



Metroflex Catalyst

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	B.P.O	Revision Date:	25/06/2018
Product Name:	Metroflex Catalyst	Supersedes Date:	New SDS

1.2 Relevant identified uses of the substance or mixture and uses advised against Hardener for 2 component coatings - Industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Manufacturer: CFSNET Ltd
United Downs Industrial Park
St Day, Redruth
Cornwall TR16 5HY

Regulatory / Technical Information:
+44(0)1209 821028
www.cfsnet.co.uk
sales@cfsnet.co.uk

Datasheet Produced by:

1.4 Emergency telephone number:

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 C, D	H242-CD
Skin Sensitizer, category 1	H317
Eye Irritation, category 2	H319
Reproductive Toxicity, category 2	H361
Hazardous to the aquatic environment, Acute, category 1	H400
Hazardous to the aquatic environment, Chronic, category 3	H412

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

dicyclohexyl phthalate, dibenzoyl-peroxide

HAZARD STATEMENTS

Organic Peroxide, categories C, D	H242-CD	Heating may cause a fire.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Eye Irritation, category 2	H319	Causes serious eye irritation.
Reproductive Toxicity, category 2	H361	Suspected of damaging fertility or the unborn child.
Hazardous to the aquatic environment, Acute, category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment, Chronic, category 3	H412	Harmful 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.
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.
P284	Wear respiratory 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.
P308+313	IF exposed or concerned: Get medical advice/attention.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
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

<u>CAS-No.</u>	<u>EINEC No.</u>	<u>Name According to EEC</u>	<u>%</u>
84-61-7	201-545-9	dicyclohexyl phthalate	50-75
94-36-0	202-327-6	dibenzoyl-peroxide	50-75

<u>CAS-No.</u>	<u>REACH Reg No.</u>	<u>CLP Symbols</u>	<u>CLP Hazard Statements</u>	<u>M-Factors</u>
84-61-7	01-2119978223-34	GHS07-GHS08	H317-361-412	
94-36-0	01-2119511472-50	GHS02-GHS07-GHS09	H242-317-319-400	

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.

AFTER INHALATION: Move to fresh air. Give oxygen or artificial respiration if needed.

AFTER SKIN CONTACT: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

AFTER EYE CONTACT: 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: Never give anything by mouth to an unconscious person. If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. If swallowed, call a poison control centre or doctor immediately.

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 by inhalation. May cause sensitization by skin contact. Irritating to eyes, respiratory system and skin.

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

5.2 Special hazards arising from the substance or mixture

May reignite after fire has been extinguished.

5.3 Advice for firefighters

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. Hazardous decomposition products formed under fire conditions. 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

Avoid dust formation. Use personal protective equipment. Remove all sources of ignition.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Pick up and transfer to properly labelled containers. Do not let product enter drains. Avoid breathing dust.

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

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Direct sources of heat.

STORAGE CONDITIONS: Keep tightly closed in a dry and cool place. Keep locked up or in an area accessible only to qualified or authorised persons. Store away from: Reducing agents (e.g. amines), acids, alkalis, and heavy metal compounds, (e.g. accelerators, drying agents, metal soaps). Keep away from combustibles and flammable materials.

7.3 Specific end use(s)

No specific advice for end use available.

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/m ³	LTEL mg/m ³
dicyclohexyl phthalate	84-61-7				5
dibenzoyl-peroxide	94-36-0				5

Name	CAS-No.	OEL Note
dicyclohexyl phthalate	84-61-7	
dibenzoyl-peroxide	94-36-0	

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: Suitable mask with particle filter P3 (European Norm 143)

EYE PROTECTION: Safety glasses with side-shields conforming to EN166.

HAND PROTECTION: Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. Long sleeved clothing. Remove and wash contaminated clothing before re-use.

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

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

Chemical Name:

dibenzoyl-peroxide

EC No.:

202-327-6

CAS-No.:

94-36-0

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							1.65 mg/kg bw/d
Inhalation				11.75 mg/m ³				2.9 mg/m ³
Dermal				6.6 mg/kg bw/d				3.3 mg/kg

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.602 mg/l
Fresh water sediments	0.338 mg/kg
Marine water	0.0602 mg/l
Marine sediments	0.0338 mg/kg
Food chain	6.67 mg/kg
Microorganisms in sewage treatment	0.35 mg/l
soil (agricultural)	0.0758 mg/kg
Air	

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	white free flowing powder
Physical State	Solid
Odor	Faint
Odor threshold	Not determined
pH	Not determined
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	N.D. - N.D.
Flash Point, (°C)	N/A
Evaporation rate	Not determined
Flammability (solid, gas)	Decomposition products maybe flammable.
Upper/lower flammability or explosive limits	Not determined
Vapour Pressure	Not determined
Vapour density	Not determined
Relative density	1230 kg/m ³
Solubility in / Miscibility with water	Insoluble
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	Not determined
Decomposition temperature (°C)	Self-Accelerating decomposi-tion temperature (SADT) : 55°C
Viscosity	Not determined
Explosive properties	Not determined
Oxidising properties	N/A

9.2 Other information

VOC Content g/l:	0
Specific Gravity (g/cm³)	1.230

SECTION 10: Stability and Reactivity

10.1 Reactivity

Explosive reaction may occur on heating or burning. Strong oxidising agent: Avoid contact with reducing agents.

10.2 Chemical stability

Stable under recommended storage conditions. To avoid thermal decomposition, do not overheat. Self-Accelerating decomposition temperature (SADT): 55°C.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur. Contact with incompatible materials may result in a self-accelerating decomposition reaction at or below SADT.

10.4 Conditions to avoid

Direct sources of heat.

10.5 Incompatible materials

Strong oxidizing agents. Reducing agents. Heavy metals Incompatible with strong acids and bases.

10.6 Hazardous decomposition products

Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Benzoic acid.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:	
Oral LD50:	No Information
Inhalation LC50:	>24.3 mg/l
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>
94-36-0	dibenzoyl-peroxide	>5000 mg/kg		>24.3 mg/L (4 hr)

Additional Information:

No Information

SECTION 12: Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):	Not available
IC50 72hr (Algae):	Not available
LC50 96hr (fish):	Not available

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>
84-61-7	dicyclohexyl phthalate	No information	No information	
94-36-0	dibenzoyl-peroxide	0.11 mg/l	0.06 mg/l	0.06 mg/l

SECTION 13: Disposal Considerations

- 13.1 WASTE TREATMENT METHODS:** Uncontrolled disposal or recycling of this packaging is not permitted and can be dangerous. Dispose of in accordance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

European Waste Code: No Information
Packaging Waste Code: 150110

SECTION 14: Transport Information

- | | |
|--|---|
| 14.1 UN number | 3106 |
| 14.2 UN proper shipping name | Organic Peroxide type D, solid (Dibenzoyl peroxide) |
| Technical name | Not applicable |
| 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: Not available

Danish MAL Code - Mixture: Not available

Sweden Product Registration Number: Not available

Norway Product Registration Number: Not available

Germany WGK Class: Not available

Covered by Directive 2012/18/EC (Seveso III): P6b, E1

Restrictions to product or to substances according to Annex XVII, Regulation (CE) 1907/2006: 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:

H242	Heating may cause a fire.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H361	Suspected of damaging fertility or the unborn child.
H400	Very toxic to aquatic life.
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;
 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.