Safety data sheet (English translation without any country-specific legislation)
according to 1907/2006/EC, Article 31

Printing date 25.11.2022 Rev. n. 3 Revision: 25.11.2022

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· **Trade name:** **BPO paste**
PERVELOX EVO 50 - E02

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
Formulation and packing into small containers. Industrial use as polymerisation initiator for production of polymers, and as cross-linking agent for the manufacture of resins. Professional use as hardener for coating resins.
[SU 9, SU 10, SU12, SU 22] [PROC 3, PROC 5, PROC 7, PROC 8a, PROC 8b, PROC 9, PROC 10, PROC 11, PROC 13, PROC 14, PROC 19, PROC 21]
· **Application of the substance / the mixture**
Dibenzoyl peroxide, pasta
Hardening agent / Curing agent
Polymerisation catalyst

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
RAICHEM S.p.A.
Via Don Grazioli, 53 - Località Gavassa
42122 Reggio Emilia (Italy)
Tel. +39 0522 511182 - Fax +39 0522 920616

· **Further information obtainable from:** RAICHEM S.p.A. - E-mail: laboratorio@raichem.it

· **1.4 Emergency telephone number:**
ITALY - POISON CENTRES (24h / 365d):
• Milano - Ospedale Niguarda Ca' Granda - Tel. +39 02 66101029
• Pavia - Centro Nazionale di Informazione Tossicologica - IRCCS Fondazione S. Maugeri - Tel. +39 0382 24444
• Firenze - Azienda Ospedaliero-Universitaria "Careggi" U.O. Tossicologia Medica - Tel. +39 055 7947819
• Bergamo - Azienda Ospedaliera Papa Giovanni XXIII - Tel. +39 800 883300
• Roma - CAV Policlinico "Umberto I" - Tel. +39 06 49978000
• Roma - CAV Policlinico "A. Gemelli" - Tel. +39 06 3054343
• Roma - CAV "Ospedale Pediatrico Bambino Gesù" - Tel. +39 06 68593726
• Foggia - Azienda Ospedaliero-Universitaria Foggia - Tel. +39 0881 732326
• Napoli - Azienda Ospedaliera "A. Cardarelli" - Tel. +39 081 7472870
• Verona - CAV Azienda ospedaliera universitaria integrata (AOUI) Borgo Trento - Tel. 8+39 00 011 858

RAICHEM S.p.A. - Technical support: Tel. +39 0522 511182 (Monday-Friday: 8.00-12.00 AM, 2.00-6.00 PM)

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**

Org. Perox. E	H242 Heating may cause a fire.
Eye Irrit. 2	H319 Causes serious eye irritation.
Skin Sens. 1	H317 May cause an allergic skin reaction.
Aquatic Acute 1	H400 Very toxic to aquatic life.
Aquatic Chronic 1	H410 Very toxic to aquatic life with long lasting effects.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
· **Hazard pictograms**



GHS02 GHS07 GHS09

· **Signal word** Warning

· **Hazard-determining components of labelling:**
dibenzoyl peroxide
· **Hazard statements**
H242 Heating may cause a fire.

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H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P280	Wear protective gloves / eye protection / face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Components:**

CAS: 94-36-0 EINECS: 202-327-6 Index number: 617-008-00-0 Reg.nr.: 01-2119511472-50-XXXX	dibenzoyl peroxide Org. Perox. B, H241; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10); Eye Irrit. 2, H319; Skin Sens. 1, H317	45-52%
CAS: 131-11-3 EINECS: 205-011-6 Reg.nr.: 01-2119437229-36-XXXX	dimethyl phthalate substance with a Community workplace exposure limit	25-35%
CAS: 107-21-1 EINECS: 203-473-3 Index number: 603-027-00-1 Reg.nr.: 01-2119456816-28-XXXX	ethanediol STOT RE 2, H373; Acute Tox. 4, H302	0.1-9.9%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:**
If skin irritation continues, consult a doctor.
Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:** Do not induce vomiting; call for medical help immediately.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
CO_2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire extinguishing methods suitable to surrounding conditions.

· **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Carbonic anhydride (CO_2)
Carbon monoxide (CO)

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Benzoic acid
Benzene
Biphenyl
Phenyl benzoate
Under certain fire conditions, traces of other toxic gases cannot be excluded.

· **5.3 Advice for firefighters**
· **Protective equipment:**
Do not inhale explosion gases or combustion gases.
Mouth respiratory protective device.
Wear suitable fire protection equipment.
· **Additional information**
Cool endangered receptacles with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Keep away from ignition sources.
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Use respiratory protective device against the effects of fumes/dust/aerosol.

· **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**
Pick up mechanically.
Do not allow to dry out
Ensure adequate ventilation.

· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

* SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Use only in well ventilated areas.
Ensure good ventilation/exhaustion at the workplace.
Keep away from heat and direct sunlight.
Protect against electrostatic charges.
· **Information about fire - and explosion protection:**
Substance/product is oxidising when dry.
Keep ignition sources away - Do not smoke.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Store only in the original receptacle.
· **Information about storage in one common storage facility:**
Do not store together with reducing agents, heavy-metal compounds, acids and alkalis.
· **Further information about storage conditions:**
Store receptacle in a well ventilated area.
Prevent from drying out.
Keep container tightly sealed.
Protect from heat and direct sunlight.

The product, stored in the original containers, away from sunlight, maintains its properties for 12 months from the production date.
· **Recommended storage temperature:** +5°C / +25°C

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· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**	
94-36-0 dibenzoyl peroxide	
TWA (Italy)	Long-term value: 5 mg/m³ A4
PEL (USA)	Long-term value: 5 mg/m³
REL (USA)	Long-term value: 5 mg/m³
TLV (USA)	Long-term value: 5 mg/m³ A4
131-11-3 dimethyl phthalate	
TWA (Italy)	Long-term value: 5 mg/m³
PEL (USA)	Long-term value: 5 mg/m³
REL (USA)	Long-term value: 5 mg/m³
TLV (USA)	Long-term value: 5 mg/m³
107-21-1 ethanediol	
TWA (Italy)	Ceiling limit: 100 mg/m³ A4 (aerosol)
VL (Italy)	Short-term value: 104 mg/m³, 40 ppm Long-term value: 52 mg/m³, 20 ppm Cute
IOELV (EU)	Short-term value: 104 mg/m³, 40 ppm Long-term value: 52 mg/m³, 20 ppm Skin
TLV (USA)	Short-term value: 10** mg/m³, 50* ppm Long-term value: 25* ppm *vapor fraction:**inh. fraction, aerosol only, A4
WEEL (USA)	I (2)

· **Regulatory information**
TWA (Italy): Valori Limite di Soglia (ACGIH)
PEL (USA): Guide to Occupational Exposure Values (OSHA PELs)
REL (USA): Guide to Occupational Exposure Values (NIOSH RELs)
TLV (USA): Guide to Occupational Exposure Values (TLV)
VL (Italy): D.Lgs. n. 81/2008
IOELV (EU): (EU) 2019/1831
WEEL (USA): Guide to Occupational Exposure Values (AIHA WEELs)

· **DNELs**		
94-36-0 dibenzoyl peroxide		
Oral	DNEL / Long term exposure - Systemic effects	2 mg/kg bw/d (general population)
Dermal	DNEL / Long term exposure - Systemic effects	13.3 mg/kg bw/d (workers)
	DNEL / Long term exposure - Local effects	0.034 mg/kg (workers)
Inhalative	DNEL / Long term exposure - Systemic effects	39 mg/m³ (workers)
131-11-3 dimethyl phthalate		
Oral	DNEL / Long term exposure - Systemic effects	9.4 mg/kg bw/d (general population)
Dermal	DNEL / Long term exposure - Systemic effects	67.5 mg/kg bw/d (general population)
		135 mg/kg bw/d (workers)
Inhalative	DNEL / Long term exposure - Systemic effects	16.3 mg/m³ (general population)
		66.1 mg/m³ (workers)
107-21-1 ethanediol		
Dermal	DNEL / Long term exposure - Systemic effects	53 mg/kg bw/d (general population)
		106 mg/kg bw/d (workers)

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Inhalative	DNEL / Long term exposure - Local effects	7 mg/m³ (general population) 35 mg/m³ (workers)

· **PNECs**

94-36-0 dibenzoyl peroxide	
PNEC / aqua	0.00002 mg/l (freshwater)
	0.000602 mg/l (intermittent releases)
	0.000002 mg/l (marine water)
PNEC / sediment	0.0127 mg/kg dw (freshwater)
	0.00127 mg/kg dw (marine water)
PNEC / soil	0.0025 mg/kg dw
PNEC / STP	0.35 mg/l (sewage treatment plant)
131-11-3 dimethyl phthalate	
PNEC / aqua	0.192 mg/l (freshwater)
	0.39 mg/l (intermittent releases)
	0.0192 mg/l (marine water)
PNEC / sediment	1.3 mg/kg dw (freshwater)
	0.13 mg/kg dw (marine water)
PNEC / soil	3.16 mg/kg dw
PNEC / STP	4 mg/l (sewage treatment plant)
107-21-1 ethanediol	
PNEC / aqua	10 mg/l (freshwater)
	10 mg/l (intermittent releases)
	1 mg/l (marine water)
PNEC / sediment	37 mg/kg dw (freshwater)
	3.7 mg/kg dw (marine water)
PNEC / soil	1.53 mg/kg dw
PNEC / STP	199.5 mg/l (sewage treatment plant)

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· **Appropriate engineering controls** No further data; see item 7.
· **Individual protection measures, such as personal protective equipment**
· **General protective and hygienic measures:**
Do not eat, drink, smoke or sniff while working.
The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
· **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.
· **Hand protection**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
Neoprene gloves
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.14 mm
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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· **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
For the mixture of chemicals mentioned, the penetration time has to be at least 30 minutes (Permeation according to EN 374 Part 3: Level 2).

· **Eye/face protection**



Tightly sealed goggles

· **Body protection:** Light weight protective clothing

* SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Physical state**	Solid
· **Colour:**	Different according to colouring
· **Odour:**	Characteristic
· **Odour threshold:**	Not determined.
· **Melting point/freezing point:**	0 °C
· **Boiling point or initial boiling point and boiling range**	Not applicable. Prior to or during boiling decomposition occurs.
· **Flammability**	May cause fire.
· **Lower and upper explosion limit**	
· **Lower:**	Not applicable.
· **Upper:**	Not applicable.
· **Flash point:**	Not applicable. Above the SADT value.
· **Decomposition temperature:**	SADT = 50 °C SADT: Self Accelerating Decomposition Temperature
· **pH at 20 °C**	4-5
· **Viscosity:**	
· **Kinematic viscosity**	172000-754000 m²/s
· **Dynamic:**	(Brookfield, 20°C) 215000-867000 mPa·s
· **Solubility**	
· **water:**	Insoluble.
· **Partition coefficient n-octanol/water (log value)**	Not applicable.
· **Vapour pressure:**	Not applicable.
· **Density and/or relative density**	
· **Density at 20 °C:**	1.15-1.25 g/cm³
· **Vapour density**	Not applicable.
· **Particle characteristics**	Pasty solid
· **9.2 Other information**	
· **Appearance:**	
· **Form:**	Pasty
· **Important information on protection of health and environment, and on safety.**	
· **Auto-ignition temperature:**	Not applicable.
· **Explosive properties:**	Product does not present an explosion hazard.
· **Change in condition**	
· **Evaporation rate**	Not determined.
· **Information with regard to physical hazard classes**	
· **Explosives**	Void
· **Flammable gases**	Void
· **Aerosols**	Void
· **Oxidising gases**	Void
· **Gases under pressure**	Void
· **Flammable liquids**	Void
· **Flammable solids**	Void

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· **Self-reactive substances and mixtures**	Void
· **Pyrophoric liquids**	Void
· **Pyrophoric solids**	Void
· **Self-heating substances and mixtures**	Void
· **Substances and mixtures, which emit flammable gases in contact with water**	Void
· **Oxidising liquids**	Void
· **Oxidising solids**	Void
· **Organic peroxides**	
Heating may cause a fire.	
· **Corrosive to metals**	Void
· **Desensitised explosives**	Void

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.

· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
Exothermic thermal decomposition.
Visible decomposition with spontaneous ignition on heating.
SADT = 50°C
SADT (Self accelerating decomposition temperature) is the lowest temperature at which self accelerating decomposition may occur with a substance in the packaging as used in transport.
A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the SADT.
Contact with incompatible substances can cause decomposition at or below the SADT.

· **10.3 Possibility of hazardous reactions**
Reacts with reducing agents.
Reacts with heavy metals.
Reacts with alkali, amines and strong acids.

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:** No further relevant information available.

· **10.6 Hazardous decomposition products:**
Benzoic acid
Benzene
Biphenyl
Phenyl benzoate

*
SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
· **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**		
94-36-0 dibenzoyl peroxide		
Oral	LD0	>2,000 mg/kg (mouse) (OECD TG 401: Acute Oral Toxicity)
Inhalative	LC0	24.3 mg/l (rat) (OECD TG 403: Acute Inhalation Toxicity)
131-11-3 dimethyl phthalate		
Oral	LD50	8,200 mg/kg (rat)
Dermal	LD50	12,000 mg/kg (rabbit)
107-21-1 ethanediol		
Oral	LD50	7,712 mg/kg (rat)
Dermal	LD50	>3,500 mg/kg (rabbit)
Inhalative	LC50 / 6h	>2.5 mg/l (mouse)

· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
· **Serious eye damage/irritation**
Causes serious eye irritation.

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· **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT-single exposure** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure** Based on available data, the classification criteria are not met.
· **Aspiration hazard** Based on available data, the classification criteria are not met.
· **11.2 Information on other hazards**

· **Endocrine disrupting properties**
None of the ingredients is listed.

* SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**	
94-36-0 dibenzoyl peroxide	
LC50 / 96h	0.0602 mg/l (fish - Oncorhynchus mykiss) (OECD TG 203: Fish, Acute Toxicity Test)
EC50 / 48h	0.11 mg/l (crustacea - Daphnia magna) (OECD TG 202: Daphnia sp. Acute Immobilisation Test)
ErC50 / 72h	0.0711 mg/l (algae - Pseudokirchneriella subcapitata) (OECD TG 201: Alga, Growth Inhibition Test)
M Factor Acute	10
NOEC / 96h	0.0316 mg/l (fish - Oncorhynchus mykiss) (OECD TG 203: Fish, Acute Toxicity Test)
EC10 / 21d	0.001 mg/l (crustacea - Daphnia magna) (OECD TG 211: Daphnia magna Reproduction Test)
NOEC / 72 h	0.02 mg/l (algae - Pseudokirchneriella subcapitata) (OECD TG 201: Alga, Growth Inhibition Test)
M Factor Chronic	10
131-11-3 dimethyl phthalate	
LC50 / 96h	39 mg/l (fish - Pimephales promelas)
EC50 / 48h	>52 mg/l (crustacea - Daphnia magna)
ErC50 / 72h	259.76 mg/l (algae - Scenedesmus subspicatus)
NOEC / 21d	9.6 mg/l (crustacea - Daphnia magna)
107-21-1 ethanediol	
LC50 / 96h	72,860 mg/l (fish - Pimephales promelas)
EC50 / 48h	>100 mg/l (crustacea - Daphnia magna) (OECD TG 202: Daphnia sp. Acute Immobilisation Test)
ErC50 / 96h	6,500-13,000 mg/l (algae - Pseudokirchneriella subcapitata)
NOEC / 7d	8,590 mg/l (crustacea - Ceriodaphnia dubia)

· **12.2 Persistence and degradability**	
94-36-0 dibenzoyl peroxide	
Ready Biodegradability in water / 28d	71 % (OECD TG 301 D: Ready Biodegradability: Closed Bottle Test)
131-11-3 dimethyl phthalate	
Ready Biodegradability in water / 11d	91 % (OECD TG 301 E: Ready biodegradability: Modified OECD Screening Test)
107-21-1 ethanediol	
Ready Biodegradability in water / 10d	90-100 % (OECD TG 301A: Ready Biodegradability: DOC Die Away Test)

· **12.3 Bioaccumulative potential**	
94-36-0 dibenzoyl peroxide	
Log Kow	3.2 /(22°C) (OECD TG 117: Partition Coefficient (n-octanol / water), HPLC Method))
131-11-3 dimethyl phthalate	
Log Kow	1.54 /(25°C) (OECD TG 107: Partition Coefficient (n-octanol / water), Shake Flask Method)
BCF	57 /21d (fish - Lepomis macrochirus)

· **12.4 Mobility in soil**	
94-36-0 dibenzoyl peroxide	
Log Koc	3.8 /(22°C) (OECD TG 121: (Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC))

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131-11-3 dimethyl phthalate	
Log Koc	1.5

· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.

· **12.7 Other adverse effects**
· **Remark:** Very toxic for fish
· **Additional ecological information:**
· **General notes:**
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Disposal must be made according to official regulations.

· **Uncleaned packaging:**
· **Recommendation:**
Disposal must be made according to official regulations.
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

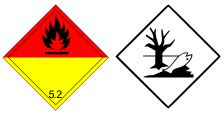
SECTION 14: Transport information

· **14.1 UN number or ID number**
· **ADR, IMDG, IATA** UN3108

· **14.2 UN proper shipping name**
· **ADR** ORGANIC PEROXIDE TYPE E, SOLID (dibenzoyl peroxide), ENVIRONMENTALLY HAZARDOUS
· **IMDG, IATA** ORGANIC PEROXIDE TYPE E, SOLID (dibenzoyl peroxide)

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class** 5.2 Organic peroxides.
· **Label** 5.2

· **IMDG, IATA**



· **Class** 5.2 Organic peroxides.
· **Label** 5.2

· **14.4 Packing group**
· **ADR, IMDG, IATA** Void

· **14.5 Environmental hazards:**
· **Marine pollutant:** Yes
· **Special marking (ADR):** Symbol (fish and tree)

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· **14.6 Special precautions for user**	Warning: Organic peroxides.
· **Hazard identification number (Kemler code):**	-
· **EMS Number:**	F-J,S-R
· **Stowage Category**	D
· **Stowage Code**	SW1 Protected from sources of heat.
· **Segregation Code**	SG35 Stow "separated from" SGG1-acids SG36 Stow "separated from" SGG18-alkalis. SG72 See 7.2.6.3.2.
· **14.7 Maritime transport in bulk according to IMO instruments**	Not applicable.
· **Transport/Additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	500 g
· **Transport category**	2
· **Tunnel restriction code**	D
· **IMDG**	
· **Limited quantities (LQ)**	500 g
· **UN "Model Regulation":**	UN 3108 ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE), 5.2, ENVIRONMENTALLY HAZARDOUS

*
SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
Regulation (EC) No 1907/2006 (REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals)
Regulation (EC) No 1272/2008 (CLP - Classification, Labelling and Packaging of substances and mixtures)
Compilation of Safety Data Sheet: Reg.UE n. 878/2020 (amending Reg.EC n.1907/2006, Annex II)

· **Directive 2012/18/EU (Seveso)**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.
· **Seveso category**
P6b SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES
E1 Hazardous to the Aquatic Environment
· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
None of the ingredients is listed.

· **REGULATION (EC) No 273/2004 on drug precursors**
None of the ingredients is listed.

· **REGULATION (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**
None of the ingredients is listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**
None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**
None of the ingredients is listed.

· **15.2 Chemical safety assessment:**
A Chemical Safety Assessment has been carried out for
Dibenzoyl peroxide - CAS 94-36-0

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SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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Safety data sheet (English translation without any country-specific legislation)
according to 1907/2006/EC, Article 31

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Trade name: BPO paste
PERVELOX EVO 50 - E02

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· **Relevant phrases**
H241 Heating may cause a fire or explosion.
H302 Harmful if swallowed.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

· **Classification according to Regulation (EC) No 1272/2008**

Organic peroxides	Expert judgement
Serious eye damage/eye irritation Skin sensitisation Hazardous to the aquatic environment - short-term (acute) aquatic hazard Hazardous to the aquatic environment - long-term (chronic) aquatic hazard	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

· **(↔1.2) Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
· **Sector of Use**
SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
SU9 Manufacture of fine chemicals
SU10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys)
SU12 Manufacture of plastics products, including compounding and conversion
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
· **Process category**
PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC5 Mixing or blending in batch processes
PROC7 Industrial spraying
PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities
PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
PROC10 Roller application or brushing
PROC11 Non industrial spraying
PROC13 Treatment of articles by dipping and pouring
PROC14 Tabletting, compression, extrusion, pelletisation, granulation
PROC19 Manual activities involving hand contact
PROC21 Low energy manipulation and handling of substances bound in/on materials or articles
· **Environmental release category**
ERC2 Formulation into mixture
ERC6d Use of reactive process regulators in polymerisation processes at industrial site (inclusion or not into/onto article)
ERC8b Widespread use of reactive processing aid (no inclusion into or onto article, indoor)
ERC8e Widespread use of reactive processing aid (no inclusion into or onto article, outdoor)

· **Contact:** Raichem S.p.A.
· **Version number of previous version:** 2

· **Abbreviations and acronyms:**
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
CLP: Classification, Labelling and Packaging
TLV: Threshold Limit Value
TLV-TWA: Threshold Limit Value - Time Weighted Average
TLV-STEL: Threshold Limit Value - Short Term Exposure Limit
PEL: Permissible Exposure Limits (Limiti di esposizione consentiti)
REL: Recommended Exposure Limits (Limiti di esposizione raccomandati)
IOELV: Indicative Occupational Exposure Limit Value
WEELs: Workplace Environmental Exposure Limits (Limiti di esposizione ambientale sul posto di lavoro)
BEI: Biological Exposure Indices
LD50: Lethal dose, 50 percent
LC50: Lethal Concentration, 50 percent
LC0: Lethal Concentration 0 - no effect
Kow: Octanol-Water partition coefficient
Koc: Organic Carbon partition Coefficient
BCF: BioConcentration Factor

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Trade name: BPO paste
PERVELOX EVO 50 - E02

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LC50: LC50: Lethal Concentration, 50 percent
EC50: Effective Concentration, 50 percent
EC10: Effective Concentration, 10 percent
ErC50: Effective Concentration, 50 percent, growth rate
NOEC: No-Observed Effect Concentration.
WGK: Wassergefährdungsklasse - Water hazard class [Germany]
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Org. Perox. B: Organic peroxides – Type B
Org. Perox. E: Organic peroxides – Type E/F
Acute Tox. 4: Acute toxicity – Category 4
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

· **** Data compared to the previous version altered.***