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

Product Name:	Flowchem VE Curing Agent	**Revision Date:**	29/11/2021
		Supersedes Date:	09/06/2021

UFI Code: 12A1-V08S-C007-06SA

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

Coatings and paints, thinners, paint removers. Manual activities involving hand contact. Widespread use leading to inclusion into/onto article (indoor). 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:

Tremco CPG UK Limited
Coupland Road
Hindley Green
WN2 4HT, UK

Tel: +44 (0)1942 251400

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)

Giftinformasjonen: +47 22 59 13 00

SECTION 2: Hazard Identification

2.1 Classification of the substance or mixture

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

HAZARD STATEMENTS

Organic Peroxide, categories E, F	H242-EF
Acute Toxicity, Oral, category 4	H302
Skin Corrosion, category 1	H314-1
Acute Toxicity, Inhalation, category 4	H332

STOT, repeated exposure, category 2	H373
Hazardous to the aquatic environment, Chronic, category 2	H411

2.2 Label elements

Symbol(s) of Product

Signal Word

Danger

Named Chemicals on Label

Cumene hydroperoxide, 2-Phenylpropan-2-ol

HAZARD STATEMENTS

Organic Peroxide, categories E, F	H242-EF	Heating may cause a fire.
Acute Toxicity, Oral, category 4	H302	Harmful if swallowed.
Skin Corrosion, category 1	H314-1	Causes severe skin burns and eye damage.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
STOT, repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic to aquatic life with long lasting effects.

PRECAUTION PHRASES

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P234	Keep only in original packaging.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do no eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/ face protection.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301+330+331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P314	Get medical advice/attention if you feel unwell.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P403+235	Store in a well-ventilated place. Keep cool.

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

Name According to EEC	EINEC No.	CAS-No.	%	Classifications	
Cumene hydroperoxide	201-254-7	80-15-9	25 - <50	H242-302-312-314-332-373-411	Acute Tox. 4 Dermal, Acute Tox. 4 Inhalation, Acute Tox. 4 Oral, Aquatic Chronic 2, Org. Perox. EF, Skin Corr. 1, STOT RE 2
Cumene	202-704-5	98-82-8	2.5 - <10	H226-304-335-411	Aquatic Chronic 2, Asp. Tox. 1, Flam. Liq. 3, STOT SE 3 RTI
2-Phenylpropan-2-ol	210-539-5	617-94-7	1.0 - <2.5	H302-315-319	Acute Tox. 4 Oral, Eye Irrit. 2, Skin Irrit. 2

CAS-No.	M-Factors	REACH Reg No.
80-15-9		01-2119475796-19
98-82-8		01-2119473983-24
617-94-7		01-2119965145-35

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. Remove contaminated clothing and shoes.
AFTER INHALATION: Call a physician or poison control centre immediately. Keep respiratory tract clear. Provide fresh air, rest and warmth. When risk of unconsciousness, place and transport the victim in secured recovery position.
AFTER SKIN CONTACT: Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
AFTER EYE CONTACT: Immediate medical attention is required. Protect unharmed eye. Continue rinsing eyes during transport to hospital. Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
AFTER INGESTION: Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Take victim immediately to hospital. If vomiting occurs spontaneously: Keep head below hips to prevent aspiration of stomach vomit into lungs.

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

Harmful if swallowed. Toxic by inhalation. Causes burns. Irritating to respiratory system. Risk of serious damage to eyes. Prolonged or repeated exposure increases the risk.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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. Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

Heating may cause a fire or explosion. In case of fire hazardous decomposition products may be produced such as: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). May form explosive peroxides. Fire will produce dense black smoke containing **hazardous combustion products** (see section 10).

5.3 Advice for firefighters

Keep containers and surroundings cool with water spray. In the event of fire, wear self-contained breathing apparatus. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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. Pay attention to the spreading of gases especially at ground level (heavier than air) and to the direction of the wind.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains. Never return spills in original containers for re-use. Local authorities should be advised if significant spillages cannot be contained. May cause long-term adverse effects in the aquatic environment.

6.3 Methods and material for containment and cleaning up

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). Refer to protective measures listed in sections 7 and 8. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Keep contents moist.

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 explosion-proof equipment. Wear personal protective equipment. Handle and open container with care. Use only in well-ventilated areas. Do not breathe vapours or spray mist.
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feedingstuffs. When using, do not eat, drink or smoke. Wash hands and face before breaks and immediately after handling the product. Avoid contact with the skin and the eyes.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Avoid temperatures above 25 °C, direct sunlight and contact with sources of heat.
STORAGE CONDITIONS: Store at room temperature in the original container. Keep locked up or in an area accessible only to qualified or authorised persons. Keep container closed when not in use. Keep away from combustible materials.

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)

Name	CAS-No.	LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3
Cumene hydroperoxide	80-15-9				

Cumene	98-82-8	25	50	250	125
2-Phenylpropan-2-ol	617-94-7				

Name	CAS-No.	OEL Note
Cumene hydroperoxide	80-15-9	
Cumene	98-82-8	Can be absorbed through the skin.
2-Phenylpropan-2-ol	617-94-7	

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 filter for organic vapor.

EYE PROTECTION: Tightly fitting safety goggles. Face-shield.

HAND PROTECTION: Full protective suit. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Impervious 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). Use chemical resistant gloves (EN 374): Butyl rubber. Neoprene.

OTHER PROTECTIVE EQUIPMENT: Ensure that eyewash stations and safety showers are close to the workstation location.

ENGINEERING CONTROLS: As a rule, at least 10 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:
Cumene hydroperoxide

EC No.: 201-254-7

CAS-No.: 80-15-9

DNELs - Derived no effect level

	Workers				Consumers			
Route of Exposure	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				6 mg/m³				
Dermal								

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.003 mg/l
Fresh water sediments	0.023 mg/kg
Marine water	0.0003 mg/l
Marine sediments	0.002 mg/kg
Food chain	
Microorganisms in sewage treatment	0.35 mg/l
soil (agricultural)	0.003 mg/kg
Air	

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Clear, Colorless
Physical State	Liquid
Odor	Characteristic
Odor threshold	Not determined
pH	Not determined
Melting point / freezing point (°C)	-10 °C

Boiling point/range (°C)	Not applicable - Not applicable
Flash Point, (°C)	>SADT
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	Not determined
Vapour Pressure	4 hPa (20 °C)
Vapour density	Not determined
Relative density	1.04 (20 °C)
Solubility in / Miscibility with water	Miscible
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	Not applicable
Decomposition temperature (°C)	SADT 55 °C
Viscosity	5 mPa.s (20 °C)
Explosive properties	Not explosive
Oxidising properties	Not applicable

9.2 Other information

VOC Content g/l: <60

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.

10.3 Possibility of hazardous reactions
No reactivity hazards known under recommended storage and use conditions.

10.4 Conditions to avoid
Avoid temperatures above 25 °C, direct sunlight and contact with sources of heat.

10.5 Incompatible materials
Iron. Copper. Rust. Heavy metals. Acids and bases. Amines. Reducing agents.

10.6 Hazardous decomposition products
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:	May cause respiratory irritation.
Corrosivity:	Causes serious eye damage.
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: May cause respiratory irritation.

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	Gas LC50	Dust/Mist LC50
80-15-9	Cumene hydroperoxide	382 mg/kg (rat)	1200 - 1520 mg/kg (rat)			1370 mg/l
98-82-8	Cumene	>2000 mg/kg (rat)			0.000	
617-94-7	2-Phenylpropan-2-ol	1300 mg/kg (rat)			0.000	0.000

Additional Information:
Corrosive to skin. Corrosive - causes irreversible eye damage. Vapours are toxic when inhaled. Harmful if swallowed.

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

CAS-No.	Name According to EEC	EC50 48hr	IC50 72hr	LC50 96hr
80-15-9	Cumene hydroperoxide	No information	No information	3.9 mg/L (onchorhynchus mykiss)
98-82-8	Cumene	10 mg/l	No information	4.7 mg/L (pimephales promelas)
617-94-7	2-Phenylpropan-2-ol	No information	No information	3.9 mg/l

SECTION 13: Disposal Considerations

13.1 WASTE TREATMENT METHODS: Dispose of as hazardous waste in compliance with local and national regulations. Container hazardous when empty. Do not re-use empty containers. The product should not be allowed to enter drains, water courses or the soil.

European Waste Code:	080111*
Packaging Waste Code:	150110*

SECTION 14: Transport Information

14.1	**UN number**	UN3109
14.2	**UN proper shipping name**	Organic peroxide type F, liquid
	Technical name	(Cumyl hydroperoxide <50%)
14.3	**Transport hazard class(es)**	5.2
	Subsidiary shipping hazard	Not applicable
14.4	**Packing group**	Not applicable
14.5	**Environmental hazards**	Marine Pollutant
14.6	**Special precautions for user**	Not applicable
	EmS-No.:	F-J , S-R
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:	4-6 (1993)
Danish MAL Code - Mixture:	5-6 (1993)
Sweden Product Registration Number:	Not available
Norway Product Registration Number:	100104
Germany WGK Class:	Not available
Directive 2004/42/CE :	<60
Covered by Directive 2012/18/EC (Seveso III):	Not applicable
Restrictions to product or to substances according to Annex XVII, Regulation (CE) 1907/2006:	Not applicable

Annex XIV - Authorisation List:

CAS-No.	Name According to EEC
Not Applicable	

SVHC - Substances of very high concern (Candidate List):

CAS-No.	Name According to EEC
Not Applicable	

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.
H242	Heating may cause a fire.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Reasons for revision

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
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.