SAFETY DATA SHEET	**date of issue: 30.10.2023** **VERSION: 1.0/EN**

Plex 192 Katalysator

in accordance with the Commission Regulation (EU) No **2020/878** of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

1 SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Plex 192 Katalysator

UFI: YH20-M0TF-J00D-0WXF

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

Identified uses Polymerization initiator. Restricted to professional users.

SU 22 Professional uses.

Uses advised against:. Other than those indicated in the identified use.

1.3 Details of the supplier of the safety data sheet

Eurostep Poland Sp. z o.o.

95-054 Ksawerów

ul. Tymiankowa 37/39; Poland

Tel.: (42) 235-28-88

www.eurostep.com.pl

Product technical information: eurostep@eurostep.com.pl

1.4 Emergency telephone number

Nationwide emergency telephones **(Mon-Fri 8:00 – 16:00): (+48) (42) 235-28-88**

112 (emergency telephone number)

Emergency telephone number

Country	Official advisory body	Address	Emergency number	Remark
Austria	Vergiftungsinformationszentra le (Poisons Information Centre)	Stubenring 6 1010 Wien	+43 1 406 43 43	
Belgium	Centre Anti-Poisons/ Antigifcentrum c/o Hôpital Central de la Base – Reine Astrid	Rue Bruyn 1 B -1120 Bruxelles/Brussel	+32 70 245 245	Please dial: 070 245245 for any urgent questions about intoxication (free of charge 24/7), if not accessible, dial: 02 264 96 30 (standard fee)
Bulgaria	Национален токсикологичен информационен център (National Toxicological Information Centre) Многопрофилна болница за активно лечение и спешна медицина "Н.И.Пирогов" (National Clinical Toxicology Centre), Emergency Medical Institute "Pirogov"	21 Totleben Boulevard 1606 SOFIA	+359 2 9154 409	
Croatia	Centar za kontrolu otrovanja Institut za medicinska istraživanja i medicinu rada	Ksaverska Cesta 2 p.p. 291 10000 Zagreb	+385 1 234 8342	
Cyprus	Κέντρου Δηλητηριάσεων		1401	Operating hours 24 hours / 24 hours, 7 days a week
Czech Republic	Toxikologickéinformačnístředisko Klinikapracovníholékařství VFN a 1. LF UK	Na Bojišti 1 120 00 Praha 2	+420 224 919 293 +420 224 915 402	
Denmark	Giftlinjen Bispebjerg Hospital	Bispebjerg Bakke 23 2400 København NV	+45 82 12 12 12	
Estonia	Mürgistusteabekeskus	Gonsiori 29 15027 Tallinn	16662 +372 626 93 90	
Finland	Myrkytystietokeskus	Stenbäckinkatu 9 PO BOX 100 29 Helsinki	+358 9 471 977 +358 9 4711	
France	Centre Antipoison et de Toxicovigilance de Paris Hôpital Fernand Widal	200 rue du Faubourg Saint-Denis 75475 Paris Cedex 10	+33 1 40 05 48 48	
France	Centre Antipoison et de Toxicovigilance de Marseille Hôpital Sainte Marguerite	270 boulevard de Sainte Marguerite 13274 Marseille Cedex 09	+33 4 91 75 25 25	
Germany	Giftnotruf München Toxikologische Abteilung der II. Med. Klinik und Poliklinik rechts der Isar der Technischen Universität München	Ismaninger Straße 22 81675 München	+49 (0) 89 19240	
Germany	Giftnotruf der Charité CBF, Haus VIII (Wirtschaftgebäude), UG	Hindenburgdamm 30 12203 Berlin	+49 (0) 30 19240	
Greece	Poisons Information Centre Children's Hospital P&A	11762 Athens	+30 2 10 779 3777	

	Kyriakou			
Hungary	Országos Kémiai Biztonsági Intézet Egészségügyi Toxikológiai Tájékoztató Szolgálat	Nagyvárad tér 2. 1437 Budapest, Pf. 839 1097 Budapest	+36 80 20 11 99	
Iceland	Eitrunarmiðstöð Landspítali	Fossvogi 108 Reykjavik	+354 543 22 22	
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Italy	Centro Antiveleni Dipartimento di Tossicologia Clinica, Universita Cattolica del Sacro Cuore	Largo Agostino Gemelli 8 168 Roma	+39 06 305 4343	
Latvia	Valsts Toksikoloģijas centrs, Saindēšanās un zāļu informācijas centrs	Hipokrāta 2 1038 Rīga	+371 67 04 24 73	
Lithuania	Apsinuodijimų informacijos biuras	Birutės g. 56 8110 Vilnius	+370 5 236 20 52 +370 687 53378	
Luxembourg	Centre Anti-Poisons/ Antigifcentrum c/o Hôpital Central de la Base - Reine Astrid	Rue Bruyn 1 1120 Bruxelles/Brussel	+352 8002 5500	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital MSD Msida	+356 2545 6504	
Netherlands	Nationaal Vergiftigingen Informatie Centrum Universitair Medisch Centrum Utrecht, Het Nationaal Vergiftigingen Informatie Centrum (NVIC) informeert (dieren-) artsen, apothekers en andere professionele hulpverleners over de mogelijke gezondheidseffecten en behandelingsmogelijkheden bij vergiftigingen. Het NVIC is hiervoor dag en nacht bereikbaar, zowel telefonisch als via internet	Huispostnummer B.00.118 PO Box 85500 3508 GA Utrecht	+31 30 274 88 88	Only for thepurpose of informing medical personnel in cases of acute intoxications
Norway	Giftinformasjonen Helsedirektoratet	P.O. Box 7000 St. Olavs Plass 130 Oslo	+47 22 591300	
Poland	National Poisons Information Centre The Nofer Institute of Occupational Medicine (Łódź)	ul. Teresy 8 P.O. BOX 199 90950 Łódź	+48 42 63 14 724	
Portugal	Centro de InformaçãoAntivenenosInstituto Nacional de Emergência Médica	Rua Almirante Barroso, 36 1000-013 Lisboa	+351 808 250 143	
Romania	Department of Clinical Toxicology Spitalul de Urgenta Floreasca	Calea Floreasca Bucuresti	+40 21 230 8000	
Serbia	Nacionalni centar za kontrolu trovanja - VMA	Crnotravska 17 11000 Beograd	+381 11 360 84 40 (24h) +381 11 3672 187	
Slovakia	Národné toxikologickéinformačné centrum UniverzitnánemocnicaBratislava, pracoviskoKramáre, Klinikapracovnéholekárstva a toxikológie	Limbová 5 833 05 Bratislava	+421 2 54 77 41 66	
Slovenia	Center za kliničnotoksikologijo in farmakologijoInternaklinika, UKCL	Zaloška cesta 7 1525 Ljubljana	+386 41 650 500	
Spain	Servicio de Información Toxicológica Instituto Nacional de Toxicología y Ciencias Forenses, Departamento de Sevilla	Carretera de San Jerónimo Km 0,4 41080 Sevilla	+34 91 562 04 20	(Toxicological emergencies only). Information in Spanish (24/7)
Sweden	Giftinformationscentralen	Box 60 500 171 76 Stockholm	112 – begär Giftinformation +46 10 456 6700 (Från utlandet)	(from abroad: +41 44 251 51 51) non urgent inquiry: +41 44 251 66 66
Switzerland	Tox Info Suisse	Freiestrasse 16 8032 Zürich	145	

2 SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Physical and chemical hazards:

Organic Peroxides, Types C, D, E, F [Org. Perox. D]

Heating may cause a fire. (H242)

Health hazards

Sensitisation - Skin, hazard category 1, 1A, 1B [Skin Sens.1]

May cause an allergic skin reaction. (H317)
Serious eye damage/eye irritation, Hazard Category 2 [Eye Irrit. 2]
Causes serious eye irritation. (H319)
Reproductive toxicity, Hazard Category 1A, 1B [Repr. 1B]
May damage the unborn child. (H360D)
Environmental hazards:
Hazardous to the aquatic environment - AcuteHazard, Category 1 [Aquatic Acute 1]
Very toxic to aquatic life. (H400)
Hazardous to the aquatic environment - Chronic Hazard, Category 1 [Aquatic Chronic 1]
Very toxic to aquatic life with long lasting effects. (H410)

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008
Pictogram

GHS02 **GHS08** **GHS07** **GHS09**

Signal word: Danger
Substances which influenced classification
Dibenzoyl peroxide; Dicyclohexyl phthalate
Hazard statement(s)
H242 Heating may cause a fire.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H360D May damage the unborn child.
H410 Very toxic to aquatic life with long lasting effects.
Precautionary statement(s):
Prevention
P201 Obtain special instructions before use.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing dust/vapours.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
Response
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P391 Collect spillage.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
Disposal
P501 Dispose of contents/ container to an approved waste disposal plant.
Supplementary information
Restricted to professional users.

2.3 Other hazards

This mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

List I

Substances identified as endocrine disruptors at EU level: EC / List no. 201-545-9 CAS no. 84-61-7 Alternative names DCHP ... DCHP Dicyclohexyl phthalate (DCHP)

his substance/mixture contains components considered to have endocrinedisrupting properties affecting human health, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100

3 SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances:

Not applicable.

3.2 Mixtures:

Substance identifier	Name of the substance	Weight fraction %	Classification in line with The Regulation (EC) No. 1272/2008		
			Signal Word Code(s)	Hazard Class and Category Code(s)	Hazard Statement Code(s)
CAS No: 94-36-0 EC No: 202-327-6 Index No: 617-008-00-0 REACH No: 01-2119511472-50-xxxx	Dibenzoyl peroxide [1]	49-52.5	GHS01 GHS02 GHS07 GHS09 Dgr	Org. Perox. B Eye Irrit. 2 Skin Sens. 1 Aquatic Acute 1 M=10 Aquatic Chronic 1 M=10	H241 H319 H317 H400 H410
CAS No: 84-61-7 EC No 201-545-9 Index No: 607-719-00-4 REACH No: 01-2119978223-3-xxxx	Dicyclohexyl phthalate [1.4]	47.5-51	GHS07 GHS08 Dgr	Skin Sens. 1 Repr. 1B, Aquatic Chronic 3	H317 H360D H412

[1] Substance with national exposure limit in the workplace.

[4] Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)

Full H phrases are specified in point 16 hereof.

4 SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

If inhaled: Move the affected person to fresh air or remove them from the exposure area. Place them in a semi-reclining or sitting position, ensuring comfort and calmness. Protect them from heat loss. Seek medical advice if necessary.

In case of skin contact: Remove contaminated clothing and rinse the skin thoroughly with lukewarm, running water. If skin irritation persists, seek medical attention.

In case of eye contact: Rinse the eyes with a large amount of cool, running water for at least 15 minutes. Remove contact lenses if present. Avoid strong water jets to prevent mechanical damage to the cornea. If irritation persists, consult an ophthalmologist.

If swallowed: If a significant amount has been swallowed, do not induce vomiting. Rinse the mouth with plenty of water and contact a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Contact with skin: May cause an allergic skin reaction.
Contact with eye: Redness, mild irritation, tearing.
Ingestion: Abdominal pain, nausea, vomiting.
Inhalation: Exposure to high concentrations of vapors may cause respiratory irritation.
May damage the unborn child.

4.3 Indication of any immediate medical attention and special treatment needed

Physician makes a decision regarding further medical treatment after thoroughly examination of the injured. Treat symptomatically

5 SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:
Foam, carbon dioxide, dry powder extinguishers, water – dispersed jets.
Unsuitable extinguishing media:
Do not use solid water streams.

5.2 Special hazards arising from the substance or mixture

The SADT (Self-Accelerating Decomposition Temperature) is possible above approximately +55°C. Vapors may form explosive mixtures with air.
WARNING: Re-ignition may occur; the product supports combustion. Vapors may form explosive mixtures with air. Do not inhale fumes resulting from fire or explosion.
During combustion, toxic products such as carbon oxides and other unidentified thermal decomposition products may form. Do not inhale combustion products, as they may be hazardous to human health.

5.3 Advice for firefighters

Use standard protective measures for firefighting. Do not remain in the fire zone without self-contained breathing apparatus and chemical-resistant protective clothing. Prevent extinguishing water from entering sewage systems, surface water, or groundwater. Collect used extinguishing media.

6 SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:
Restrict access to the affected area until appropriate cleaning operations are completed. In the event of large spills, isolate the affected area. Avoid direct contact with the released product. Avoid inhaling dust. Use personal protective equipment. Ensure adequate ventilation.
For emergency responders:
Ensure that only trained personnel handle the containment and cleanup of the spill. Use personal protective measures.

6.2 Environmental precautions

In case of large releases, take appropriate measures to prevent the mixture from spreading into the environment. Prevent the product from entering the sewage system. Notify the appropriate emergency services.

6.3 Methods and material for containment and cleaning up

Protect drains. Collect the material into sealable plastic containers and transport it to a disposal site. DO NOT seal the waste.

6.4 Reference to other sections

Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

7 SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Weigh at temperatures below +25°C. Do not mix directly with reducers, promoters, etc. Do not shake, throw, or subject to impacts. Do not eat, drink, or smoke during production and storage. Wash hands thoroughly after work. Store work clothing separately and do not take it home. The use of devices and tools that may cause sparks is prohibited.

7.2 Conditions for safe storage, including any incompatibilities

Keep away from food, beverages, and animal feed. Store away from sources of ignition, heat, and light, at temperatures below +30°C. Do not smoke. Wash hands thoroughly before and after contact with the peroxide. Use only tools made from suitable materials (polyethylene, polypropylene, stainless steel).

7.3 Specific end use(s)

No information on applications other than those listed in subsection 1.2.

8 SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters

Dibenzoyl peroxide [94-36-0]				
	Limit value - Eight hours		**Limit value - Short term**	
	ppm	**mg/m ³**	**ppm**	**mg/m³**
Austria		5 inhalable aerosol		10 inhalable aerosol
Belgium		5		
Denmark		5		10
Finland		5		10 (1)
France		5		
Germany (AGS)		5 inhalable aerosol		5 inhalable aerosol (1)
Germany (DFG)		5 (1)		5 (1)(2)
Hungary		5 (1)		5 (1)(2)
Ireland		5		
Norway		5		
Poland		5		10 (1)
Spain		5		
Switzerland		5 inhalable aerosol		5 inhalable aerosol
United Kingdom		5		
Remarks				
Finland	(1) 15 minutes average value			
Germany (AGS)	(1) 15 minutes average value			
Germany (DFG)	(1) Inhalable fraction (2) 15 minutes average value			
Hungary	(1) Skin (2) 15 minutes average value			
Poland	(1) 15 minutes average value			

Dicyclohexyl phthalate [84-61-7]			
Limit value - Eight hours		**Limit value - Short term**	
ppm	**mg/m³**	**ppm**	**mg/m³**
Austria	5		

Denmark	3	6
United Kingdom	5	

DNEL/PNEC

Dibenzoyl peroxide

DNEL for workers (chronic exposure by inhalation, systemic): 39 mg/m^3
DNEL for workers (dermal chronic, systemic): 13,3 mg / kg body weight / day
DNEL for workers (dermal chronic, local): 34 µg/cm^2
PNEC freshwater: 0.02 µg / l
PNEC sea water: 0.002 µg / l
PNEC sediment-freshwater: 0.013 mg / kg
PNEC sediment-see water: 0.001 mg / kg
PNEC soil: 0.002 mg / kg soil
PNEC STP: 0.35 mg / l

Dicyclohexyl phthalate

DNEL for employee (chronic exposure by inhalation, systemic): 35.2 mg/m^3
DNEL for workers (dermal chronic, systemic): 0.5 mg/kg/day
PNEC: freshwater water: 0.00362 mg/l
PNEC sea water: 0.000362 mg/l
PNEC periodic release: 0.0362 mg/l
PNEC sediment- see water: 1.06 mg/kg
PNEC soil: 0.21 mg/kg
PNEC STP: 10 mg/kg

Recommended monitoring procedures

Procedures shall be in place to monitor the air concentrations of hazardous components and, where available and justified at the workplace, to control the cleanliness of air in the workplace in accordance with relevant Polish or European Standards, taking into account the conditions at the exposure site and the appropriate measurement methodology adapted to the working conditions.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure adequate ventilation to maintain concentrations of hazardous substances below occupational exposure limits. Verify that the work area is well-ventilated. Explosion-proof ventilation is recommended.

8.2.2 Individual protection measures, such as personal protective equipment

Respiratory System:

Based on the hazard and potential risk of exposure, select a protective mask that meets the relevant standard or certification. Protective masks must be used in accordance with a respiratory protection program to ensure proper fit, training, and other important aspects of use.

Hand and body protection:

Use gloves resistant to chemicals. Use appropriate protective antistatic clothing Recommended glove [nitrile rubber] In case of short-term exposure wear the protective gloves with protection level 2 or higher (breakthrough time > 30 min). In case of long-term exposure wear the protective gloves with protection level 6 (breakthrough time > 480 min). Wear protective clothing and shoes –resistant to chemicals

When using protective gloves during work with chemical products, it should be noted that the efficacy levels and corresponding breakthrough times do not indicate actual times of protection at a particular workplace, because the protection can be affected by many factors, e.g. temperature, other substances etc. If there are any signs of degradation, damage or change in appearance (colour, flexibility, shape), it is recommended to replace the gloves with a new pair. Please follow the manufacturer's instructions, not only in

terms of gloves' usage, but also in terms of their cleaning, maintenance and storage. It is also important to know how to take off the gloves in order to avoid hands contamination.

Eye/face protection

If the risk assessment indicates that it is necessary to avoid exposure to liquid splashes, mists, gases, or dust, use protective goggles compliant with an approved standard. If contact is possible, wear the following protection unless a higher level is indicated by the assessment: splash-proof chemical safety goggles.

8.3 Environmental exposure controls

Prevent direct discharge into sewage systems or surface waters. Do not contaminate surface waters or drainage ditches with chemicals or used containers. Any spills, especially into surface waters, should be reported to the relevant authorities in accordance with national and local regulations. Dispose of as chemical waste in compliance with national and local requirements.

9 SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state:	Solid, powder
Colour:	White
Odour:	Faint
Melting point/freezing point:	Not available
Boiling point or initial boiling point and boiling range:	Not available
Flammability:	Not available
Lower and upper explosion limit:	Not available
Flash point:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Self accelerating Decomposition Temperature SADT: +55°C
pH:	~7
Kinematic viscosity:	Not applicable [solid]
Solubility:	Water-insoluble
Partition coefficient n-octanol/water (log value):	Not available
Vapour pressure:	Not available
Density and/or relative density:	600 -700 kg/m^3
Relative vapour density:	Not available
Particle characteristics:	Not available

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Oxidising properties	organic peroxide

9.2.2 Other safety characteristics

Active oxygen content:	3.24 – 3.47%

10 SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Sensitive to exothermic decomposition; decomposition can be initiated by heat, contact with contaminants (e.g., acids, heavy metal compounds, amines), friction, or impact.

10.2 Chemical stability

Decomposes rapidly under the influence of heat.

10.3 Possibility of hazardous reactions

SADT (Self-Accelerating Decomposition Temperature) is possible above approximately +55°C. Vapors may form explosive mixtures with air.

10.4 Conditions to avoid

Avoid high temperatures, light, contaminants, and rust.

10.5 Incompatible materials

Avoid contact with acids, bases, and amines.

10.6 Hazardous decomposition products

In the event of fire or decomposition, hydrocarbons, benzoic acid derivatives, and irritating, corrosive, and flammable gases may be released. For more information, see section 5.

11 SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicity of components

Dibenzoyl peroxide

LD50 oral, mouse- >2000 mg/kg

LC50 inhalation, rat 24,3 mg/l (exp.time: 4h)

Dicyclohexyl phthalate

LD50 (oral, rat):> 2000 mg / kg

Acute toxicity:

Based on available information, classification criteria are not met.

Skin corrosion/irritation:

Based on available information, classification criteria are not met.

Serious eye damage/irritation :

Causes serious eye irritation.

Respiratory or skin sensitisation

May produce an allergic reaction.

Germ cell mutagenicity

Based on available information, classification criteria are not met.

Carcinogenicity

Based on available information, classification criteria are not met.

Reproductive toxicity

May damage the unborn child.

STOT-single exposure:

Based on available information, classification criteria are not met.

STOT-repeated exposure;

Based on available information, classification criteria are not met.

Aspiration hazard

Based on available information, classification criteria are not met.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Contact with skin:	May cause an allergic skin reaction.
Contact with eye:	Redness, mild irritation, tearing.
Ingestion:	Abdominal pain, nausea, vomiting.
Inhalation:	Exposure to high concentrations of vapors may cause respiratory irritation.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

List I
Substances identified as endocrine disruptors at EU level: EC / List no. 201-545-9 CAS no. 84-61-7 Alternative names DCHP ... DCHP Dicyclohexyl phthalate (DCHP)
his substance/mixture contains components considered to have endocrinedisrupting properties affecting human health, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100

11.2.2 Other information

Not applicable to substances.

12 SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity of components

Dibenzoyl peroxide:
Water pollution class (Germany): WGK 1 slightly water.
EC50 (48h) (*Daphnia magna*): 0.110 mg/l NOEC: 0.0765 mg/l
EC50 (96h) (fish): 0.0602 mg/l NOEC: 0.0316 mg/l
EC50 (72h) (algae) 0.0711 mg/l NOEC: 0.02 mg/l
EC50 (0.5h) (bacteria) 35 mg/l
Dicyclohexyl phthalate:
EC50(48h)(*Daphnia magna*): > 2 mg/l acute toxic
NOEC(21 days)(*Daphnia magna*): 0,679 mg/l chronic toxic
LC50(96h)(fish): > 2 mg/l
IC50(72h)(algae) 0.06 mg/l

Toxicity of mixture

Very toxic to aquatic life with long lasting effects. (H410)
In order to minimise long-term global pollution, this should be considered:

- Reducing the use of products and disposable packaging.
- Participation in recycling activities.
- Do not allow product to enter water, sewage or soil.

12.2 Persistence and degradability

Dibenzoyl peroxide:
It is hydrolytically unstable under basic conditions, acidic and neutral. Benzoic acid is the major compound produced by the decomposition during hydrolysis.
Dicyclohexyl phthalate:
readily biodegradable - 91% - 28 days.

12.3 Bioaccumulative potential

Dibenzoyl peroxide:
Log Kow = 3.2 indicates a low probability of bioaccumulation; readily biodegradable.
Dicyclohexyl phthalate:
Potential low
lg Pow 4.82 (25oC)
BCF: 85 – 90

12.4 Mobility in soil

The mobility of the substance depends on their hydrophilic and hydrophobic properties and abiotic and biotic conditions of soil, including its structures, climatic conditions, seasons and soil organisms, mainly (bacteria, fungi, algae, invertebrates).

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

The mixture is not classified as hazardous to the ozone layer. There should be considered the possibility of other harmful effects of the individual components of the mixture on the environment. (eg. the ability of disrupting endocrine , the impact of global warming potential).

13 SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal methods for the product: dispose in accordance with applicable regulations. Do not introduce into drains. Residues store in sealed, steel containers.

Waste code **16 03 05*** "organic wastes containing dangerous substances".

The product may be disposed of by incineration. Burning should be done in a location away from buildings and industrial facilities in a specialized furnace to burn waste chemicals.

Packaging of the product be disposed of as hazardous waste code **15 01 10*** "Packaging containing residues of or contaminated by dangerous

Disposal methods for used packing: reuse/recycle/eliminate empty containers in accordance with the local legislation. Only completely emptied packaging can be recycled.

Legal basis: Directive 2008/98/EC, 94/62/EC.

14 SECTION 14: TRANSPORT INFORMATION

The mixture is subject to the regulations concerning the transport of dangerous goods as specified in ADR (road transport), RID (rail transport), ADN (inland waterway transport), IMDG (maritime transport), and ICAO/IATA (air transport).

14.1 UN number or ID number

ADR/RID/IMDG/IATA: **UN3106**

14.2 UN proper shipping name

ADR/RID/IMDG/IATA: ORGANIC PEROXIDE TYPE D, SOLID

Special provisions 274: dibenzoyl peroxide

14.3 Transport hazard class(es)

ADR/RID/IMDG/IATA: 5.2

14.4 Packing group

ADR/RID/IMDG/IATA: no

14.5 Environmental hazards

ADR/RID/IMDG/IATA: The mixture is hazardous for the environment in accordance with the criteria included in transport regulations and in accordance with the criteria covered by the UN Model Regulations includes symbol 5.2.1.8.3 ADR and the entry in the shipping document compliant with 5.4.1.1.18.

Special regulation – label the article (unit packaging over 5 L, IBC and tanks) with the symbol compliant with 5.2.1.3 ADR.

Based on the regulation 5.4.1.1.18 ADR, special regulations regarding the carriage of materials hazardous for the environment are in force, so the shipping document (CMR) should include an additional entry "ENVIRONMENTALLY HAZARDOUS" or "MARINE POLUTANT''.

14.6 Special precautions for user

ADR Regulated

Classification code	P1
Tunnel restriction code:	[D]
Transport category:	2
Limited Quantities (3.4.6):	500 g
Excepted quantities:	E0
Packing instructions:	P520
Mixed Packing:	MP4
Special provisions	122;274
Special Provisions:	CV15; CV22; CV24
Special Provisions:	V1
Handling Instructions:	S19

RID:

Classification Code:	P1
Transport Category:	2
Excepted Quantities:	0
Limited Quantities (3.4.6):	500 g
Mixed Packing:	MP4
Special Provisions:	122, 274
Packing Instructions:	P520
Special Provisions:	CW15; CW22; CW24
Special Provisions:	W7
Handling Instructions:	S19
Express Shipments:	CE10
Identification Number:	539

IMDG:

Special provisions	122;274
Limited Quantity:	500g
Excepted quantities:	E0
EmS-No. (Fire) :	F-J
EmS-No. (Spillage) :	S-R
Stowage category (IMDG) :	D
Packing instructions:	P520
Stowage and handling:	SW1
Segregation:	SG35, SG36

IATA Regulated

IATA (Passenger and Cargo Aircraft):

Excepted Quantities:	E0
Limited Quantities for Passenger and Cargo Aircraft :	Forbidden
Maximum Net Quantity for Limited Quantities for Passenger and Cargo Aircraft :	Forbidde
Packaging Instructions:	570
Maximum Net Quantity:	5 kg

IATA (Cargo Aircraft Only):

Packaging Instructions: 570
Maximum Net Quantity: 10 kg
Special Provisions (IATA): A20, A802
ERG Code (IATA): 5L

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

15 SECTION 15: REGULATORY INFORMATION

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

2012/18/EU (Seveso III)	**E1 environmental hazards (hazardous to the aquatic environment, cat. 1** Qualifying quantity (tonnes) for the application of lower and upper-tier requirements 100 200

Candidate List SVHC:	Dicyclohexyl phthalate CAS: 84-61-7

Other legislation:

1. **Regulation (EC) No 1907/2006** concerning the Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC, and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC, and 2000/21/EC.
2. **Commission Regulation (EU) 2020/878** of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH).
3. **Regulation (EC) No 648/2004** of the European Parliament and of the Council of 31 March 2004 on detergents.
4. **Directive 94/62/EC** of the European Parliament and of the Council of 20 December 1994 on packaging and packaging waste, as amended.
5. **Regulation (EC) No 850/2004** of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC (as amended by subsequent regulations).
6. **Regulation (EC) No 1013/2006** of the European Parliament and of the Council of 14 June 2006 on shipments of waste (Waste Shipment Regulation).
7. **Regulation (EU) No 649/2012** of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals (PIC Regulation).
8. **Regulation (EC) No 1223/2009** of the European Parliament and of the Council of 30 November 2009 on cosmetic products.
9. **Regulation (EC) No 1272/2008** on classification, labelling, and packaging of substances and mixtures (CLP), including the latest Adaptations to Technical Progress (ATPs).
10. **Directive 2012/19/EU** of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE Directive).
11. **Regulation (EU)** No **2019/**1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants (recasting Regulation (EC) No 850/2004).
12. **Regulation (EU) 2019/1148** of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors**.**
13. **Act of 13 April 2016** on the safety of trading in explosives precursors (Journal of Laws 2016, item 669; consolidated text: Journal of Laws 2019, item 994).

14. **Act of 25 February 2011** on chemical substances and their mixtures (Journal of Laws 2011, No 63, item 322; consolidated text: Journal of Laws 2022, item 1816).
15. Act of 13 June 2013 on the management of packaging and packaging waste (consolidated text: Journal of Laws 2024, item 927).
16. **Act of 14 December 2012** on waste (consolidated text: Journal of Laws 2023, item 1587).
17. **Regulation of the Minister of Economy of 5 November 2009** on specific requirements for aerosol products (Journal of Laws 2009 No 188, item 1460 as amended).
18. **Notice of the Minister of Entrepreneurship and Technology of 15 April 2019** on the announcement of the consolidated text of the Regulation of the Minister of Economy on specific requirements for aerosol products (Journal of Laws 2019, item 975**).**
19. **Act on the transport of dangerous goods of 19 August 2011** (Journal of Laws No 227, item 1367; consolidated text: Journal of Laws 2022, item 2147).
20. **Government Statement of 13 March 2023** on the entry into force of amendments to Annexes A and B to the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), done at Geneva on 30 September 1957 (Journal of Laws 2023, item 891).

15.2 Chemical safety assessment

The supplier has not assessed chemical safety It is not required for the mixture.

16 SECTION 16: OTHER INFORMATION

Other sources of information:

IUCLID Data Bank (European Commission – European Chemicals Bureau).
ESIS – European Chemical Substances Information System (European Chemicals Bureau).

Safety Data Sheet made by: **mgr Małgorzata Krenke; Feed Reach Consulting" www.frc.com.pl**

Disclaimer

The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. That does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field.

Classification according to Regulation (EC) No 1272/2008		
Repr. 1B	H360D	calculation method
Aquatic Acute 1	H400	calculation method
Aquatic Chronic 1	H410	calculation method
Skin Sens.1	H317	calculation method
Eye Irrit. 2	H319	calculation method
Org. Perox. D	H242	Classification criteria

H (hazard) phrases specified in point 2 and 3 hereof:

H317	May cause an allergic skin reaction
H412	Harmful to aquatic life with long lasting effects
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life

H410	Very toxic to aquatic life with long lasting effects
H361	Suspected of damaging fertility or the unborn child
H360D	May damage the unborn child
H241	Heating may cause a fire or explosion

Explanation of returns

ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EH40/2005	Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
GHS "	Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	the Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	short-term exposure limit
SVHC	Substance of Very High Concern
TWA	time-weighted average
VOC	Volatile Organic Compounds
vPvB	very Persistent and very Bioaccumulative
WEL	workplace exposure limit

Training

Prior to working with the product you should be familiar with safety rules for handling the chemicals, in particular take proper workplace training. **People associated with the transport of hazardous materials in accordance with ADR** should be adequately trained to perform their duties (general training, bench and safety).