SAFETY DATA SHEET

Based upon Regulation (EC) No. 1907/2006, as amended by Regulation (EC) No. 453/2010

Hardener Metal Plastic

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

1.1 Product identifier:

Product name : Hardener Metal Plastic

Product type REACH : Mixture

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

1.2.1 Relevant identified uses

Hardener

1.2.2 Uses advised against

No uses advised against known

1.3 Details of the supplier of the safety data sheet:

Supplier of the safety data sheet

SOUDAL N.V.
Everdongenlaan 18-20
B-2300 Turnhout
☎ +32 14 42 42 31
 +32 14 42 65 14
msds@soudal.com

Manufacturer of the product

SOUDAL N.V.
Everdongenlaan 18-20
B-2300 Turnhout
☎ +32 14 42 42 31
 +32 14 42 65 14
msds@soudal.com

1.4 Emergency telephone number:

24h/24h (Telephone advice: English, French, German, Dutch):
+32 14 58 45 45 (BIG)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

2.1.1 Classification according to Regulation EC No 1272/2008

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Org. Perox.	type E	H242: Heating may cause a fire.
STOT RE	category 2	H373: May cause damage to organs through prolonged or repeated exposure.
Eye Irrit.	category 2	H319: Causes serious eye irritation.
Skin Sens.	category 1	H317: May cause an allergic skin reaction.
Aquatic Acute	category 1	H400: Very toxic to aquatic life.

2.1.2 Classification according to Directive 67/548/EEC-1999/45/EC

Classified as dangerous in accordance with the criteria of Directives 67/548/EEC and 1999/45/EC

O; R7 - May cause fire.

Xi; R36 - Irritating to eyes.

Xn; R48/22 - Harmful: danger of serious damage to health by prolonged exposure if swallowed.

R43 - May cause sensitisation by skin contact.

N; R50 - Very toxic to aquatic organisms.

2.2 Label elements:

Labelling according to Regulation EC No 1272/2008 (CLP)

Drawn up according to the criteria of Regulation (EU) No 487/2013, 4th adaptation of Regulation (EC) No 1272/2008

Contains: dibenzoyl peroxide; 2,2' -oxybisethanol; dibutyl maleate.

Signal word Warning

H-statements

H242	Heating may cause a fire.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.

P-statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves and eye protection/face protection.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P302 + P352	IF ON SKIN: Wash with plenty of water and soap.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

Labelling according to Directive 67/548/EEC-1999/45/EC (DSD/DPD)

Labels

Oxidising

Harmful

Dangerous for the environment

Contains: dibenzoyl peroxide; 2,2' -oxybisethanol; dibutyl maleate.

R-phrases

07	May cause fire
36	Irritating to eyes
43	May cause sensitisation by skin contact
48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed
50	Very toxic to aquatic organisms

S-phrases

(02)	(Keep out of the reach of children)
03/07	Keep container tightly closed in a cool place
14	Keep away from reducing agents/(strong) acids /(strong) bases and metals
26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
36/37/39	Wear suitable protective clothing gloves, and eye/face protection
(46)	(If swallowed, seek medical advice immediately and show this container or label)
50	Do not mix with peroxidation accelerator
61	Avoid release to the environment. Refer to special instructions/safety data sheets.

2.3 Other hazards:

CLP

Most organic solids may burn if strongly heated
Promotes combustion
Prolonged exposure: danger of damage to health

DSD/DPD

Most organic solids may burn if strongly heated
Promotes combustion
Prolonged exposure: danger of damage to health

SECTION 3: Composition/information on ingredients

3.1 Substances:

Not applicable

3.2 Mixtures:

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to DSD/DPD	Classification according to CLP	Note	Remark
dibenzoyl peroxide 01-2119511472-50	94-36-0 202-327-6	25%<C<55%	E; R3 O; R7 Xi; R36 R43 N; R50	Org. Perox. B; H241 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Acute 1; H400	(1)(2)(9)	Constituent
2,2' -oxybisethanol 01-2119457857-21	111-46-6 203-872-2	1%<C<10%	Xn; R22	Acute Tox. 4; H302 STOT RE 2; H373	(1)(2)(10)	Constituent
dibutyl maleate	105-76-0 203-328-4	1%<C<10%	Xn; R48/22 R43	STOT RE 2; H373 Skin Sens. 1; H317	(1)(10)	Constituent
2,6-di-tert-butyl-p-cresol	128-37-0 204-881-4	0.1%<C<2.5%	N; R50-53	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	(1)(2)	Constituent

(1) For R-phrases and H-statements in full: see heading 16
(2) Substance with a Community workplace exposure limit
(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006
(9) M-factor, see heading 16

SECTION 4: First aid measures

4.1 Description of first aid measures:

General:

Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact:

Wash immediately with lots of water. Soap may be used. Take victim to a doctor if irritation persists.

After eye contact:

Rinse immediately with plenty of water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. Consult a doctor/medical service if you feel unwell.

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

4.2.1 Acute symptoms

After inhalation:

No effects known.

After skin contact:

No effects known.

After eye contact:

Irritation of the eye tissue.

After ingestion:

No effects known.

4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1 Extinguishing media:

5.1.1 Suitable extinguishing media:

Preferably: quantities of water. Water spray. Polyvalent foam. ABC powder. Carbon dioxide. Sand/earth.

5.1.2 Unsuitable extinguishing media:

No unsuitable extinguishing media known.

5.2 Special hazards arising from the substance or mixture:

Upon combustion: CO and CO2 are formed. On heating: oxidation resulting in increased fire or explosion risk.

5.3 Advice for firefighters:

5.3.1 Instructions:

If exposed to fire cool the closed containers by spraying with water. Do not move the load if exposed to heat. Re-ignition is possible after the extinguishment. After extinguishing: flood seat of fire with plenty of water. Take account of environmentally hazardous firefighting water.

5.3.2 Special protective equipment for fire-fighters:

Gloves. Safety glasses. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

No naked flames.

6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

6.1.2 Protective equipment for emergency responders

Gloves. Safety glasses. Protective clothing.

Suitable protective clothing

See heading 8.2

6.2 Environmental precautions:

Contain leaking substance. Dam up the solid spill. Use appropriate containment to avoid environmental contamination. Prevent soil and water pollution. Prevent spreading in sewers.

6.3 Methods and material for containment and cleaning up:

Start with disposal only in the presence of experts. Scoop solid spill into closing containers. Carefully collect the spill/leftovers. Spill must not return in its original container. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4 Reference to other sections:

See heading 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1 Precautions for safe handling:

Keep away from naked flames/heat. Observe very strict hygiene - avoid contact. Keep container tightly closed. Remove contaminated clothing immediately. Do not discharge the waste into the drain.

7.2 Conditions for safe storage, including any incompatibilities:

7.2.1 Safe storage requirements:

Storage temperature: < 25 °C. Store in a cool area. Keep out of direct sunlight. Store in a dry area. Keep container in a well-ventilated place. Fireproof storeroom. Keep locked up. Unauthorized persons are not admitted. Keep only in the original container. Meet the legal requirements. Max. storage time: 1 year(s).

7.2.2 Keep away from:

Heat sources, ignition sources, Do not store with other substances, (strong) acids, (strong) bases, reducing agents, metals.

7.2.3 Suitable packaging material:

Stainless steel, polyethylene, polypropylene, glass.

7.2.4 Non suitable packaging material:

Iron, copper.

7.3 Specific end use(s):

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

The Netherlands

2,6-Di-tert-butyl-p-cresol (inhaleerbaar)	Time-weighted average exposure limit 8 h	5 mg/m³ (a.44)	Private occupational exposure limit value; a.44: inhalable
Dibenzoylperoxide	Time-weighted average exposure limit 8 h	5 mg/m³	Private occupational exposure limit value

Belgium

2,6-Di-tert-butyl-p-crésol (vapeur et aérosol)	Time-weighted average exposure limit 8 h	2 mg/m³	
Peroxyde de dibenzoyle	Time-weighted average exposure limit 8 h	5 mg/m³	

USA (TLV-ACGIH)

Benzoyl peroxide	Time-weighted average exposure limit 8 h	5 mg/m³	TLV - Adopted Value
Butylated hydroxytoluene (BHT)	Time-weighted average exposure limit 8 h	2 mg/m³ (IFV)	TLV - Adopted Value; (IFV): Inhalable fraction and vapor

Germany

2,2'-Oxydiethanol	Time-weighted average exposure limit 8 h	10 ppm	TRGS 900
	Time-weighted average exposure limit 8 h	44 mg/m³	TRGS 900
2,6-Di-tert-butyl-p-kresol	Time-weighted average exposure limit 8 h	10 mg/m³	TRGS 900
Dibenzoylperoxid	Time-weighted average exposure limit 8 h	5 mg/m³	TRGS 900

France

2,6-Di-tert-butyl-p-crésol	Time-weighted average exposure limit 8 h	10 mg/m³	VL: Valeur non réglementaire indicative
Peroxyde de dibenzoyle	Time-weighted average exposure limit 8 h	5 mg/m³	VL: Valeur non réglementaire indicative

UK

2,2'-Oxydiethanol	Time-weighted average exposure limit 8 h	23 ppm	Workplace exposure limit (EH40/2005)
	Time-weighted average exposure limit 8 h	101 mg/m³	Workplace exposure limit (EH40/2005)
2,6-Di-tert-butyl-p-cresol	Time-weighted average exposure limit 8 h	10 mg/m³	Workplace exposure limit (EH40/2005)
Dibenzoyl peroxide	Time-weighted average exposure limit 8 h	5 mg/m³	Workplace exposure limit (EH40/2005)

b) National biological limit values

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods

If applicable and available it will be listed below.

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 DNEL/PNEC values

DNEL - Workers

dibenzoyl peroxide

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects dermal	6.6 mg/kg bw/day	
	Long-term systemic effects inhalation	11.75 mg/m³	

2,2' -oxybisethanol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects dermal	106 mg/kg bw/day	
	Long-term local effects inhalation	60 mg/m³	

dibutyl maleate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Acute systemic effects dermal	24.2 mg/kg bw/day	
	Acute systemic effects inhalation	5.87 mg/m³	
	Acute local effects dermal	4.13 mg/cm²	
	Acute local effects inhalation	5.87 mg/m³	
	Long-term systemic effects dermal	0.42 mg/kg bw/day	
	Long-term systemic effects inhalation	5.87 mg/m³	
	Long-term local effects inhalation	4.12 mg/cm²	
	Long-term local effects dermal	5.87 mg/m³	

2,6-di-tert-butyl-p-cresol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects dermal	0.5 mg/kg bw/day	
	Long-term systemic effects inhalation	3.5 mg/m³	

DNEL - General population

dibenzoyl peroxide

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects dermal	3.3 mg/kg bw/day	
	Long-term systemic effects inhalation	2.9 mg/m³	
	Long-term systemic effects oral	1.65 mg/kg bw/day	

2,2' -oxybisethanol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects dermal	53 mg/kg bw/day	
	Long-term local effects inhalation	12 mg/m³	

dibutyl maleate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Acute -systemic effects oral	0.5 mg/kg bw/day	
	Long-term systemic effects oral	0.25 mg/kg bw/day	

2,6-di-tert-butyl-p-cresol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects dermal	0.25 mg/kg bw/day	
	Long-term systemic effects inhalation	0.86 mg/m³	
	Long-term systemic effects oral	0.25 mg/kg bw/day	

PNEC

dibenzoyl peroxide

Compartments	Value	Remark
Fresh water	0.602 µg/l	
Marine water	0.0602 µg/l	
Aqua (intermittent releases)	0.602 µg/l	
STP	0.35 mg/l	
Fresh water sediment	0.338 mg/kg sediment dw	
Marine water sediment	0.0338 mg/kg sediment dw	
Soil	0.0758 mg/kg soil dw	
Oral	6.67 mg/kg food	

2,2' -oxybisethanol

Compartments	Value	Remark
Fresh water	10 mg/l	
Marine water	1 mg/l	
Fresh water sediment	20.9 mg/kg sediment dw	
Soil	1.53 mg/kg sediment dw	
STP	10 mg/l	
Aqua (intermittent releases)	199.5 mg/l	

dibutyl maleate

Compartments	Value	Remark
Fresh water	0.0012 mg/l	
Marine water	0.00012 mg/l	
Aqua (intermittent releases)	0.012 mg/l	
STP	4.886 mg/l	
Fresh water sediment	0.06 mg/kg sediment dw	
Marine water sediment	0.006 mg/kg sediment dw	
Soil	0.0115 mg/kg soil dw	
Oral	6.33 mg/kg food	

2,6-di-tert-butyl-p-cresol

Compartments	Value	Remark
Fresh water	0.199 µg/l	
Marine water	0.0199 µg/l	
Aqua (intermittent releases)	1.99 µg/l	
STP	0.17 mg/l	
Fresh water sediment	99.6 µg/kg sediment dw	
Marine water sediment	9.96 µg/kg sediment dw	
Soil	47.69 µg/kg soil dw	
Oral	8.33 mg/kg food	

8.1.5 Control banding

If applicable and available it will be listed below.

8.2 Exposure controls:

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment

Observe very strict hygiene - avoid contact. Keep container tightly closed. Do not eat, drink or smoke during work.

a) Respiratory protection:

Wear gas mask with filter type A if conc. in air > exposure limit.

b) Hand protection:

Gloves.

- materials (good resistance)

Neoprene, synthetic rubber.

c) Eye protection:

Safety glasses.

d) Skin protection:

Protective clothing.

8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical form	Paste
Odour	Mild odour
Odour threshold	No data available
Colour	Red
Particle size	Not applicable
Explosion limits	No data available
Flammability	Heating may cause a fire.
Log Kow	Not applicable (mixture)
Dynamic viscosity	No data available
Kinematic viscosity	No data available
Melting point	Not applicable
Boiling point	Not applicable
Flash point	34 °C
Evaporation rate	No data available
Relative vapour density	No data available
Vapour pressure	No data available
Solubility	water ; 20 °C ; insoluble
Relative density	No data available
Decomposition temperature	50 °C
Auto-ignition temperature	No data available
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
pH	No data available

Physical hazards

Organic peroxide

9.2 Other information:

SADT	50 °C
Surface tension	No data available
Absolute density	No data available

SECTION 10: Stability and reactivity

10.1 Reactivity:

Promotes combustion. No data available.

10.2 Chemical stability:

Stable under normal conditions.

10.3 Possibility of hazardous reactions:

Reacts violently with many compounds e.g.: with (strong) reducers, with combustible materials, with (some) acids/bases and with (some) metals.

10.4 Conditions to avoid:

Keep away from naked flames/heat.

10.5 Incompatible materials:

Do not store with other substances, (strong) acids, (strong) bases, reducing agents, metals, iron, copper.

10.6 Hazardous decomposition products:

Upon combustion: CO and CO2 are formed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

11.1.1 Test results

Acute toxicity

Hardener Metal Plastic

No (test)data on the mixture available

dibenzoyl peroxide

Route of exposure	Parameter	Method	Value	Exposure time	Species	Gender	Value determination
Oral	LD50	Equivalent to OECD 401	>5000 mg/kg bw		Rat	Male	Weight of evidence
Inhalation (dust)	LC0	Equivalent to OECD 403	24.3 mg/m³ air	4 h	Rat	Male	Experimental value

2,2' -oxybisethanol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Gender	Value determination
Oral	LD50		1120 mg/kg bw		Human		

dibutyl maleate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Gender	Value determination
Oral	LD50		>=3730 mg/kg bw		Rat	Male	Experimental value
Dermal	LD50	OECD 402	> 2000 mg/kg bw	24 h	Rat	Male/female	Experimental value
Dermal	LD50		10000 mg/kg		Rabbit		Literature study
Inhalation (aerosol)	LC50	OECD 403	> 5000 mg/m³ air	4 h	Rat	Male/female	Experimental value

2,6-di-tert-butyl-p-cresol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Gender	Value determination
Oral	LD50	OECD 401	>6000 mg/kg bw		Rat	Male/female	Experimental value
Dermal	LD50	OECD 402	>2000 mg/kg bw	24 h	Rat	Male/female	Experimental value

Judgement is based on the relevant ingredients

Conclusion

Low acute toxicity by the dermal route

Low acute toxicity by the oral route

Low acute toxicity by the inhalation route

Corrosion/irritation

Hardener Metal Plastic

No (test)data on the mixture available

dibenzoyl peroxide

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination
Eye	Highly irritating	Equivalent to OECD 405		24; 48; 72 hours	Rabbit	Expert judgement
Skin	Not irritating	Equivalent to OECD 404	4 h	24; 72 hours	Rabbit	Experimental value

2,2' -oxybisethanol

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination
Eye	Not irritating	Range Finder study		24 hours	Rabbit	Experimental value
Skin	Not irritating	Equivalent to OECD 405		6 weeks	Rabbit	Experimental value

dibutyl maleate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination
Eye	Slightly irritating	OECD 405		24; 48; 72 hours	Rabbit	Experimental value
Skin	Slightly irritating	Human observation			Human	Literature study

2,6-di-tert-butyl-p-cresol

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination
Eye	Not irritating	OECD 405		24; 72 hours	Rabbit	Experimental value
Skin	Not irritating	OECD 404		24; 72 hours	Rabbit	Experimental value

Classification is based on the relevant ingredients

Conclusion

Causes serious eye irritation.

Respiratory or skin sensitisation

Hardener Metal Plastic

No (test)data on the mixture available

dibenzoyl peroxide

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Gender	Value determination
Skin	Sensitizing	Equivalent to OECD 429	3 day(s)		Mouse	Female	Experimental value
	Sensitizing				Human		Literature study

2,2' -oxybisethanol

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Gender	Value determination
Skin	Not sensitizing	OECD 406		24 hours	Guinea pig	Female	Experimental value

dibutyl maleate

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Gender	Value determination
Skin	Sensitizing	Equivalent to OECD 406	48 h	24; 48 hours	Guinea pig	Female	Experimental value

2,6-di-tert-butyl-p-cresol

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Gender	Value determination
Skin	Not sensitizing	Guinea pig maximisation test		24; 48 hours	Guinea pig	Male/female	Experimental value
Skin	Not sensitizing	Human observation			Human	Male/female	Experimental value

Classification is based on the relevant ingredients

Conclusion

May cause an allergic skin reaction.

Specific target organ toxicity

Hardener Metal Plastic

No (test)data on the mixture available

dibenzoyl peroxide

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Gender	Value determination
Oral	NOEL	OECD 422	500 mg/kg bw/day		No effect		Rat	Male	Experimental value
Oral	NOEL	OECD 422	1000 mg/kg bw/day		No effect		Rat	Female	Experimental value

2,2' -oxybisethanol

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Gender	Value determination
Oral	NOAEL	Subchronic toxicity test	100 mg/kg bw/day	Kidney	Overall effects	225 day(s)	Rat	Male/female	Experimental value
Dermal	NOAEL	OECD 410	8000 mg/kg bw/day	Kidney	Histopathology	4 week(s)	Dog	Male	Read-across

dibutyl maleate

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Gender	Value determination
Oral	LOAEL	OECD 408	30 mg/kg bw/day	Kidney	Affection of the renal tissue	90 day(s)	Rat	Male/female	Experimental value

2,6-di-tert-butyl-p-cresol

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Gender	Value determination
Oral (diet)	NOAEL		25 mg/kg bw/day		No effect		Rat	Male/female	Experimental value

Classification is based on the relevant ingredients

Conclusion

May cause damage to organs through prolonged or repeated exposure if inhaled.

Mutagenicity (in vitro)

Hardener Metal Plastic

No (test)data on the mixture available

dibenzoyl peroxide

Result	Method	Test substrate	Effect	Value determination
Negative	OECD 476	Mouse (lymphoma L5178Y cells)	No effect	Experimental value
Negative	Ames test	Bacteria (S.typhimurium)	No effect	Experimental value

2,2' -oxybisethanol

Result	Method	Test substrate	Effect	Value determination
Negative	Equivalent to OECD 473	Chinese hamster ovary (CHO)		Experimental value

dibutyl maleate

Result	Method	Test substrate	Effect	Value determination
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S.typhimurium)		Experimental value
Positive	OECD 476	Chinese hamster ovary (CHO)	Chromosome aberrations	Experimental value

2,6-di-tert-butyl-p-cresol

Result	Method	Test substrate	Effect	Value determination
Negative	Ames test	Bacteria (S.typhimurium)	No effect	Experimental value
Negative	Equivalent to OECD 473	Chinese hamster ovary (CHO)	No effect	Experimental value
Negative	Equivalent to OECD 479	Chinese hamster ovary (CHO)	No effect	Experimental value

Mutagenicity (in vivo)

Hardener Metal Plastic

No (test)data on the mixture available

dibenzoyl peroxide

Result	Method	Exposure time	Test substrate	Gender	Organ	Value determination
Negative		8 week(s)	Mouse	Male/female		Experimental value

2,2' -oxybisethanol

Result	Method	Exposure time	Test substrate	Gender	Organ	Value determination
Negative	OECD 474		Mouse	Male		Experimental value

dibutyl maleate

Result	Method	Exposure time	Test substrate	Gender	Organ	Value determination
Negative	OECD 474		Mouse	Male/female		Experimental value

2,6-di-tert-butyl-p-cresol

Result	Method	Exposure time	Test substrate	Gender	Organ	Value determination
Negative	Chromosome aberration assay	8 weeks (daily)	Mouse	Male		Experimental value
Negative	Micronucleus test		Mouse	Female	Bone marrow	Experimental value

Carcinogenicity

Hardener Metal Plastic

No (test)data on the mixture available

dibenzoyl peroxide

Route of exposure	Parameter	Method	Value	Exposure time	Species	Gender	Value determination	Organ	Effect
Dermal	NOEL	Not further determined	40 mg/animal	2 year(s)	Mouse	Male/female	Weight of evidence		No effect
Oral	NOAEL	Not determined	2800 mg/kg bw/day	120 week(s)	Rat	Male/female	Weight of evidence		No adverse systemic effects
Oral	NOAEL	Not determined	2800 mg/kg bw/day	80 week(s)	Mouse	Male/female	Weight of evidence		No adverse systemic effects

2,2' -oxybisethanol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Gender	Value determination	Organ	Effect
Oral	NOAEL	Not further determined	1160 - 1210 mg/kg bw/day	108 week(s)	Rat	Male/female	Experimental value		

2,6-di-tert-butyl-p-cresol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Gender	Value determination	Organ	Effect
Oral		Not further determined		104 week(s)	Rat	Male/female	Experimental value		No carcinogenic effect

Reproductive toxicity

Hardener Metal Plastic

No (test)data on the mixture available

dibenzoyl peroxide

	Parameter	Method	Value	Exposure time	Species	Gender	Effect	Organ	Value determination
Developmental toxicity	NOAEL (F1)	OECD 422	500 mg/kg bw/day		Rat	Male/female	No effect		Experimental value
Effects on fertility	NOAEL (P)	OECD 422	1000 mg/kg bw/day		Rat	Male/female	No effect		Experimental value

2,2' -oxybisethanol

	Parameter	Method	Value	Exposure time	Species	Gender	Effect	Organ	Value determination
Developmental toxicity	NOEL	Equivalent to OECD 414	1 ml/kg/day	6 -15 days (gestation, daily)	Rat				Experimental value
	NOAEL	OECD 414	1000 mg/kg bw/day	7 - 19 days (gestation, daily)	Rabbit		Overall effects		Experimental value
Effects on fertility	NOAEL	Fertility Assessment	3060 mg/kg bw/day	98 day(s)	Mouse	Male/female	General effects		Experimental value
	NOAEL	Investigation reproductive capacity	2200 mg/kg bw/day	> 12 week(s)	Rat	Male/female	General effects		Experimental value

dibutyl maleate

	Parameter	Method	Value	Exposure time	Species	Gender	Effect	Organ	Value determination
Effects on fertility	NOEL	OECD 422	95 mg/kg bw/day	41 - 46 day(s)	Rat	Male/female	No effect		Experimental value

2,6-di-tert-butyl-p-cresol

	Parameter	Method	Value	Exposure time	Species	Gender	Effect	Organ	Value determination
Developmental toxicity	NOAEL	Equivalent to OECD 414	375 mg/kg bw/day		Rat	Female	No effect	Foetus	Experimental value
Maternal toxicity	NOAEL	Equivalent to OECD 414	93.5 mg/kg bw/day		Rat	Female	No effect		Experimental value
Effects on fertility	NOAEL		500 mg/kg bw/day		Rat	Female	No effect		Experimental value
	NOAEL		100 mg/kg bw/day		Rat	Male	No effect		Experimental value

Judgement is based on the relevant ingredients

Conclusion CMR

Not classified for carcinogenicity

Not classified for mutagenic or genotoxic toxicity

Not classified for reprotoxic or developmental toxicity

Toxicity other effects

Hardener Metal Plastic

No (test)data on the mixture available

Chronic effects from short and long-term exposure

Hardener Metal Plastic

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Skin rash/inflammation.

SECTION 12: Ecological information

12.1 Toxicity:

Hardener Metal Plastic

No (test)data on the mixture available

dibenzoyl peroxide

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	0.0602 mg/l	96 h	Oncorhynchus mykiss	Semi-static system	Fresh water	Experimental value; GLP
Acute toxicity invertebrates	EC50	OECD 202	0.11 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	EC50	OECD 201	0.0711 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP
Toxicity aquatic micro-organisms	EC50	OECD 209	35 mg/l	30 minutes	Activated sludge	Static system	Fresh water	Experimental value; GLP

2,2' -oxybisethanol

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	Other	75200 ppm	96 h	Pimephales promelas	Flow-through system		Experimental value
Acute toxicity invertebrates	EC50	DIN 38412-11	>10000 mg/l	24 h	Daphnia magna	Static system	Fresh water	Experimental value
Toxicity algae and other aquatic plants	NOEC	Equivalent to OECD 201	2700 mg/l	8 day(s)	Scenedesmus quadricauda	Static system	Fresh water	Experimental value
Long-term toxicity fish	NOEC	EPA 600/4-90/027	15380 mg/l	7 day(s)	Pimephales promelas			Read-across
Long-term toxicity aquatic invertebrates	NOEC	EPA 600/4-90/027	8590 mg/l	7 day(s)	Ceriodaphnia sp.		Fresh water	Read-across
Toxicity aquatic micro-organisms	EC20	ISO 8192	>1995 mg/l	30 minutes		Static system	Fresh water	Experimental value

dibutyl maleate

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	1.2 mg/l	96 h	Salmo gairdneri	Static system	Fresh water	Experimental value; GLP
Acute toxicity invertebrates	EC50	OECD 202	21 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	EC50	OECD 201	6.2 mg/l	72 h	Scenedesmus subspicatus	Static system	Fresh water	Experimental value; Biomass
Toxicity aquatic micro-organisms	EC50	OECD 209	488.6 mg/l	3 h	Activated sludge	Static system	Fresh water	Experimental value; GLP
	EC10		1003 mg/l	6 h	Pseudomonas putida			Literature study

2,6-di-tert-butyl-p-cresol

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC0	EU Method C.1	>= 0.57 mg/l	96 h	Brachydanio rerio	Semi-static system	Fresh water	Experimental value; GLP
	LC50	ECOSAR v1.00	0.199 mg/l	96 h	Pisces			QSAR
Acute toxicity invertebrates	EC50	OECD 202	0.48 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
	NOEC	OECD 202	0.15 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	EC50	ECOSAR v1.00	0.758 mg/l	96 h	Algae			Calculated value
Long-term toxicity fish	NOEC	ECOSAR v1.00	0.041 mg/l		Pisces			Calculated value; Chronic
Long-term toxicity aquatic invertebrates	NOEC	OECD 202	0.316 mg/l	21 day(s)	Daphnia magna			Experimental value; GLP
Toxicity aquatic micro-organisms	EC50		1.7 mg/l	24 h	Tetrahymena pyriformis	Static system	Fresh water	Experimental value

Classification is based on the relevant ingredients

Conclusion

Highly toxic to aquatic organisms

Very toxic to aquatic life.

12.2 Persistence and degradability:

dibenzoyl peroxide

Biodegradation water

Method	Value	Duration	Value determination
OECD 301C: Modified MITI Test (I)	84 %	21 day(s)	Experimental value
OECD 301D: Closed Bottle Test	68 %	28 day(s)	Experimental value

Half-life water (t1/2 water)

Method	Value	Primary degradation/mineralisation	Value determination
OECD 111: Hydrolysis as a function of pH	< 1 day(s)	Primary degradation	Experimental value

2,2' -oxybisethanol

Biodegradation water

Method	Value	Duration	Value determination
OECD 301A: DOC Die-Away Test	90/100 %	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
SRC AOP v1.91	17.2 h	500000 /cm³	Calculated value

dibutyl maleate

Biodegradation water

Method	Value	Duration	Value determination
EU Method C.4	35 %	19 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
Other	2 day(s)	500000 /cm³	QSAR

Half-life water (t1/2 water)

Method	Value	Primary degradation/mineralisation	Value determination
OECD 111: Hydrolysis as a function of pH	96.3 h	Primary degradation	Experimental value

2,6-di-tert-butyl-p-cresol

Biodegradation water

Method	Value	Duration	Value determination
OECD 301C: Modified MITI Test (I)	4.5 %	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	7.02 h	1.5E6 /cm³	Calculated value

Biodegradation soil

Method	Value	Duration	Value determination
	63.82 %	1 day(s)	Experimental value

Half-life water (t1/2 water)

Method	Value	Primary degradation/mineralisation	Value determination
BIOWIN 4.10	37.5 day(s)	Primary degradation	Calculated value

Half-life soil (t1/2 soil)

Method	Value	Primary degradation/mineralisation	Value determination
EPI Suite	75 day(s)	Primary degradation	Calculated value

Half-life air (t1/2 air)

Method	Value	Primary degradation/mineralisation	Value determination
AOPWIN v1.92	7.018 h	Primary degradation	Calculated value

Conclusion

Contains non readily biodegradable component(s)

12.3 Bioaccumulative potential:

Hardener Metal Plastic

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

dibenzoyl peroxide

Log Kow

Method	Remark	Value	Temperature	Value determination
		3.71		QSAR
OECD 117		3.2	22 °C	Experimental value

2,2' -oxybisethanol

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		100	3 day(s)	Leuciscus melanotus	Experimental value

Log Kow

Method	Remark	Value	Temperature	Value determination
		-1.98		

dibutyl maleate

BCF other aquatic organisms

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFBAF v3.00	81.34			QSAR

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 117		3.39	25 °C	Experimental value

2,6-di-tert-butyl-p-cresol

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF	OECD 305	230 - 2500	56 day(s)	Cyprinus carpio	Experimental value

Log Kow

Method	Remark	Value	Temperature	Value determination
		5.1		Experimental value

Conclusion

Contains bioaccumulative component(s)

12.4 Mobility in soil:

dibenzoyl peroxide

(log) Koc

Parameter	Method	Value	Value determination
log Koc	OECD 121	3.8	Experimental value

2,2' -oxybisethanol

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v1.66	0	Calculated value

Volatility (Henry's Law constant H)

Value	Method	Temperature	Remark	Value determination
0.000206 Pa.m³/mol	SRC HENRYWIN v3.10	25 °C		QSAR

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level I	0.75 %		0 %	0 %	99.25 %	QSAR

dibutyl maleate

(log) Koc

Parameter	Method	Value	Value determination
Koc	SRC PCKOCWIN v2.0	473	QSAR
log Koc	SRC PCKOCWIN v2.0	2.675	QSAR

Volatility (Henry's Law constant H)

Value	Method	Temperature	Remark	Value determination
0.3563 Pa.m³/mol	Other	20 °C		Calculated value

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	1.8 %		0.14 %	70.2 %	27.9 %	Calculated value

2,6-di-tert-butyl-p-cresol

(log) Koc

Parameter	Method	Value	Value determination
Koc	PCKOCWIN v1.66	23030	Calculated value
log Koc	PCKOCWIN v1.66	4.362	Calculated value

Volatility (Henry's Law constant H)

Value	Method	Temperature	Remark	Value determination
8.92E-5 atm m³/mol	SRC HENRYWIN v3.10			Calculated value

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	0.37 %		30.4 %	58.5 %	10.7 %	Calculated value

Conclusion

Contains component(s) with potential for mobility in the soil

Contains component(s) that adsorb(s) into the soil

12.5 Results of PBT and vPvB assessment:

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

12.6 Other adverse effects:

Hardener Metal Plastic

Global warming potential (GWP)

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EC) No 842/2006)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

2,2' -oxybisethanol

Ground water

Ground water pollutant

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1 Waste treatment methods:

13.1.1 Provisions relating to waste

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).
16 09 03* (oxidising substances: peroxides, for example hydrogen peroxide). Depending on branch of industry and production process, also other waste codes may be applicable. Hazardous waste according to Directive 2008/98/EC.

13.1.2 Disposal methods

Incinerate under surveillance with energy recovery. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Do not discharge into the sewer. Do not discharge into surface water.

13.1.3 Packaging/Container

Waste material code packaging (Directive 2008/98/EC).
15 01 10* (packaging containing residues of or contaminated by dangerous substances).

SECTION 14: Transport information

Road (ADR)

14.1 UN number:

UN number	3269

14.2 UN proper shipping name:

Proper shipping name	Polyester resin kit

14.3 Transport hazard class(es):

Hazard identification number	
Class	3
Classification code	F3

14.4 Packing group:

Packing group	III
Labels	3

14.5 Environmental hazards:

Environmentally hazardous substance mark	yes

14.6 Special precautions for user:

Special provisions	236
Special provisions	340
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

Rail (RID)

14.1 UN number:

UN number	3269

14.2 UN proper shipping name:

Proper shipping name	Polyester resin kit

14.3 Transport hazard class(es):

Hazard identification number	33
Class	3
Classification code	F3

14.4 Packing group:

Packing group	III
Labels	3

14.5 Environmental hazards:

Environmentally hazardous substance mark	yes

14.6 Special precautions for user:

Special provisions	236
Special provisions	340
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

Inland waterways (ADN)

14.1 UN number:

UN number	3269

14.2 UN proper shipping name:

Proper shipping name	Polyester resin kit

14.3 Transport hazard class(es):

Class	3
Classification code	F3

14.4 Packing group:

Packing group	III
Labels	3

14.5 Environmental hazards:

Environmentally hazardous substance mark	yes

14.6 Special precautions for user:

Special provisions	236
Special provisions	340
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

Sea (IMDG/IMSBC)

14.1 UN number:

UN number	3269

14.2 UN proper shipping name:

Proper shipping name	Polyester resin kit

14.3 Transport hazard class(es):

Class	3

14.4 Packing group:

Packing group	III
Labels	3

14.5 Environmental hazards:

Marine pollutant	P
Environmentally hazardous substance mark	yes

14.6 Special precautions for user:

Special provisions	236
Special provisions	340

Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

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

Annex II of MARPOL 73/78	Not applicable

Air (ICAO-TI/IATA-DGR)

14.1 UN number:

UN number	3269

14.2 UN proper shipping name:

Proper shipping name	Polyester resin kit

14.3 Transport hazard class(es):

Class	3

14.4 Packing group:

Packing group	III
Labels	3

14.5 Environmental hazards:

Environmentally hazardous substance mark	yes

14.6 Special precautions for user:

Special provisions	A66
Special provisions	A163
Passenger and cargo transport: limited quantities: maximum net quantity per packaging	5 kg

SECTION 15: Regulatory information

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

European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
5-10 %	

REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
· 2,2' -oxybisethanol · dibutyl maleate	Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1.	1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects,2. Articles not complying with paragraph 1 shall not be placed on the market.3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: — can be used as fuel in decorative oil lamps for supply to the general public, and, — present an aspiration hazard and are labelled with R65 or H304,4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met: a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: “Keep lamps filled with this liquid out of the reach of children”; and, by 1 December 2010, “Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life- threatening lung damage”; b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: “Just a sip of grill lighter may lead to life threatening lung damage”; c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public.7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.’

Reference legislation

See column 1: 3.

National legislation The Netherlands

Hardener Metal Plastic

Waste identification (the Netherlands)	LWCA (the Netherlands): KGA category 06
Waterbezwaarlijkheid	5

National legislation Germany

Hardener Metal Plastic

WGK	1; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4)

dibenzoyl peroxide

TA-Luft	TA-Luft Klasse 5.2.5/I
MAK 8-Stunden-Mittelwert mg/m³	Dibenzoylperoxid; 5 mg/m³; gemessen als einatembare Fraktion (vgl. Abschn. Vd) S. 191)

2,2' -oxybisethanol

TA-Luft	TA-Luft Klasse 5.2.5/I
Schwangerschaft Gruppe	C
MAK 8-Stunden-Mittelwert ppm	Diethylenglykol; 10 ppm
MAK 8-Stunden-Mittelwert mg/m³	Diethylenglykol; 44 mg/m³

dibutyl maleate

TA-Luft	TA-Luft Klasse 5.2.5/I

2,6-di-tert-butyl-p-cresol

MAK - Krebserzeugend Kategorie	4
TA-Luft	TA-Luft Klasse 5.2.5/I
Schwangerschaft Gruppe	C
MAK 8-Stunden-Mittelwert mg/m³	Butylhydroxytoluol (BHT); 10 mg/m³; gemessen als einatembare Fraktion (vgl. Abschn. Vd) S. 191)

National legislation France

Hardener Metal Plastic

No data available

National legislation Belgium

Hardener Metal Plastic

No data available

15.2 Chemical safety assessment:

No chemical safety assessment has been conducted.

SECTION 16: Other information

Full text of any R-phrases referred to under headings 2 and 3:

R03 Extreme risk of explosion by shock, friction, fire or other sources of ignition
R07 May cause fire
R22 Harmful if swallowed
R36 Irritating to eyes
R43 May cause sensitisation by skin contact
R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed
R50 Very toxic to aquatic organisms
R53 May cause long-term adverse effects in the aquatic environment

Full text of any H-statements referred to under headings 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.
H373 May cause damage to organs through prolonged or repeated exposure if swallowed.
H373 May cause damage to organs through prolonged or repeated exposure.
H373 May cause damage to the kidneys through prolonged or repeated exposure if swallowed.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

(*) = INTERNAL CLASSIFICATION BY BIG

PBT-substances = persistent, bioaccumulative and toxic substances

DSD Dangerous Substance Directive

DPD Dangerous Preparation Directive
CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

M-factor

dibenzoyl peroxide	10	Acute	BIG
2,6-di-tert-butyl-p-cresol	1	Acute	BIG

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Old versions must be destroyed. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.