according to Regulation (EC) No. 830/2015

POLYFAN HARDENER

Version 2.17 Revision Date 10.12.2015 Print Date 05.02.2019

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

1.1 Product identifier

Trade name : POLYFAN HARDENER

Product code : L0000284

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

Use of the : Paints, varnishes and enamels

Substance/Mixture

Chemical nature : Organic peroxide

1.3 Details of the supplier of the safety data sheet

Company : Lechler SpA

Via Cecilio 17

22100 Como- CO-

 Telephone
 : +39031586111

 Telefax
 : +39031586206

 E-mail address
 : safety@lechler.eu

Responsible/issuing person

1.4 Emergency telephone number

Tel. +39-031-586301 Fax +39-031-586299

This telephone number is available during office hours only. (8.00-18.00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Organic peroxides, Type C H242: Heating may cause a fire.

Skin corrosion, Category 1B H314: Causes severe skin burns and eye damage.

Specific target organ toxicity - single H335: May cause respiratory irritation.

exposure, Category 3

Serious eye damage, Category 1 H318: Causes serious eye damage.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :





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Signal word : Danger

Hazard statements : H242 Heating may cause a fire.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

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.

P280 Wear protective gloves/ protective clothing/

eye protection/ face protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off

immediately all contaminated clothing.

Rinse skin with water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh

air and keep comfortable for breathing.

Immediately call a POISON CENTER or

doctor/ physician.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with

water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsina.

P370 + P378 In case of fire: Use dry sand, dry chemical

or alcohol-resistant foam to extinguish.

Storage:

P411 + P235 Store at temperatures not exceeding 25°C/

77F. Keep cool.

Hazardous components which must be listed on the label:

• 12262-58-7 cyclohexanone, peroxide

• 123-42-2 4-hydroxy-4-methylpentan-2-one

2.3 Other hazards

None known.

No hazards resulting from the material as supplied.

The information required is contained in this Material Safety Data Sheet.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Paste organic peroxide

Hazardous components

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Chemical Name	CAS-No.	Classification	Concentration
onomical Hame	EC-No.	(REGULATION (EC) No	[%]
	Registration number	1272/2008)	[,~]
4-hydroxy-4- methylpentan-2-one	123-42-2 204-626-7 01-2119473975-21	Flam. Liq. 3; H226 Eye Irrit. 2; H319 STOT SE 3; H335	>= 30 - < 50
cyclohexanone, peroxide	12262-58-7 235-527-7	Org. Perox. A; H240 Acute Tox. 4; H302 Skin Corr. 1B; H314	>= 25 - < 30
WEL substance :			
dimethyl phthalate	131-11-3 205-011-6 01-2119437229-36		>= 30 - < 50

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : When symptoms persist or in all cases of doubt seek medical

advice.

Never give anything by mouth to an unconscious person.

If inhaled : Remove to fresh air.

Keep patient warm and at rest.

If breathing is irregular or stopped, administer artificial

respiration.

If unconscious place in recovery position and seek medical

advice.

In case of skin contact : Take off all contaminated clothing immediately.

Wash skin thoroughly with soap and water or use recognized

skin cleanser.

Do NOT use solvents or thinners. Put shower on working place

In case of eye contact : Irrigate copiously with clean, fresh water for at least 10

minutes, holding the eyelids apart.

Seek medical advice.

Put eye-washer on working place

Remove contact lenses.

If swallowed : If accidentally swallowed obtain immediate medical attention.

Do NOT induce vomiting.

Keep at rest.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

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Risks : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : The first aid procedure should be established in consultation

with the doctor responsible for industrial medicine.

Seek medical advice.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or

carbon dioxide.

Keep containers and surroundings cool with water spray.

Unsuitable extinguishing

media

: Do NOT use water jet.

5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

: As the product contains combustible organic components, fire

will produce dense black smoke containing hazardous

products of combustion (see section 10).

Exposure to decomposition products may be a hazard to

health.

Cool closed containers exposed to fire with water spray.

Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

5.3 Advice for firefighters

Special protective equipment

for firefighters

: Wear self-contained breathing apparatus for firefighting if

necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Material can create slippery conditions.

6.2 Environmental precautions

Environmental precautions : Try to prevent the material from entering drains or water

courses.

If the product contaminates rivers and lakes or drains inform

respective authorities.

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6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Clean with detergents. Avoid solvents.

> Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to

local / national regulations (see section 13).

6.4 Reference to other sections

Refer to section 15 for specific national regulation.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid exceeding of the given occupational exposure limits

(see section 8).

Use only in area provided with appropriate exhaust ventilation.

Avoid contact with skin, eyes and clothing.

Smoking, eating and drinking should be prohibited in the

application area.

Avoid inhalation of vapour or mist. For personal protection see section 8.

Thoroughly mix before using

After using, store in a well-sealed container

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage

Observe label precautions.

areas and containers

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

Store between 5° an 35°C in a dry, well ventilated place away

from source of heat, ignition and direct sunlight.

Store in accordance with the particular national regulations.

: Keep away from oxidising agents and strongly acid or alkaline Advice on common storage

materials.

7.3 Specific end use(s)

: This information is not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
dimethyl	131-11-3	TWA			ACGIH

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phthalate			5 mg/m3	
4-hydroxy-4-	123-42-2	TWA	50 ppm	ACGIH
methylpentan-				
2-one				
(Technical)				

DNEL

dimethyl phthalate : End Use: Consumers

Exposure routes: Ingestion

Potential health effects: Long-term systemic effects

Value: 25 ppm

End Use: Consumers

Exposure routes: Skin contact

Potential health effects: Long-term systemic effects

Value: 60 ppm

End Use: Workers

Exposure routes: Skin contact

Potential health effects: Long-term systemic effects

Value: 100 ppm

End Use: Consumers Exposure routes: Inhalation

Potential health effects: Long-term systemic effects

Value: 87 mg/m3

End Use: Workers

Exposure routes: Inhalation

Potential health effects: Long-term systemic effects

Value: 294 mg/m3

PNEC

dimethyl phthalate : Fresh water

Value: 0,192 mg/l

Marine water Value: 0,0192 mg/l

Fresh water sediment Value: 1403 mg/kg

Soil

Value: 3,16 mg/kg

8.2 Exposure controls

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Respiratory protection : Apply technical measures to comply with the occupational

exposure limits.

This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If the occupational exposure limits cannot be met, in exceptional cases suitable respiratory equipment should be worn only for a

short period of time.

Respirator with combination filter for vapour/particulate (EN 141).

Hand protection : Protective gloves complying with EN 374.

For prolonged or repeated contact use protective gloves.

Wash your hands and put on barrier creams

Barrier creams may help to protect the exposed areas of skin, they should however not be applied once exposure has occurred.

Skin should be washed after contact.

Eye protection : Chemical resistant goggles must be worn.

Skin and body protection : Personnel should wear protective clothing.

Skin should be washed after contact.

Environmental exposure controls

General advice : Try to prevent the material from entering drains or water courses.

If the product contaminates rivers and lakes or drains inform

respective authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Odour : solvent-like

Flash point : > 63 - 100 °C

Ignition temperature : not determined

Lower explosion limit : No data available

Upper explosion limit : No data available

Auto-ignition temperature : not applicable

pH : not determined

Freezing point : not applicable

Boiling point : not determined

Vapour pressure : 1,000 hPa

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at 50 °C

Density : 1,1 g/cm3

Water solubility : not determined

Partition coefficient: n-

octanol/water

: No data available

Solubility in other solvents : not determined

Flow time : 27 s

3 mm

Method: ASTM D 1200 '82

Relative vapour density : not applicable

Evaporation rate : not determined

9.2 Other information

: 60 % Solids by weight

Volatile organic compounds : 35 %

(VOC) content

Water content : 5%

SECTION 10: Stability and reactivity

10.1 Reactivity

None reasonably foreseeable.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : Our products were manufactured in compliance with safety

standards to avoid decomposition and degrading under the

defined conditions.

Taking the product type into account, it is advisable to leave the product in its original packaging thus avoiding transferring

10.5 Incompatible materials

Materials to avoid : Keep away from oxidising agents, strongly alkaline and

strongly acid materials in order to avoid exothermic reactions.

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10.6 Hazardous decomposition products

Hazardous decomposition

products

: Carbon dioxide (CO2), carbon monoxide (CO), oxides of

nitrogen (NOx), dense black smoke.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg, Calculation method

Acute inhalation toxicity : Exposure to component solvent vapours concentration in excess of

the stated occupational exposure limit may result in adverse health effects., Such as: mucous membrane irritation, respiratory system irritation, adverse effects on kidney, liver and central nervous system. Symptoms and signs: headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases loss of

consciousness.

Skin corrosion/irritation : Repeated or prolonged contact with the mixture may cause removal

of natural fat from the skin resulting in desiccation of the skin., The

product may be absorbed through the skin.

Serious eye damage/eye

irritation

: The liquid splashed in the eyes may cause irritation and reversible

damage.

Components:

4-hydroxy-4-methylpentan-2-one:

Acute oral toxicity : LD50: 3.002 mg/kg, rat

Acute inhalation toxicity : LC0: $\geq 7,6$ mg/l, rat

Acute dermal toxicity : LD50: > 1.875 mg/kg, rat

cyclohexanone, peroxide:

Acute oral toxicity : Acute toxicity estimate: 500 mg/kg, Converted acute toxicity

point estimate

: LD50: 880 mg/kg, mouse

Acute inhalation toxicity : LC50: > 5,0 mg/l, 4 h, rat,

Acute dermal toxicity : LD50: > 2.000 mg/kg

dimethyl phthalate:

Acute oral toxicity : LD50: > 2.400 mg/kg, rat Acute dermal toxicity : LD50: > 10.000 mg/kg, rabbit

SECTION 12: Ecological information

according to Regulation (EC) No. 830/2015

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12.1 Toxicity

Toxicity to fish

Remarks:

No data is available on the product itself.

Toxicity to fish

4-hydroxy-4-methylpentan-2- : LC50: > 100 mg/l

one

Exposure time: 96 h

Species: Oryzias latipes (Orange-red killifish)

12.2 Persistence and degradability

Biodegradability : No data available

12.3 Bioaccumulative potential

Bioaccumulation : No data available

12.4 Mobility in soil

Mobility : No data available

12.5 Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT)., This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects

Additional ecological

information

: There is no data available for this product.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water

courses or the soil.

Disposal together with normal waste is not allowed. Special

disposal required according to local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste

handling site for recycling or disposal.

According to the European Waste Catalogue, Waste Codes

are not product specific, but application specific.

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The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. The following Waste Codes are only suggestions: 150110*

SECTION 14: Transport information

14.1 UN number

ADR : UN 3105

IMDG : UN 3105

IATA : UN 3105

14.2 Proper shipping name

ADR ORGANIC PEROXIDE TYPE D, LIQUID

IMDG ORGANIC PEROXIDE TYPE D, LIQUID

IATA Organic peroxide type D, liquid

14.3 Transport hazard class(es)

ADR : 5.2

IMDG : 5.2

IATA : 5.2

14.4 Packing group

ADR

Packing group : Not assigned by regulation

Classification Code : P1

Labels : 5.2

IMDG

Packing group : II Labels : 5.2

EmS Code : F-J,S-R

IATA

according to Regulation (EC) No. 830/2015

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Packing group : II Labels : 5.2

14.5 Environmental hazards

ADR

Environmentally hazardous : no

IMDG

Marine pollutant : no

IATA

Environmentally hazardous : no

14.6 Special precautions for user

not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation

(Article 59).

: not applicable

REACH - List of substances

subject to authorisation

(Annex XIV)

: not applicable

MAL-Code-Number (DK) : 3-4 (1993)

1.117-m3 air/10 g

Risk classification according

to VbF

: Flash Point > 55 °C up to 100 °C, at 15 °C not miscible with

wate

Specially dangerous flammable liquids

Water contaminating class : slightly water endangering

12 / 13

according to Regulation (EC) No. 830/2015

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(Germany)

VWVWS A4

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

15.2 Chemical Safety Assessment

No data is available on the product itself.

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H226	Flammable liquid and vapour.
H240	Heating may cause an explosion.
H242	Heating may cause a fire.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.