

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 DECKSHIELD UV TOPCOAT BASE Revision Date: 19/01/2017

Product Name: Deckshield UV Topcoat Base A Supercedes Date: 01/07/2015

1.2 Relevant identified uses of the substance or mixture and uses advised against Coatings and paints, thinners, paint removers. Hand-mixing with intimate contact and only PPE available. Wide dispersive indoor use resulting in inclusion into or onto a matrix. Wide dispersive outdoor use resulting in inclusion into or onto a matrix. For use by appropriately trained applicators. Roller application or brushing. Low energy spreading of coatings. Advised against: Home DIY applications, because of the health hazards and training required.

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
Flammable Liquid, category 3 H226
Skin Irritation, category 2 H315

Date Printed: 19/01/2017 2.2 Label elements

Symbol(s) of Product





Signal Word

Warning

Named Chemicals on Label

None

HAZARD STATEMENTS

Allergic effects	EUH208	Contains fatty acids, c14-18 and c16-18-unsatd., maleated, reaction products with oleylamine. May produce an allergic reaction.
Flammable Liquid, category 3	H226	Flammable liquid and vapour.
Skin Irritation, category 2	H315	Causes skin irritation.
PRECAUTION PHRASES		
	P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P280	Wear protective gloves/protective clothing/eye protection/ face protection.
	P332+313	If skin irritation occurs: Get medical advice/attention.
	P403+233	Store in a well-ventilated place. Keep container tightly closed.

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

CAS-No.	EINEC No.	Name According to EEC	<u>%</u>
1330-20-7	215-535-7	Xylene	2.5-10
123-86-4	204-658-1	n-butyl acetate	2.5-10
108-65-6	203-603-9	2-methoxy-1-methylethyl-acetate	2.5-10
100-41-4	202-849-4	Ethylbenzene	1.0-2.5
67762-90-7	614-122-2	Amorphous silica	1.0-2.5
85711-47-3	288-307-8	fatty acids, c14-18 and c16-18-unsatd., maleated, reaction products with oleylamine	0.1-1.0

CAS-No.	REACH Reg No.	CLP Symbols	CLP Hazard Statements	M-Factors
1330-20-7	01-2119488216-32	GHS02-GHS07	H226-312-315-332	
123-86-4	01-2119485493-29	GHS02-GHS07	H225-336	
108-65-6	01-2119475791-29	GHS02	H226	
100-41-4	01-2119489370-35	GHS02-GHS07-GHS08	H225-304-315-319-332-373	
67762-90-7	-			
85711-47-3		GHS07	H317-412	

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. Risk of product entering the lungs on vomiting after ingestion. Repeated exposure may cause skin dryness or cracking. Remove contaminated clothing and shoes.

AFTER INHALATION: 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. In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist. **AFTER INGESTION:** Gently wipe or rinse the inside of the mouth with water. If symptoms persist, call a physician or Poison Control Centre immediately. 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:

Carbon Dioxide, 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

In use, may form flammable/explosive vapour-air mixture.

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). Flash back possible over considerable distance. In the event of fire, wear self-contained breathing apparatus. Do 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.

6.3 Methods and material for containment and cleaning up

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). Ventilate the area. Refer to protective measures listed in sections 7 and 8.

6.4 Reference to other sections

Date Printed: 19/01/2017

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

Take measures to prevent the build up of electrostatic charge. Vapours may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Electrical equipment should be protected to the appropriate standard. Provide sufficient air exchange and/or exhaust in work rooms. As a rule, at least 10 air changes per hour are recommended at the workplace. Wear personal protective equipment. Use only in well-ventilated areas. Do not breathe vapours or spray mist. Keep product and empty container away from heat and sources of ignition. Use only explosion-proof equipment. Keep away from sources of ignition - No smoking.

Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. In the case of sensitisation to any of the ingredients, it is inadvisable to work with the product. Handle in accordance with good industrial hygiene and safety practice. Keep working clothes separately. Keep away from food, drink and animal feeding stuffs. When using, do not eat, drink or smoke. Wash hands and face before breaks and immediately after handling the product.

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. Heat, flames and sparks. Strong sunlight for prolonged periods.

STORAGE CONDITIONS: Store in original container. Keep in an area equipped with solvent resistant flooring. Keep locked up or in an area accessible only to qualified or authorised persons. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

7.3 Specific end use(s)

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>	CAS-No.	LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3
Xylene	1330-20-7	50	100	441	220
n-butyl acetate	123-86-4	150	200	966	724
2-methoxy-1-methylethyl-acetate	108-65-6	50	100	548	274
Ethylbenzene	100-41-4	100	125	552	441
Amorphous silica	67762-90-7				6.
fatty acids, c14-18 and c16-18-unsatd., maleated, reaction products with oleylamin	85711-47-3 ne				

 Name
 CAS-No.
 OEL Note

 Xylene
 1330-20-7

 n-butyl acetate
 123-86-4

 2-methoxy-1-methylethyl-acetate
 108-65-6

 Ethylbenzene
 100-41-4

 Amorphous silica
 67762-90-7

fatty acids, c14-18 and c16-18-unsatd., maleated, reaction products with

85711-47-3

oleylamine

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: In case of insufficient ventilation wear suitable respiratory equipment. Respirator with a vapor filter.

EYE PROTECTION: Eye wash bottle with pure water. Tightly fitting safety goggles.

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 10 air changes per hour are recommended at the workplace. Avoid contact with skin, eyes and clothing. Maintain air concentrations below occupational exposure standards. Ensure adequate ventilation, especially in confined areas. Dermal absorption possible.

Chemical Name:

Xylene

EC No.: CAS-No.: 215-535-7 1330-20-7

DNELs - Derived no effect level

		Workers			Consumers			
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects local	systemic
Oral	Not required						1.6 mg/kg	
Inhalation	289 mg/m ³	289 mg/m ³	77 mg/m³	77 mg/m³	174 mg/m ³	174 mg/m ³		14.8 mg/m ³
Dermal	174 mg/m³		-				_	108 mg/kg

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.327 mg/l
Fresh water sediments	12.46 mg/kg
Marine water	
Marine sediments	
Food chain	
Microorganisms in sewage treatment	6.58 mg/l
soil (agricultural)	2.31 mg/kg
Air	

Chemical Name:

2-methoxy-1-methylethyl-acetate

EC No.: CAS-No.: 203-603-9 108-65-6

DNELs - Derived no effect level

	Workers			Consumers				
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects local	systemic
Oral	Not required					1.67 mg/kg		
Inhalation				275 mg/m ³				33 mg/m ³
Dermal				153.5 mg/kg				54.8 mg/kg

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.635 mg/l
Fresh water sediments	3.29 mg/kg
Marine water	0.0635 mg/l
Marine sediments	0.329 mg/kg
Food chain	
Microorganisms in sewage treatment	100 mg/l
soil (agricultural)	0.29 mg/kg
Air	

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: miscellaneous colours

Physical State Liquid

Odor solvent like

Odor threshold Not determined

pH Not determined

Melting point / freezing point (°C) Not determined

Boiling point/range (°C) 108 - N.D.

Flash Point, (°C) 30

Evaporation rate Not determined

Flammability (solid, gas) Not determined

Upper/lower flammability or explosive

limits

0.8 - 12.7

Vapour Pressure 7 - 9 hPa @ 20°C (xylene)

Vapour density Not determined

Relative density ca. 1.05

Solubility in / Miscibility with water partially miscible

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: <400

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

Stable under recommended storage conditions. Risk of ignition.

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. Heat, flames and sparks. Strong sunlight for prolonged periods.

10.5 Incompatible materials

Incompatible with strong acids and oxidizing agents.

10.6 Hazardous decomposition products

In 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: Prolonged or repeated skin contact may result in allergic eczema.

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:

CAS-No.	Name According to EEC	Oral LD50	Dermal LD50	Vapor LC50
1330-20-7	Xylene	4300 mg/kg (rat)	2000 mg/kg (rabbit)	6350 ppm, 4 hrs (rat)
123-86-4	n-butyl acetate	10760 mg/kg (rat)		23.4 mg/l, 4hr (rat)
108-65-6	2-methoxy-1-methylethyl-acetate	8532 mg/kg (rat)	>5000 mg/kg (rat)	1105 mg/m³, 4hr
100-41-4	Ethylbenzene	3500 mg/kg (rat)	5000 mg/kg (rabbit)	
67762-90-7	Amorphous silica	6350 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. Repeated exposure may cause skin dryness or cracking. This product may contain Titanium Dioxide, which is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals. This classification is relevant when exposed to titanium dioxide in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities.

SECTION 12: Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):

No information

No information

No information

No information

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

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

assessment:

12.6 Other adverse effects: No information

CAS-No.	Name According to EEC	EC50 48hr	IC50 72hr	LC50 96hr
1330-20-7	Xylene	No information	No information	13.4 mg/l (pimephales promelas)
123-86-4	n-butyl acetate	No information	No information	
108-65-6	2-methoxy-1-methylethyl-acetate	500 mg/l	No information	161 mg/l (Pimephales promelas)
100-41-4	Ethylbenzene	1.8 mg/l	4.6 mg/l	4.2 mg/l (Oncorhynchus mykiss)
67762-90-7	Amorphous silica	No information	No information	
85711-47-3	fatty acids, c14-18 and c16-18-unsatd., maleated, reaction products with oleylamine	No information	No information	No information

SECTION 13: Disposal Considerations

13.1 WASTE TREATMENT METHODS: Do not burn, or use a cutting torch on, the empty drum. Dispose of as hazardous waste in compliance with local and national regulations. 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: 080111* Packaging Waste Code: 150110

Date Printed: 19/01/2017

SECTION 14: Transport Information

14.1 UN number UN186614.2 UN proper shipping name Resin solution

Technical name Xylene/ n-butyl acetate mixture

14.3 Transport hazard class(es) 3

Subsidiary shipping hazard Not applicable

14.4 Packing group

14.5 Environmental hazards Not applicable
14.6 Special precautions for user 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: 3-1

 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:

H225	Highly flammable liquid and vapour.
-	
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

H332 Harmful if inhaled.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

Reasons for revision

Date Printed: 19/01/2017

Substance and/or Product Properties Changed in Section(s):

03 - Composition / Info on Ingredients

08 - Exposure Controls/Personal Protection

09 - Physical & Chemical Information

Substance Chemical Name Changed

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/m3 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

Product: DECKSHIELD UV TOPCOAT BASE

IATA International Air Transport Association

MARPOL International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978

Date Printed: 19/01/2017

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.