


**UTWARDZACZ - HARDENER FOR POLYESTER PUTTY****SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

- 1.1 Product identifier:** UTWARDZACZ - HARDENER FOR POLYESTER PUTTY
- Other means of identification:**
- UFI:** V800-F0JP-U00J-NPDK
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
- Relevant uses: Industrial use as a polymerization initiator for the production of polymers as well as a crosslinking agent for the production of resins.
- Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**
- BOLL Wojciech Dalewski Spółka Jawna
ul. Chemiczna 3
65-713 Zielona Góra - Polska
Phone: 68 451 99 99 - Fax: 68 451 99 00
huszcza@boll.pl
<https://www.boll.pl>
- 1.4 Emergency telephone number:**

SECTION 2: HAZARDS IDENTIFICATION **

- 2.1 Classification of the substance or mixture:**
- CLP Regulation (EC) No 1272/2008:**
- Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.
- Aquatic Acute 1: Hazardous to the aquatic environment, acute hazard, Category 1, H400
Aquatic Chronic 1: Hazardous to the aquatic environment, long-term hazard, Category 1, H410
Eye Irrit. 2: Eye irritation, Category 2, H319
Org. Perox. D: Organic peroxides, Category D, H242
Skin Sens. 1: Sensitisation, skin, Category 1, H317
- 2.2 Label elements:**
- CLP Regulation (EC) No 1272/2008:**
- Danger**
- 
- Hazard statements:**
- Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Org. Perox. D: H242 - Heating may cause a fire.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
- 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/protective clothing/respiratory protection/eye protection/protective footwear.
P302+P352: IF ON SKIN: Wash with plenty of 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 regulations on hazardous waste or packaging and packaging waste respectively.
- Substances that contribute to the classification**
- Dibenzoyl peroxide
- UFI:** V800-F0JP-U00J-NPDK
- 2.3 Other hazards:**

** Changes with regards to the previous version

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Safety data sheet

This SDS is an English translation of COMMISSION REGULATION (EU) 2020/878, without any country-specific legislation

UTWARDZACZ - HARDENER FOR POLYESTER PUTTY

SECTION 2: HAZARDS IDENTIFICATION ** (continued)

Product does not meet PBT/vPvB criteria
Endocrine-disrupting properties: The product does not meet the criteria.

** Changes with regards to the previous version

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: A blend of the listed ingredients with safe admixtures.

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 94-36-0 EC: 202-327-6 Index: 617-008-00-0 REACH: 01-2119511472-50-XXXX	Dibenzoyl peroxide⁽¹⁾ Self-classified	45 - <52 %
	Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Irrit. 2: H319; Org. Perox. B: H241; Skin Sens. 1: H317 - Danger	
CAS: 131-11-3 EC: 205-011-6 Index: Non-applicable REACH: 01-2119437229-36-XXXX	Dimethyl Phthalate⁽²⁾ Not classified	25 - <35 %
	Regulation 1272/2008	
CAS: 107-21-1 EC: 203-473-3 Index: 603-027-00-1 REACH: 01-2119456816-28-XXXX	Ethanediol⁽¹⁾ Self-classified	0,1 - <9,9 %
	Regulation 1272/2008 Acute Tox. 4: H302; STOT RE 2: H373 - Warning	

⁽¹⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

⁽²⁾ Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2020/878

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Other information:

Identification	M-factor	
	Dibenzoyl peroxide CAS: 94-36-0 EC: 202-327-6	Acute
	Chronic	10

Identification	Specific concentration limit
Dibenzoyl peroxide CAS: 94-36-0 EC: 202-327-6	% (w/w) >=52: Org. Perox. B - H241 35<= % (w/w) <52: Org. Perox. D - H242

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

Identification	Acute toxicity		Genus
	Ethanediol CAS: 107-21-1 EC: 203-473-3	LD50 oral	
	LD50 dermal	Not relevant	
	LC50 inhalation	Not relevant	

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

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**UTWARDZACZ - HARDENER FOR POLYESTER PUTTY****SECTION 4: FIRST AID MEASURES (continued)****By skin contact:**

May cause an allergic skin reaction. In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of changes on the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Safety Data Sheet

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

4.2 Most important symptoms and effects, both acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed:

Not available

SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media:****Suitable extinguishing media:**

Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC)

Unsuitable extinguishing media:

Water jet

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures:****For non-emergency personnel:**

HEATING MAY CAUSE A FIRE. Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

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SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

Sweep up and shovel product or collect by other means and place in container for reuse (preferred) or disposal

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

B.- Technical recommendations for the prevention of fires and explosions

AVOID ANY KIND OF HEATING. Devices and systems must comply with the essential safety and health requirements and, with the minimum requirements for improving the health and safety protection of workers. Consult section 10 for conditions and materials that should be avoided. KEEP ONLY IN ORIGINAL CONTAINER.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Preferably use aspiration for cleaning. Given the danger of the product by inhalation, any cleaning method that involves exposure to the product in this way (sweeping, etc.) is not recommended

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 10 °C

Maximum Temp.: 20 °C

Maximum time: 24 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC, Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

Identification	Occupational exposure limits		
	Ethanediol ⁽¹⁾ CAS: 107-21-1 EC: 203-473-3	IOELV (8h)	20 ppm
	IOELV (STEL)	40 ppm	104 mg/m ³

⁽¹⁾ Likely absorption through the skin

Nuisance dust: Inhalable dust 10 mg/m³ // Respirable dust 4 mg/m³

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Dibenzoyl peroxide CAS: 94-36-0 EC: 202-327-6	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	13,3 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	39 mg/m ³	Not relevant

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Dimethyl Phthalate CAS: 131-11-3 EC: 205-011-6	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	135 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	66,1 mg/m ³	Not relevant
Ethanediol CAS: 107-21-1 EC: 203-473-3	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	106 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	Not relevant	35 mg/m ³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Dibenzoyl peroxide CAS: 94-36-0 EC: 202-327-6	Oral	Not relevant	Not relevant	2 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
	Inhalation	Not relevant	Not relevant	Not relevant	Not relevant
Dimethyl Phthalate CAS: 131-11-3 EC: 205-011-6	Oral	Not relevant	Not relevant	9,4 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	67,5 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	16,3 mg/m ³	Not relevant
Ethanediol CAS: 107-21-1 EC: 203-473-3	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	53 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	Not relevant	7 mg/m ³

PNEC:



Identification					
Dibenzoyl peroxide CAS: 94-36-0 EC: 202-327-6	STP	0,35 mg/L	Fresh water	0,00002 mg/L	
	Soil	0,003 mg/kg	Marine water	0,000002 mg/L	
	Intermittent	0,000602 mg/L	Sediment (Fresh water)	0,013 mg/kg	
	Oral	Not relevant	Sediment (Marine water)	0,001 mg/kg	
Dimethyl Phthalate CAS: 131-11-3 EC: 205-011-6	STP	4 mg/L	Fresh water	0,192 mg/L	
	Soil	3,16 mg/kg	Marine water	0,019 mg/L	
	Intermittent	0,39 mg/L	Sediment (Fresh water)	1,3 mg/kg	
	Oral	Not relevant	Sediment (Marine water)	0,13 mg/kg	
Ethanediol CAS: 107-21-1 EC: 203-473-3	STP	199,5 mg/L	Fresh water	10 mg/L	
	Soil	1,53 mg/kg	Marine water	1 mg/L	
	Intermittent	10 mg/L	Sediment (Fresh water)	37 mg/kg	
	Oral	Not relevant	Sediment (Marine water)	3,7 mg/kg	

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours		EN 405:2002+A1:2010	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)





Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks			Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN ISO 21420:2020 and EN ISO 374-1:2016+A1:2018

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.



D.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.		EN 166:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Antistatic and fireproof protective clothing		EN 1149-1:2006 EN 1149-2:1997 EN 1149-3:2004 EN 168:2002 EN ISO 14116:2015 EN 1149-5:2018	Limited protection against flames.
 Mandatory foot protection	Safety footwear with antistatic and heat resistant properties		EN ISO 13287:2020 EN ISO 20345:2011	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 °C: Solid
 Appearance: Paste
 Colour: Characteristic
 Odour: Characteristic
 Odour threshold: Not available *

Volatility:

Boiling point at atmospheric pressure: Not available *
 Vapour pressure at 20 °C: 2300 Pa
 Vapour pressure at 50 °C: Not available *

*Not available due to the nature of the product, not providing information property of its hazards.

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**UTWARDZACZ - HARDENER FOR POLYESTER PUTTY****SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)**

Evaporation rate at 20 °C:	Not available *
Product description:	
Density at 20 °C:	1150 - 1250 kg/m ³
Relative density at 20 °C:	1,15 - 1,25
Dynamic viscosity at 20 °C:	Not available *
Kinematic viscosity at 20 °C:	Not available *
Kinematic viscosity at 40 °C:	>20,5 mm ² /s
Concentration:	Not available *
pH:	4 - 5
Vapour density at 20 °C:	Not available *
Partition coefficient n-octanol/water 20 °C:	Not available *
Solubility in water at 20 °C:	Not available *
Solubility properties:	Insoluble
Decomposition temperature:	50 °C
Melting point/freezing point:	Not available *
Flammability:	
Flash Point:	Non-applicable
Flammability (solid, gas):	Not available *
Autoignition temperature:	Not available *
Lower flammability limit:	Not available *
Upper flammability limit:	Not available *
Explosive (Solid):	
Lower explosive limit:	Not available *
Upper explosive limit:	Not available *
Particle characteristics:	
Median equivalent diameter:	Not available *

9.2 Other information:**Information with regard to physical hazard classes:**

Explosive properties:	Not available *
Oxidising properties:	H242 Heating may cause a fire.
Corrosive to metals:	Not available *
Heat of combustion:	Not available *
Aerosols-total percentage (by mass) of flammable components:	Not available *

Other safety characteristics:

Surface tension at 20 °C:	Not available *
Refraction index:	Not available *

*Not available due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY**10.1 Reactivity:**

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

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**UTWARDZACZ - HARDENER FOR POLYESTER PUTTY****SECTION 10: STABILITY AND REACTIVITY (continued)****10.3 Possibility of hazardous reactions:**

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Heating may cause a fire or explosion	Avoid direct impact	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Avoid direct impact	Avoid alkalines, heavy metals, reducing agents, peroxide accelerating agents

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:**

The experimental information related to the toxicological properties of the product itself is not available

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health .

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for skin contact. For more information see section 3.
- Contact with the eyes: Produces eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
IARC: Dibenzoyl peroxide (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:

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**UTWARDZACZ - HARDENER FOR POLYESTER PUTTY****SECTION 11: TOXICOLOGICAL INFORMATION (continued)**

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Not relevant

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Dibenzoyl peroxide CAS: 94-36-0 EC: 202-327-6	LD50 oral	7710 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>5 mg/L	
Dimethyl Phthalate CAS: 131-11-3 EC: 205-011-6	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L	
Ethanediol CAS: 107-21-1 EC: 203-473-3	LD50 oral	500 mg/kg (ATEi)	
	LD50 dermal	>3500 mg/kg	Rabbit
	LC50 inhalation	>20 mg/L	

11.2 Information on other hazards:**Endocrine disrupting properties**

Endocrine-disrupting properties: The product does not meet the criteria.

Other information

Not relevant

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

Very toxic to aquatic life with long lasting effects.

12.1 Toxicity:**Acute toxicity:**

Identification	Concentration		Species	Genus
Dibenzoyl peroxide CAS: 94-36-0 EC: 202-327-6	LC50	0,0602 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	0,11 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	0,071 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae
Dimethyl Phthalate CAS: 131-11-3 EC: 205-011-6	LC50	39 mg/L (96 h)	Pimephales promelas	Fish
	EC50	150 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	204 mg/L (72 h)	Scenedesmus subspicatus	Algae
Ethanediol CAS: 107-21-1 EC: 203-473-3	LC50	53000 mg/L (96 h)	Pimephales promelas	Fish
	EC50	51000 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	24000 mg/L (168 h)	Selenastrum capricornutum	Algae

Chronic toxicity:

Identification	Concentration		Species	Genus
Dimethyl Phthalate CAS: 131-11-3 EC: 205-011-6	NOEC	11 mg/L	Oncorhynchus mykiss	Fish
	NOEC	9,6 mg/L	Daphnia magna	Crustacean

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UTWARDZACZ - HARDENER FOR POLYESTER PUTTY

SECTION 12: ECOLOGICAL INFORMATION (continued)

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
Dibenzoyl peroxide CAS: 94-36-0 EC: 202-327-6	BOD5	Not relevant	Concentration	Not relevant
	COD	Not relevant	Period	10 days
	BOD5/COD	Not relevant	% Biodegradable	68 %
Dimethyl Phthalate CAS: 131-11-3 EC: 205-011-6	BOD5	1,12 g O2/g	Concentration	100 mg/L
	COD	0,74 g O2/g	Period	28 days
	BOD5/COD	1,51	% Biodegradable	93 %
Ethanediol CAS: 107-21-1 EC: 203-473-3	BOD5	0,47 g O2/g	Concentration	100 mg/L
	COD	1,29 g O2/g	Period	14 days
	BOD5/COD	0,36	% Biodegradable	90 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
Dimethyl Phthalate CAS: 131-11-3 EC: 205-011-6	BCF	57
	Pow Log	1.6
	Potential	Moderate
Ethanediol CAS: 107-21-1 EC: 203-473-3	BCF	10
	Pow Log	-1.36
	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Dibenzoyl peroxide CAS: 94-36-0 EC: 202-327-6	Koc	6309.57	Henry	Not relevant
	Conclusion	Immobile	Dry soil	Not relevant
	Surface tension	Not relevant	Moist soil	Not relevant
Dimethyl Phthalate CAS: 131-11-3 EC: 205-011-6	Koc	Not relevant	Henry	Not relevant
	Conclusion	Not relevant	Dry soil	Not relevant
	Surface tension	4,044E-2 N/m (25 °C)	Moist soil	Not relevant
Ethanediol CAS: 107-21-1 EC: 203-473-3	Koc	0	Henry	1,327E-1 Pa·m ³ /mol
	Conclusion	Very High	Dry soil	No
	Surface tension	4,989E-2 N/m (25 °C)	Moist soil	No

12.5 Results of PBT and vPvB assessment:

Product does not meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product does not meet the criteria.

12.7 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
16 09 04*	oxidising substances, not otherwise specified	Hazardous

Type of waste (Regulation (EU) No 1357/2014):

HP3 Flammable, HP14 Ecotoxic, HP13 Sensitising, HP4 Irritant — skin irritation and eye damage

Waste management (disposal and evaluation):

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SECTION 13: DISPOSAL CONSIDERATIONS (continued)

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-hazardous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2023 and RID 2023:



- 14.1 UN number or ID number:** UN3108
- 14.2 UN proper shipping name:** ORGANIC PEROXIDE TYPE E, SOLID (Dibenzoyl peroxide)
- 14.3 Transport hazard class(es):** 5.2
Labels: 5.2
- 14.4 Packing group:** N/A
- 14.5 Environmental hazards:** Yes
- 14.6 Special precautions for user**
Special regulations: 122, 274
Tunnel restriction code: D
Physico-Chemical properties: see section 9
Limited quantities: 500 g
- 14.7 Maritime transport in bulk according to IMO instruments:** Not relevant

Transport of dangerous goods by sea:

With regard to IMDG 41-22:



- 14.1 UN number or ID number:** UN3108
- 14.2 UN proper shipping name:** ORGANIC PEROXIDE TYPE E, SOLID (Dibenzoyl peroxide)
- 14.3 Transport hazard class(es):** 5.2
Labels: 5.2
- 14.4 Packing group:** N/A
- 14.5 Marine pollutant:** Yes
- 14.6 Special precautions for user**
Special regulations: 274, 122
EmS Codes: F-J, S-R
Physico-Chemical properties: see section 9
Limited quantities: 500 g
Segregation group: SGG16
- 14.7 Maritime transport in bulk according to IMO instruments:** Not relevant

Transport of dangerous goods by air:

With regard to IATA/ICAO 2024:

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SECTION 14: TRANSPORT INFORMATION (continued)



- 14.1 UN number or ID number:** UN3108
- 14.2 UN proper shipping name:** ORGANIC PEROXIDE TYPE E, SOLID (Dibenzoyl peroxide)
- 14.3 Transport hazard class(es):** 5.2
Labels: 5.2
- 14.4 Packing group:** N/A
- 14.5 Environmental hazards:** Yes
- 14.6 Special precautions for user**
Physico-Chemical properties: see section 9
- 14.7 Maritime transport in bulk according to IMO instruments:** Not relevant

SECTION 15: REGULATORY INFORMATION

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

- Article 95, REGULATION (EU) No 528/2012: Not relevant
- Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Not relevant
- Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Not relevant
- REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Not relevant
- Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Not relevant

Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
P6b	SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES	50	200
E1	ENVIRONMENTAL HAZARDS	100	200

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Not relevant

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

COMMISSION REGULATION (EU) 2020/878

CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16):

- Supplementary information

Texts of the legislative phrases mentioned in section 2:

- H242: Heating may cause a fire.
- H317: May cause an allergic skin reaction.
- H400: Very toxic to aquatic life.
- H410: Very toxic to aquatic life with long lasting effects.
- H319: Causes serious eye irritation.

Texts of the legislative phrases mentioned in section 3:

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**UTWARDZACZ - HARDENER FOR POLYESTER PUTTY****SECTION 16: OTHER INFORMATION (continued)**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

Acute Tox. 4: H302 - Harmful if swallowed.

Aquatic Acute 1: H400 - Very toxic to aquatic life.

Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.

Eye Irrit. 2: H319 - Causes serious eye irritation.

Org. Perox. B: H241 - Heating may cause a fire or explosion.

Skin Sens. 1: H317 - May cause an allergic skin reaction.

STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral).

Classification procedure:

Skin Sens. 1: Calculation method

Aquatic Acute 1: Calculation method

Aquatic Chronic 1: Calculation method

Eye Irrit. 2: Calculation method

Advice related to training:

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

<http://echa.europa.eu>

<http://eur-lex.europa.eu>

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road

IMDG: International maritime dangerous goods code

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

COD: Chemical Oxygen Demand

BOD5: 5day biochemical oxygen demand

BCF: Bioconcentration factor

LD50: Lethal Dose 50

LC50: Lethal Concentration 50

EC50: Effective concentration 50

LogPOW: Octanolwater partition coefficient

Koc: Partition coefficient of organic carbon

UFI: unique formula identifier

IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -