Statements shown in Section 3 describing each ingredient:

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Reasons for revision

No Information

List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark
 ESIS (The European Chemical Substances Information System), provided by the European Commission
 Joint Research Centre in Ispra, Italy
 Annex VI of the EU Council Directive 67/548/EEC
 Council Directive 67/548/EEC - Annex I or EU Council Directive 1999/45/EC
 European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of
 substances and mixtures (CLP Regulation)
 EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"

Acronym & Abbreviation Key:

CLP	Classification, Labeling & Packaging Regulation
EC	European Commission
EU	European Union
US	United States
CAS	Chemical Abstract Service
EINECS	European Inventory of Existing Chemical Substances
REACH	Registration, Evaluation, Authorization of Chemicals Regulation
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
LTEL	Long term exposure limit
STEL	Short term exposure limit
OEL	Occupational exposure limit
ppm	Parts per million
mg/m ³	Milligrams per cubic meter
TLV	Threshold Limit Value
ACGIH	American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety & Health Administration
PEL	Permissible Exposure Limits
VOC	Volatile organic compounds
g/l	Grams per liter
mg/kg	Milligrams per kilogram
N/A	Not applicable
LD50	Lethal dose at 50%
LC50	Lethal concentration at 50%
EC50	Half maximal effective concentration
IC50	Half maximal inhibitory concentration
PBT	Persistent bioaccumulative toxic chemical
vPvB	Very persistent and very bioaccumulative
EEC	European Economic Community
ADR	International Transport of Dangerous Goods by Road
RID	International Transport of Dangerous Goods by Rail
UN	United Nations
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association
MARPOL	International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978
IBC	International Bulk Container

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.