



Safety Data Sheet
according to Regulation (EC)
No. 2015/830

SECTION 1: Identification of the Substance/Mixture and the Company/Undertaking

1.1 Product Identifier	FLOWFRESH /FLOWCRETE MULTIPACK REDSPOT	Revision Date:	19/01/2017
Product Name:	Flowfresh /Flowcrete Multipack Redspot Base A	Supersedes Date:	01/09/2015

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

Hand-mixing with intimate contact and only PPE available. Wide dispersive indoor use resulting in inclusion into or onto a matrix. For use by appropriately trained applicators. This component does NOT contain an antimicrobial agent. Roller application or brushing. Low energy spreading of coatings. Advised against: Home DIY applications, because of the health hazards and training required. Component of multicomponent industrial coatings - Industrial use.

1.3 Details of the supplier of the safety data sheet

Supplier:

Flowcrete UK Ltd.
 The Flooring Technology Centre
 Booth Lane
 Moston, Sandbach, Cheshire. UK
 CW11 3QF

Tel: +44 (0)1270 753000
 Fax: +44 (0)1270 753333
 ehs.uk@flowcrete.com
 http://www.flowcrete.co.uk

Datasheet Produced by: ehs.uk@flowcrete.com

1.4 Emergency telephone number: CHEMTREC +001 703 5273887 (Outside US)
 CHEMTREC 1-800-424-9300 (Inside US)

SECTION 2: Hazard Identification

2.1 Classification of the substance or mixture

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

HAZARD STATEMENTS

Allergic effects	EUH208
Hazardous to the aquatic environment, Chronic, category 3	H412

2.2 Label elements**Symbol(s) of Product**

No Hazard Symbols Exist

Signal Word

None

Named Chemicals on Label

None

HAZARD STATEMENTS

Allergic effects	EUH208	Contains Dipentene. May produce an allergic reaction.
Hazardous to the aquatic environment, Chronic, category 3	H412	Harmful to aquatic life with long lasting effects.

PRECAUTION PHRASES

P273	Avoid release to the environment.
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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.

SECTION 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>
27138-31-4	248-258-5	Oxydipropyl dibenzoate	2.5-10
111-46-6	203-872-2	2,2' -oxybisethanol	1.0-2.5
138-86-3	205-341-0	Dipentene	0.1-1.0
110-25-8	203-749-3	(z)-n-methyl-n-(1-oxo-9-octadecenyl)glycine	0.1-1.0

<u>CAS-No.</u>	<u>REACH Reg No.</u>	<u>CLP Symbols</u>	<u>CLP Hazard Statements</u>	<u>M-Factors</u>
27138-31-4	01-2119529241-49		H412	
111-46-6	01-2119457857-21			
138-86-3		GHS02-GHS07-GHS09	H226-315-317-400-410	
110-25-8	01-2119488991-20	GHS05-GHS09	H315-318-400-410	1

Additional Information: The text for CLP Hazard Statements shown above (if any) is given in Section 16.**SECTION 4: First-aid Measures****4.1 Description of First Aid Measures****GENERAL NOTES:** When symptoms persist or in all cases of doubt seek medical advice. Show this safety data sheet to the doctor in attendance. Remove contaminated clothing and shoes.**AFTER INHALATION:** Move to fresh air. Consult a physician after significant exposure. Keep respiratory tract clear. Remove person to fresh air. If signs/symptoms continue, get medical attention.**AFTER SKIN CONTACT:** Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. Do NOT use solvents or thinners.**AFTER EYE CONTACT:** Keep eye wide open while rinsing. Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes. Remove contact lenses. If eye irritation persists, consult a specialist.

AFTER INGESTION: Gently wipe or rinse the inside of the mouth with water. Give small amounts of water to drink. Never give anything by mouth to an unconscious person. If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel.

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.

SECTION 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

Keep containers and surroundings cool with water spray. Fire will produce dense black smoke containing hazardous combustion products (see section 10). In the event of fire, wear self-contained breathing apparatus. Dry powderCarbon dioxide (CO₂)HalonsDo not use a solid water stream as it may scatter and spread fire. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak. Remove all sources of ignition.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains. May cause long-term adverse effects in the aquatic environment.

6.3 Methods and material for containment and cleaning up

Pick up and transfer to properly labelled containers. No special environmental precautions required. Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). After cleaning, flush away traces with water. Refer to protective measures listed in sections 7 and 8.

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.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Use only in area provided with appropriate exhaust ventilation. Provide sufficient air exchange and/or exhaust in work rooms. Wear personal protective equipment. Use only in well-ventilated areas. Avoid prolonged contact with eyes, skin and clothing.

Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. In

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Avoid temperatures above 40 °C, direct sunlight and contact with sources of heat. Do not freeze. Avoid dust accumulation in enclosed space.

STORAGE CONDITIONS: Store at room temperature in the original container. Keep tightly closed in a dry and cool place. Keep locked up or in an area accessible only to qualified or authorised persons. Keep container closed when not in use. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

7.3 Specific end use(s)

Base A - Flowfresh and Flowcrete Multipack range. Component of a resin flooring product. The mixing and application to be in accordance with the technical data sheets.

SECTION 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>
Oxydipropyl dibenzoate	27138-31-4				
2,2' -oxybisethanol	111-46-6		23		101
Dipentene	138-86-3				
(z)-n-methyl-n-(1-oxo-9-octadecenyl)glycine	110-25-8				

<u>Name</u>	<u>CAS-No.</u>	<u>OEL Note</u>
Oxydipropyl dibenzoate	27138-31-4	
2,2' -oxybisethanol	111-46-6	
Dipentene	138-86-3	
(z)-n-methyl-n-(1-oxo-9-octadecenyl)glycine	110-25-8	

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: Breathing apparatus with filter. No personal respiratory protective equipment normally required.

EYE PROTECTION: Eye wash bottle with pure water. Safety goggles. Tightly fitting safety goggles. Safety glasses with side-shields conforming to EN166.

HAND PROTECTION: Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Rubber or plastic gloves. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Long sleeved clothing. Remove and wash contaminated clothing before re-use. Remove contaminated clothing and protective equipment before entering eating areas.

OTHER PROTECTIVE EQUIPMENT: No Information

ENGINEERING CONTROLS: As a rule, at least 5 air changes per hour are recommended at the workplace. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

Chemical Name:**EC No.:****CAS-No.:****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							
Inhalation								
Dermal								

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	
Fresh water sediments	
Marine water	
Marine sediments	
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	
Air	

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

Appearance:	off white liquid
Physical State	Liquid
Odor	light terpene
Odor threshold	Not determined
pH	9.5
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	100 - 252
Flash Point, (°C)	> 65°C
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	1 - 12.3
Vapour Pressure	Not determined
Vapour density	Not determined
Relative density	approx. 1.0 at 20°C
Solubility in / Miscibility with water	emulsifiable
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: <10

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

SECTION 10: Stability and Reactivity**10.1 Reactivity**

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

No decomposition if stored and applied as directed. Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Avoid temperatures above 40 °C, direct sunlight and contact with sources of heat. Do not freeze. Avoid dust accumulation in enclosed space.

10.5 Incompatible materials

Incompatible with strong acids and oxidizing agents.

10.6 Hazardous decomposition productsIn case of fire **hazardous decomposition products** may be produced such as: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).**SECTION 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>
27138-31-4	Oxydipropyl dibenzoate	3914 mg/kg (rat)	> 2001 mg/kg (rat)	> 200 mg/L, 4 hr (rat)
111-46-6	2,2' -oxybisethanol	12565 mg/kg (rat)	13300 mg/kg (rabbit)	
138-86-3	Dipentene	5000 mg/kg (rat)		
110-25-8	(z)-n-methyl-n-(1-oxo-9-octadecenyl)glycine	>2000 mg/kg (rat)		

Additional Information:

In the case of sensitisation to any of the ingredients, it is inadvisable to work with the product. Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons.

SECTION 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>
27138-31-4	Oxydipropyl dibenzoate	No information	No information	
111-46-6	2,2' -oxybisethanol	No information	No information	75200 mg/l (Pimephales promelas)
138-86-3	Dipentene	No information	No information	No information
110-25-8	(z)-n-methyl-n-(1-oxo-9-octadecenyl)glycine	0.68 mg/l	No information	No information

SECTION 13: Disposal Considerations

13.1 WASTE TREATMENT METHODS: Dispose of as hazardous waste in compliance with local and national regulations. If recycling is not practicable, dispose of in compliance with local regulations. Waste codes should be assigned by the user based on the application for which the product was used. Container hazardous when empty. Empty containers should be taken to an approved waste handling site for recycling or disposal. The product should not be allowed to enter drains, water courses or the soil.

European Waste Code: 080119*
Packaging Waste Code: 150110

SECTION 14: Transport Information

14.1 UN number	Not applicable
14.2 UN proper shipping name	Not regulated for transport according to ADR/RID, IMDG, and IATA regulations.
Technical name	Not applicable
14.3 Transport hazard class(es)	Not applicable
Subsidiary shipping hazard	Not applicable
14.4 Packing group	Not applicable
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	Not applicable
EmS-No.:	Not applicable
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Not applicable

SECTION 15: Regulatory Information**15.1 Safety, health and environmental regulations/legislation for the substance or mixture:****National Regulations:**

Denmark Product Registration Number:	Not available
Danish MAL Code:	Not available
Danish MAL Code - Mixture:	Not available
Sweden Product Registration Number:	Not available
Norway Product Registration Number:	Not available
WGK Class:	Not available

15.2 Chemical Safety Assessment:

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

SECTION 16: Other Information**Text for CLP Hazard Statements shown in Section 3 describing each ingredient:**

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Reasons for revision

Regulatory Formula Source Changed
 Substance Chemical Name Changed
 Substance and/or Product Properties Changed in Section(s):
 02 - Hazards Identification
 08 - Exposure Controls/Personal Protection
 Statement(s) Changed

This Safety Data Sheet (SDS) has been revised to meet the new EU CLP requirements. There have been both formatting and content changes based on the CLP classification (if applicable), please review each section of the SDS for specific changes.

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;
 European Union Commission Regulation No. 1907/2006 on REACH as amended within Commission Regulation (EU) 2015/830;
 European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) and subsequent technical progress adaptations (ATP);
 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

RTI Respiratory Tract Irritation
NE Narcotic Effects

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.