# SOLUMASTIK HARDENER

### **PROLINE**

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#### Section 1 Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

#### Identification of the mixture:

RETIC® BP 50 LA WHITE E (SOLUMASTIK HARDENER)

#### UFI Code:

RHK1-F045-S00T-UKS7

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

#### Use of the Substance/Mixture:

Use as hardener for Solumastik professional adhesive. For professional user/industrial user only.

#### Uses advised against:

All uses not specified in this section or in Section 7.3.

### 1.3 Details of the manufacturer/supplier of the safety data sheet

#### Manufacturer:

ARKEMA, Organic peroxides 420 rue d'Estienne d'Orves 92705 Colombes - France Telephone: +33 (0)1 49 00 80 80 -Fax: +33 (0)1 49 00 83 96

E-mail: pars-drp-fds@arkema.com;

arkema.peroxides-reach-uses@arkema.com

Website: www.arkema.com

#### Supplier:

Cosentino Global S.L.U, Ctra. A334, Baza-Huércal Overa, km 59 04850 Cantoria (Almería) - Spain Telephone: +34 950 444 175 E-mail: info@cosentino.com

E-mail: info@cosentino.com Website: www.cosentino.com

#### 1.4 Emergency telephone number

#### ChemTel Inc. (24/7/365, multilingual):

Worldwide: +1-813-248-0585

United States: 1-800-255-3924 (free toll)

Australia: 1-300-954-583 China: 400-120-0751 India: 000-800-100-4086 Mexico: 01-800-099-0731 Brazil: 0-800-591-6042

### For information on emergency phone numbers of EU national authorities you may check:

https://echa.europa.eu/documents/10162/2322249/ emergency\_phone\_numbers\_en.pdf/d911af43-4bcf-9371-a59d-a20736d91e7d?t=1628515444598



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#### Section 2 Hazards identification

#### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008):

Organic peroxides, E, **H242**Eye irritation, Category 2, **H319**Skin sensitisation, Category 1, **H317**Acute aquatic toxicity, Category 1, **H400**Chronic aquatic toxicity, Category 1, **H410** 

#### Additional information:

For the full text of the H and EUH-phrases mentioned in this Section, see Section 16.

#### 2.2 Label elements

#### Label elements (REGULATION (EC) No 1272/2008)

Hazardous components which must be listed on the label:
Dibenzoyl peroxide; Benzoyl peroxide.

### Hazard pictograms:







### **Signal word:** Warning.

#### Hazard statements:

H242 - Heating may cause a fire.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H410 - Very toxic to aquatic life

with long lasting effects.

#### Precautionary statements:

#### Prevention

**P210:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P234: Keep only in original container. P273: Avoid release to the environment. P280: Wear protective gloves/protective clothing/eye protection/face protection.

#### Response

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. P333+P313: If skin irritation or rash occurs:

Get medical advice/attention.

P337+P313: If eye irritation persists:
Get medical advice/attention.

#### Storage

P403+P235: Store in a well-ventilated place. Keep cool.

#### 2.3 Other hazards

#### Potential health effects:

Inhalation: Inhalation of vapours due to thermal decomposition. Risk of irritation of respiratory system. Toxic effects cannot be excluded.

#### **Environmental effects:**

Very toxic to fish. Very toxic to daphnia. Very toxic to algae.

#### Physical and chemical hazards:

If the product is dried, possible explosive decomposition through shock or rise in temperature. Contact with combustible material may cause fire. Thermal decomposition giving flammable and toxic products.

Decomposition products: See Section 10.

#### Other

#### Results of PBT and vPvB assessment:

Based on the available information, it is not possible to conclude on PBT and vPvB criteria according to REACH Regulation, Annex XIII.

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Section 3 Composition/information on ingredients

#### 3.1 Substances

Not applicable.

#### 3.2 Mixtures

#### Chemical nature of the mixture:

Preparation based on: Organic peroxide.

Hazardous components (in accordance with Annex II of Regulation (EC) No 1907/2006 and its amendments(s)):

IDENTIFICATION		CHEMICAL	CONCENTRATION			
CAS:	94-36-0		DIBENZOYL PEROXIDE			
EC:	202-327-6		Skin Sens. 1: H31/; Aquatic Acute 1: H400;	M-Factor Acute = 10 M-Factor Chronic = 10	48 % - 55 %	
Index:	617-008-00-0	Regulation 1272/2008				
REACH(2):	01-2119511472-50	1272/2000	Aquatic Chronic 1: H410			
CAS:	107-21-1	ETHYLENEGLYCOL				
EC:	203-473-3				-10.9/	
Index:	603-027-00-1	Regulation 1272/2008	Acute Tox. 4 (Oral): H302		< 10 %	
REACH(2):	01-2119456816-28	,				

<sup>(1)</sup> See Section 14 for Proper Shipping Name

<sup>(2)</sup> See the text of the regulation for applicable exceptions or provisions

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# Section 4 First aid measures

#### 4.1 Description of necessary first-aid measures

#### General advice:

Risk of ignition. In case of splashes, remove contaminated clothing and plunge it into water immediately.

#### Inhalation:

Move to fresh air. Oxygen or artificial respiration if needed. In case of persistent problems: Hospitalise.

#### Skin contact:

Wash off immediately with soap and plenty of water. If skin irritation or rash occurs: Get medical advice/attention.

#### Eye contact:

Wash open eyes immediately, abundantly and thoroughly for at least 15 minutes. Remove contact lenses. Consult an ophthalmologist.

#### Ingestion:

If the subject is unconscious, do not induce vomiting. Consult a physician.

#### Protection of first-aiders:

In case of insufficient ventilation, wear suitable respiratory equipment. Protective suit.

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

No data available.

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

No data available.

# Section 5 Firefighting measures

#### 5.1 Extinguishing media

#### Suitable extinguishing media:

Carbon dioxide (CO<sub>2</sub>), water spray, dry powder.

#### Unsuitable extinguishing media:

High volume water jet.

### 5.2 Special hazards arising from the substance or mixture

The product burns violently (protect people from possible projections). Contact with combustible material may cause fire. Through thermal decomposition, formation of very reactive free radicals.

Thermal decomposition giving flammable and toxic products: Carbon dioxide (CO<sub>2</sub>), Benzoic acid, Benzene, Phenyl benzoate, Diphenyl.

#### 5.3 Advice for firefighters

#### Specific methods:

Fight fire from a distance (more than 15 m). Cool containers/tanks with water spray. In case of fire nearby, remove exposed containers.

#### Special protective actions for firefighters:

Wear self-contained breathing apparatus and protective suit.

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# Section 6 Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Prohibit all sources of sparks and ignition - Do not smoke. Evacuate non-essential staff and those not equipped with individual protection apparatus. Avoid contact with the skin and the eyes. Use personal protective equipment. In case of insufficient ventilation, wear suitable respiratory equipment.

#### 6.2 Environmental precautions

Do not release into the environment. Do not let product enter drains.

#### 6.3 Methods and materials for containment and cleaning up

#### Methods for cleaning up:

After cleaning, flush away traces with water. Recover waste water for processing later.

#### Recovery:

Never return spills in original containers for re-use. Shovel into suitable container for disposal. Keep contents moist. No sparking tools should be used.

#### Elimination:

See Section 13.

#### 6.4 Reference to other sections

None.

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#### Section 7 Handling and storage

#### 7.1 Precautions for safe handling

#### **Technical measures/Precautions:**

Storage and handling precautions applicable to products: Organic peroxides. Irritant.
Sensitizing. Dangerous for the environment.
Provide appropriate exhaust ventilation at machinery. Provide showers, eye-baths. Provide self-contained breathing apparatus nearby (for emergency intervention). Provide water supplies near the point of use. Provide fire-blanket nearby. Provide electrical earthing of equipment.

#### Safe handling advice:

Strictly limit the quantities of product in the work area to those which are absolutely necessary for the work in hand. Great cleanliness in work areas is a necessary and important factor for safety. Handle and open container with care. Prohibit all sources of sparks and ignition - Do not smoke. Protect from contamination. Never return any product to the container from which it was originally removed (risk of decomposition). Never mix peroxides directly with accelerators (risk of explosion). Add each component separately to the resin. In case of insufficient ventilation, wear suitable respiratory equipment.

#### Hygiene measures:

Take off immediately all contaminated clothing. Avoid contact with the skin and the eyes. When using do not eat, drink or smoke. Wash hands after handling. Remove contaminated clothing and protective equipment before entering eating areas.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in well insulated area (peroxided area) away from other substances. Storage building must be built and equipped so as not to exceed the maximum proscribed temperature limit. Use noncombustible construction materials. Keep/Store away from clothing/combustible materials. Keep tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Do not smoke. Store in original container. Use only very clean containers and equipment free from traces of impurities. Never return unused material to storage receptacle. Do not reuse empty packaging to store other products. Protect the containers from any impacts. Take measures to prevent the build up of electrostatic charge. Provide earthing and safe electrical equipment. Provide impermeable floor. Consult ARKEMA before storage design.

Store between 5°C to 30°C, to maintain the technical properties of the product.

#### Incompatible products:

Strong oxidizing agents, strong reducing agents, acids, bases, amines, heavy metal compounds, heavy metals, sulphur compounds, rust, ash, dusts (risk of self-accelerating exothermic decomposition).

#### Packaging material:

Recommended: Keep only in the original container. To be avoided: Ordinary metals (ordinary steel), copper, rubber (natural or synthetic), glass - stoneware (risk of contents spurting or spraying out if container ruptures due to overpressurization).

#### 7.3 Specific end use(s)

None.

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# Section 8 Exposure controls/ personal protection

#### 8.1 Control parameters

#### Exposure Limit Values:

IDENTIFICATION	SOURCE	DATE	VALUE TYPE	VALUE (ppm)	VALUE (mg/m³)	REMARKS
DIBENZOYL PEROXIDE	ACGIH (US)	02 2012	TWA	-	5	-
	EU ELV	12 2009	STEL	40	104	Indicative value
ETHYLENEGLYCOL	EU ELV	12 2009	SKIN	-	-	Can be absorbed through the skin
	EU ELV	12 2009	TWA	20	52	Indicative value
	ACGIH (US)	02 2012	Ceiling	-	100	Aerosol

#### Derived No Effect Level (DNEL):

IDENTIFICATION	END USE	INHALATION	INGESTION	SKIN CONTACT
DIBENZOYI PEROXIDE	Workers	39 mg/m³ (LT, SE)		13.3 mg/Kg bw/day (LT, SE)
DIBENZOTE PEROXIDE	Consumers	-	2 mg/Kg bw/day (LT, SE)	-

LE: Local effects, SE: Systemic effects, LT: Long term, ST: Short term

#### Predicted No Effect Concentration (PNEC):

IDENTIFICATION	COMPARTMENT	VALUE
	Fresh water	0.02 µg/L
	Marine water	0.002 µg/L
	Water (Intermittent release)	0.602 µg/L
DIBENZOYL PEROXIDE	Fresh water sediment	0.013 mg/Kg dw
	Marine sediment	0.001 mg/Kg dw
	Soil	0.003 mg/Kg dw
	Effects on waste water treatment plants	0.35 mg/L

#### 8.2 Exposure controls

#### Personal protective equipment:

- Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.
   In the case of hazardous fumes, wear self contained breathing apparatus.
- Hand protection: Gloves (Nitrile rubber, Neoprene).
- Eye/face protection: Safety glasses/goggles and face-mask (during discharge).
- Skin and body protection: Protective suit.

#### Environmental exposure controls:

See Section 6.

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# Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

#### Appearance:

Physical state (20 °C): Solid

Form: PastyColour: WhiteOdour: Characteristic

Odour threshold: No data available Melting point/range: No data available Boiling point/range: No data available Flammability: No data available Flash point: Not applicable

Auto-ignition temperature: No data available Decomposition temperature: No data available

Self-Accelerating decomposition temperature (SADT): 50 °C

**pH**: Not relevant

Viscosity: No data available

Water solubility:

DIBENZOYL PEROXIDE:
 0.35 mg/L at 20 °C
 (OECD Test Guideline 105)

ISODECYL BENZOATE:
 < 0.069 mg/L at 20 °C</li>

#### Partition coefficient n-octanol/water:

 DIBENZOYL PEROXIDE: log Kow: 3.2 at 22 °C (OECD Test Guideline 117)

• ETHYLENEGLYCOL:

log Kow: - 1.36 at 23 °C (calculated)

#### Vapour pressure:

DIBENZOYL PEROXIDE:
 0.009 Pa at 25 °C

Relative density: No data available Vapour density: No data available

#### 9.2 Other information

Active oxygen content: 3.30 % Explosive properties:

Explosivity: Not relevant. The substance or mixture is

an organic peroxide classified as type E.

In the dry state. Risk of explosion by shock, friction, fire

or other sources of ignition

Oxidizing properties: Organic peroxide

#### Section 10 Stability and reactivity

#### 10.1 Reactivity

No data available.

#### 10.2 Chemical stability

The product is stable under normal handling and storage conditions.

#### 10.3 Possibility of hazardous reactions

Organic peroxides. At high temperature: risk of violent reaction (decomposition).

#### 10.4 Conditions to avoid

Temperatures above 30 °C (to maintain the technical properties of the product). Keep away from heat and sources of ignition (risk of exothermic decomposition). Protect from light.

#### 10.5 Incompatible materials to avoid

Strong oxidizing agents, strong reducing agents, acids, bases, heavy metal compounds, heavy metals, sulphur compounds, rust, ash, dusts (risk of self-accelerating exothermic decomposition.

Follow conditions of use with: accelerators (amines, metallic salts).

#### 10.6 Hazardous decomposition products

Through thermal decomposition, formation of very reactive free radicals. Thermal decomposition giving flammable and toxic products: Carbon dioxide ( $CO_2$ ), Benzoic acid, Benzene, Phenyl benzoate, Diphenyl.

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# Section 11 Toxicological information

All available and relevant data on this product and/ or the components quoted in Section 3 and/or the analogue substances/metabolites have been taken into account for the hazard assessment.

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

#### Acute toxicity

#### Inhalation:

According to its composition, this product should not be harmful in normal conditions of use.

Inhalation of vapours due to thermal decomposition: Risk of irritation of respiratory system. Toxic effects cannot be excluded.

#### DIBENZOYL PEROXIDE

In animals:

No mortality/4 h/Rat: 24.3 mg/L (Method: OECD Test Guideline 403), Eye irritation, Local irritation of the respiratory system (Dusts) (Active ingredient, 78%)

#### ISODECYL BENZOATE

In animals:

No mortality/4 h/Rat: 5.5 mg/L (Method: OECD Test Guideline 436), No specific toxic effects

#### ETHYLENEGLYCOL

In animals:

LC50/6 h/Rat: > 2.5 mg/L (Method: Aerosol) (Aerosol)

#### FATTY ACIDS, C16-18, ZINC SALTS

In animals:

LC50/1 h/Rat: > 200 mg/L

#### Ingestion:

From its composition, it must be considered as: Slightly harmful by ingestion.

#### DIBENZOYL PEROXIDE

In animals:

No mortality/Rat: 5 g/Kg, No specific toxic effects (Active ingredient, 78 %)

#### ISODECYL BENZOATE

In animals:

No mortality/Rat: 5 g/Kg (Method: OECD Test Guideline 401)

#### ETHYLENEGLYCOL

In animals: LD50/Rat: 7.7 g/Kg

#### FATTY ACIDS, C16-18, ZINC SALTS

In animals:
 No mortality/Rat: 5 g/Kg
 (Method: OECD Test Guideline 401)

#### Dermal:

According to its composition, this product should not be harmful in normal conditions of use.

#### ISODECYL BENZOATE

In animals:
No mortality/Rabbit: 2 g/Kg
(Method: OECD Test Guideline 402),
Local irritation

#### ETHYLENEGLYCOL

In animals:
 No mortality/Mouse: 3.5 g/Kg

FATTY ACIDS, C16-18, ZINC SALTS

• In animals:

No mortality/Rabbit: 2 g/Kg

#### Local effects (Corrosion/Irritation/ Serious eye damage)

#### Skin contact:

According to its composition, can be considered as: Slightly irritating to skin.

#### Eye contact:

According to its composition: Causes serious eye irritation.

#### DIBENZOYL PEROXIDE

In animals:
 Mild eye irritation
 (OECD Test Guideline 405, Rabbit)
 (Active ingredient, 78 %)

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#### Respiratory or skin sensitisation

#### Inhalation:

No data available.

#### Skin contact:

According to its composition: May cause an allergic skin reaction.

#### DIBENZOYL PEROXIDE

In man:

Skin allergy was observed

In animals:

Strong sensitizing effects by skin contact (Method: OECD Test Guideline 429 LLNA: Local Lymph Node Assay), Sensitizing effects by skin contact

(Method: OECD Test Guideline 406 Buehler method, Guinea pig)

#### **CMR** effects

#### Mutagenicity:

Contains no ingredient listed as a mutagen.

#### Carcinogenicity:

#### DIBENZOYL PEROXIDE

• In animals:

Absence of carcinogenic effects (Rat and mouse, Chronic, By diet) (Rat and mouse, Chronic, Dermal route)

#### ETHYLENEGLYCOL

In animals:

Absence of carcinogenic effects (Rat and mouse, 2 years, By diet)

#### Reproductive toxicity:

Fertility: According to its composition, this product should not be harmful in normal conditions of use.

#### DIBENZOYL PEROXIDE

In animals:

Reproductive/Developmental Effects Screening Assay: Absence of toxic effects on fertility NOAEL (Parental toxicity): 0.5 g/Kg NOAEL (Fertility): 1 g/Kg NOAEL (Developmental toxicity): 0.5 g/Kg (Method: OECD Test Guideline 422, Rat, By oral route)

#### ISODECYL BENZOATE

In animals.

Two generation reproduction study: Absence of toxic effects on fertility, Reduced offspring weight gain

NOAEL (Parental toxicity): 1,000 ppm

NOAEL (Fertility): 10,000 ppm

NOAEL (Developmental toxicity): 3,000 ppm (Method: OECD Test Guideline 416, Rat, By diet)

#### ETHYLENEGLYCOL

In animals:

Multiple generation reproduction test: No toxic effects for reproduction NOAEL (Parental toxicity): 1 g/Kg NOAEL (Fertility): 1 g/Kg (Rat, By diet)

#### Foetal development:

According to its composition, this product should not be harmful in normal conditions of use.

#### DIBENZOYL PEROXIDE

In animals:

Exposure during pregnancy: Absence of toxic effects for foetal development at non toxic maternal doses, No teratogenic effects NOAEL (Developmental toxicity): 300 mg/Kg bw/day NOAEL (Maternal toxicity): 300 mg/Kg bw/day (Method: OECD Test Guideline 414, Rat, By oral route)

#### ISODECYL BENZOATE

In animals:

Exposure during pregnancy: Absence of toxic effects for foetal development at non toxic maternal doses

NOAEL (Developmental toxicity):

300 mg/Kg bw/day

NOAEL (Maternal toxicity): 300 mg/Kg bw/day (Method: OECD Test Guideline 414, Rat, By oral route)

#### ETHYLENEGLYCOL

In animals:

Exposure during pregnancy: Absence of toxic effects for foetal development NOAEL (Developmental toxicity): 2 g/Kg NOAEL (Maternal toxicity): 1 g/Kg (Rabbit, By oral route)
Toxic effects for foetal development at toxic maternal doses, No teratogenic effects NOAEL (Developmental toxicity): 0.15 mg/L NOAEL (Maternal toxicity): 1 mg/L (By inhalation)

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Specific target organ toxicity (STOT) - single exposure

#### Inhalation:

Dust inhalation: Risk of irritation of respiratory system.

Specific target organ toxicity (STOT) - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

#### DIBENZOYL PEROXIDE

• In animals:

By diet: Decreased growth rate, atrophy

Target organs: Testes

NOAEL: 200 mg/Kg bw/day (Rat, 2 years)

Dermal route: No specific toxic effects

NOAEL: > 833 mg/Kg bw/day

(Mouse, Repeated exposure) (Chronic)

#### ISODECYL BENZOATE

In animals:

By diet: No specific toxic effects NOAEL: > 619 mg/Kg bw/day

(Method: OECD Test Guideline 408, Rat, 3 months)

#### ETHYLENEGLYCOL

In animals:

By diet: Target organs: Kidney

NOAEL: 150 mg/Kg (Rat, Chronic, 52 weeks)

By diet: Target organs: Kidney

NOAEL: 150 mg/Kg

(Rat, Subchronic exposure, 16 weeks) Dermal route: No adverse systemic

effects reported

NOAEL: 8 g/Kg bw/day (Dog, 4 weeks)

#### Aspiration hazard

Not applicable.

#### 11.2 Information on other hazards

Not relevant.

#### 11.3 Endocrine disrupting properties

None known.

#### 11.4 Other information

Not relevant.

#### Section 12 Ecological information

#### Ecotoxicology assessment:

All available and relevant data on this product and/ or the components quoted in Section 3 and/or the analogue substances/metabolites have been taken into account for the hazard assessment.

#### Acute aquatic toxicity:

Very toxic to aquatic life.

#### Chronic aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

#### 12.1 Toxicity

#### Fish:

From its composition, it must be considered as: Very toxic to fish.

#### DIBENZOYL PEROXIDE

LC50, 96 h (Oncorhynchus mykiss): 0.0602 mg/L (Method: OECD Test Guideline 203)

#### ETHYLENEGLYCOL

 LC50, 96 h (Pimephales promelas (Fathead minnow)): 72,860 mg/L (Method: US EPA)

#### Aquatic invertebrates:

From its composition, it must be considered as: Very toxic to daphnia.

#### DIBENZOYL PEROXIDE

EC50, 48 h (Daphnia magna (Water flea)):
 0.110 mg/L (Method: OECD Test Guideline 202)

#### **ETHYLENEGLYCOL**

EC50, 48 h (Daphnia magna (Water flea)):
 > 100 mg/L (Method: OECD Test Guideline 202)

#### Aquatic plants:

From its composition, it must be considered as: Very toxic to algae.

#### DIBENZOYL PEROXIDE

 ErC50, 72 h (Pseudokirchneriella subcapitata (green algae)): 0.0711 mg/L (Method: OECD Test Guideline 201)

#### ETHYLENEGLYCOL

 ErC50, 96 h (Selenastrum capricornutum (green algae)): 6,500 - 13,000 mg/L (Method: US EPA)

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#### Microorganisms:

#### DIBENZOYL PEROXIDE

 EC50, 30 min (Activated sludge): 35 mg/L (Method: OECD Test Guideline 209, Respiration inhibition)

#### ETHYLENEGLYCOL

 EC20, 3 h (Activated sludge): > 1,995 mg/L (Method: Standard ISO 8192)

#### Aquatic toxicity/Long term toxicity

#### Fish:

#### ETHYLENEGLYCOL

 NOEC, 7 d (Pimephales promelas (Fathead minnow)): 15,380 mg/L (Method: US EPA, Early-life Stage)

#### Aquatic invertebrates:

#### DIBENZOYL PEROXIDE

EC10, 21 d (Daphnia magna (Water flea)):
 0.001 mg/L (Method: OECD Test Guideline 211,
 Reproduction inhibition)

#### ETHYLENEGLYCOL

 NOEC, 7 d (Ceriodaphnia dubia): 8,590 mg/L (Method: Reported data)

#### Aquatic plants:

#### DIBENZOYL PEROXIDE

 NOEC r, 72 h (Pseudokirchneriella subcapitata (green algae)): 0.02 mg/L (Method: OECD Test Guideline 201)

#### ETHYLENEGLYCOL

 NOEC, 72 h (Pseudokirchneriella subcapitata (microalgae)): > 100 mg/L (Method: OECD Test Guideline 201)

#### Non aquatic toxicity/Toxicity

#### Toxicity to soil dwelling organisms:

#### DIBENZOYL PEROXIDE

- LC50, 14 d (Eisenia fetida (earthworms)):
   > 1,000 mg/Kg (Soil dw)
   (Method: OECD Test Guideline 207)
- EC10, 28 d (Microorganisms): 1,000 mg/Kg (Soil dw) (Method: OECD Test Guideline 216)

#### 12.2 Persistence and degradability

#### Stability in water:

#### DIBENZOYL PEROXIDE

 Half-life: < 2.4 h at 50 °C and pH 4 - 9 (Method: OECD Test Guideline 111)

Biodegradation (In water): Based on the available information, it is not possible to conclude on biodegradability of this mixture.

#### DIBENZOYL PEROXIDE

 Readily biodegradable: 71 % after 28 d (Method: OECD Test Guideline 301 D)

#### **ETHYLENEGLYCOL**

 Readily biodegradable: 90 - 100 % after 10 d (Method: OECD Test Guideline 301 A)

#### 12.3 Bioaccumulative potential

Bioaccumulation: Based on the available information, it is not possible to conclude on the bioaccumulation potential of this mixture.

#### DIBENZOYL PEROXIDE

 Partition coefficient n-octanol/water: log Kow: 3.2 at 22 °C (Method: OECD Test Guideline 117)

#### ETHYLENEGLYCOL

 Partition coefficient n-octanol/water: log Kow: - 1.36 at 23 °C (Method: calculated)

### 12.4 Mobility in soil - Distribution among environmental compartments

#### DIBENZOYL PEROXIDE

0.009 Pa, 25 °C

#### Absorption/desorption:

#### DIBENZOYL PEROXIDE

log Koc: 3.8 (Method: OECD Test Guideline 121)

#### 12.5 Results of PBT and vPvB assessment

Based on the available information, it is not possible to conclude on PBT and vPvB criteria according to REACH regulation, Annex XIII.

#### 12.6 Endocrine disrupting properties

None known.

#### 12.7 Other adverse effects

None known.

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# Section 13 Disposal considerations

#### 13.1 Waste treatment methods

#### Disposal of product:

Do not dispose of waste into sewer. Eliminate the product by incineration after dilution in a suitable flammable solvent (in accordance with local and national regulations).

For further information, please contact: ARKEMA.

#### Disposal of packaging:

Do not release into the environment. Destroy packaging by incineration at an approved waste disposal site (in accordance with local and national regulations).

# Section 14 Transport information

REGULATION	14.1 UN NUMBER	14.2 UN PROPER SHIPPING NAME	14.3 TRANSPORT HAZARD CLASS(ES)	LABEL	14.4 PACKING GROUP	14.5 ENVIRONMENTAL HAZARDS	14.6 SPECIAL PRECAUTIONS FOR USER
ADR	3108	ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)	5.2	5.2	-	Yes	-
ADN	3108	ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)	5.2	5.2	-	Yes	-
RID	3108	ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)	5.2	5.2	-	Yes	-
IATA CARGO	3108	Organic peroxide Type E, Solid (Dibenzoyl peroxide)	5.2	5.2 (74F)	-	Yes	-
IATA PASSENGER	3108	Organic peroxide Type E, Solid (Dibenzoyl peroxide)	5.2	5.2 (74F)	-	Yes	-
IMDG	3108	ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)	5.2	5.2	-	Marine pollutant	EmS Number: F-J, S-R Mark: MP

#### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

### SOLUMASTIK HARDENER

### **PROLINE**

REV. 02 - 06/2022 PRINT DATE - JUNE 2022

#### Section 15 Regulatory information

Safety Datasheets: in accordance with Annex II of Regulation (EC) No 1907/2006 and its amendment(s).

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

-

#### 15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance (Dibenzoyl peroxide).

#### **INVENTORIES:**

EINECS: The product contains ELINCS substances

TSCA: Conforms to

DSL: All components of this product

are on the Canadian DSL IECSC (CN): Conforms to ENCS (JP): Does not conform

ISHL (JP): Does not conform

KECI (KR): Conforms to PICCS (PH): Does not conform

AICS: Conforms to

NZIOC: Does not conform

# Section 16 Other information

### Full text of H and EUH-phrases referred to under Sections 2 and 3:

H241: Heating may cause a fire or explosion.

**H242:** Heating may cause a fire.

H302: Harmful if swallowed.

H317: May cause an allergic skin reaction.

**H319:** Causes serious eye irritation.

**H400:** Very toxic to aquatic life.

**H410**: Very toxic to aquatic life

with long lasting effects.

#### Bibliography:

- ARKEMA brochure: Safe Handling of Organic Peroxides
- Cahiers et notes documentaires INRS No 186
   1erT2002: "Les peroxydes et leur utilisation"

#### Further information:

- This product must be handled only by personnel well informed of safety conditions
- When used in formulations, contact us for labelling

#### Thesaurus:

- NOAEL: No Observed Adverse Effect Level
- LOAEL: Lowest Observed Adverse Effect Level
- bw: Body weight
- food: Oral feed
- dw: Dry weight
- vPvB: Very Persistent and very Bioaccumulative
- PBT: Persistent, Bioaccumulative and Toxic

This information applies to the PRODUCT AS SUCH and conforming to specifications of ARKEMA. In case of formulations or mixtures, it is necessary to ascertain that a new danger will not appear. The information contained is based on our knowledge of the product, at the date of publishing and it is given quite sincerely. Users are advised of possible additional hazards when the product is used in applications for which it was not intended. This sheet shall only be used and reproduced for prevention and security purposes. The references to legislative, regulatory and codes of practice documents cannot be considered as exhaustive. It is the responsibility of the person receiving the product to refer to the totality of the official documents concerning the use, the possession and the handling of the product. It is also the responsibility of the handlers of the product to pass on to any subsequent persons who will come into contact with the product (usage, storage, cleaning of containers, other processes) the totality of the information contained within this Safety Datasheet and necessary for safety at work, the protection of health and the protection of environment.