# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

# **MEKP**



Version 2 Revision Date 10.03.2020 Print Date 13.11.2020 GB / EN

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifier

Trade name : MEKP

UFI : 2U4G-J9EA-W20M-80KG

REACH Registration Number :

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

Use of the : Specific use(s): Curing agent

Substance/Mixture

1.3 Details of the supplier of the safety data sheet

Company : Easy Composites Ltd

Unit 39 Park Hall Business Village,

Longton,

Stoke-on-Trent,

ST3 5XA

Telephone 01782 454499

E-mail address sales@easycomposites.com

1.4 Emergency telephone number

Emergency telephone

01782 454499 (office hours only)

number

# **SECTION 2: HAZARDS IDENTIFICATION**

#### 2.1 Classification of the substance or mixture

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

Organic peroxides, D, H242 Acute toxicity, 4, H302 Acute toxicity, 4, H332 Skin corrosion, 1B, H314 Serious eye damage, 1, H318

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

Version 2

#### 2.2 Label elements

# Labelling (REGULATION (EC) No 1272/2008)

Pictogram







Signal word : Danger

Hazard statements : H242 Heating may cause a fire.

H302 + H332 Harmful if swallowed or if inhaled.
H314 Causes severe skin burns and eye

damage.

Precautionary statements : **Prevention:** 

P210 Keep away from heat, hot surfaces,

sparks, open flames and other ignition

sources. No smoking.

P234 Keep only in original packaging.
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.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously

with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a

POISON CENTER/doctor.

P370 + P378 In case of fire: Use water spray, alcohol-

resistant foam, dry chemical or carbon

dioxide to extinguish.

# Hazardous components which must be listed on the label:

Methyl ethyl ketone peroxide; Reaction mass of butane- 1338-23-2,2-diyl dihydroperoxide and di-sec-butylhexaoxidane

# 2.3 Other hazards

No further data available.

PBT and vPvB assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

# **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### 3.2 Mixtures

Pure substance/mixture : Mixture

#### Hazardous substance

Chemical name	PBT vPvB OEL	CAS-No. EC-No. REACH No.	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
Methyl ethyl ketone peroxide;Reaction mass of butane- 2,2-diyl dihydroperoxide and di-sec- butylhexaoxidane		1338-23-4 700-954-4 01-2119514691-43	Org. Perox. A; H240 Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Corr. 1B; H314 Eye Dam. 1; H318	30 - 37
Methyl ethyl ketone		78-93-3 201-159-0	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	1 - 5

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

# REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

Status : Not applicable

# **SECTION 4: FIRST AID MEASURES**

# 4.1 Description of first aid measures

General advice : Immediate medical attention is required.

Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

If inhaled : If breathed in, move person into fresh air.

Consult a physician after significant exposure.

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

Rinse immediately with plenty of water.

Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with

difficulty.

In case of eye contact : Rinse with plenty of water.

Get medical attention immediately. Continue to rinse during

transport.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

Small amounts splashed into eyes can cause irreversible

tissue damage and blindness.

If swallowed : Clean mouth with water and drink afterwards plenty of water.

Never give anything by mouth to an unconscious person.

Take victim immediately to hospital.

Do not induce vomiting! May cause chemical burns in mouth

and throat.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : The symptoms and effects are as expected from the hazards

as shown in section 2. No specific product related symptoms

are known.

Risks : Harmful if swallowed or if inhaled.

Causes serious eye damage.

Causes severe burns.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

# **SECTION 5: FIREFIGHTING MEASURES**

# 5.1 Extinguishing media

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

carbon dioxide.

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

Specific hazards during firefighting / Specific hazards

firefighting / Specific hazards arising from the chemical

: CAUTION: reignition may occur.

Supports combustion.

Water spray may be ineffective unless used by experienced

firefighters.

Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous decomposition products formed under fire

conditions.

Combustion products : Fire will produce smoke containing hazardous combustion

products (see section 10).

#### 5.3 Advice for firefighters

Special protective equipment

for firefighters

Further information

: In the event of fire, wear self-contained breathing apparatus.

: Use water spray to cool unopened containers.

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.

# **SECTION 6: ACCIDENTAL RELEASE MEASURES**

# 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

Wear respiratory protection.

Ensure adequate ventilation. Remove all sources of ignition.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Emergency measures on

accidental release

Evacuate personnel to safe areas.

Only qualified personnel equipped with suitable protective

equipment may intervene.

Prevent unauthorised persons entering the zone.

### 6.2 Environmental precautions

**Environmental precautions** 

: Prevent product from entering drains.

If the product contaminates rivers and lakes or drains inform

respective authorities.

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

Methods for cleaning up / Methods for containment

: Soak up with inert absorbent material and dispose of as

hazardous waste. Keep wetted with water. Confinement must be avoided.

Never return spills in original containers for re-use.

#### 6.4 Reference to other sections

For disposal considerations see section 13. For personal protection see section 8.

# **SECTION 7: HANDLING AND STORAGE**

# 7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.

Avoid formation of aerosol.

Do not breathe vapours or spray mist.

Smoking, eating and drinking should be prohibited in the

application area.

Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national

regulations.

Advice on protection against

fire and explosion

Use explosion protected equipment.

Keep away from sources of ignition - No smoking.

No sparking tools should be used.

Keep away from reducing agents (e.g. amines), acids, alkalies and heavy metal compounds (e.g. accelerators, driers, metal

soaps).

Do not cut or weld on or near this container even when empty.

Keep away from combustible material.

Temperature class : It is recommended to use electrical equipment of temperature

group T3. However, autoignition can never be excluded.

# 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage

: No smoking.

areas and containers Keep in a well-ventilated place.

Electrical installations / working materials must comply with

the technological safety standards. Keep only in original container. Store away from other materials.

Maximum storage

: 25 °C

temperature: Other data

: Maximum storage temperature is for quality only.

7.3 Specific end use(s)

Specific use(s) : Consult the technical guidelines for the use of this

substance/mixture.

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

# 8.1 Control parameters

Components with workplace control parameters

Components	CAS-No.	Va	lue	Control parameters	Update	Basis	Form of exposure
Dimethyl phthalate	131-11-3	TWA	<b>\</b>	5 mg/m3	2005-04-06	GB EH40	
		STE	L	10 mg/m3	2005-04-06	GB EH40	
Methyl ethyl ketone peroxide;Reaction mass of butane-2,2- diyl dihydroperoxide and di-sec- butylhexaoxidane	1338-23-4	STE	L	0.2 ppm 1.5 mg/m3	2005-04-06	GB EH40	
Methyl ethyl ketone	78-93-3	TWA	٨	200 ppm 600 mg/m3	2000-06-16	2000/39/EC	
	Further information	:	Indic	ative	•	-	<u> </u>
		STE	L	300 ppm 900 mg/m3	2000-06-16	2000/39/EC	
	Further information	:	Indic	ative	1		
		TWA	1	200 ppm 600 mg/m3	2005-04-06	GB EH40	
	Further information	:		Can be absorbed throughich there are concer ity.			
		STE	L	300 ppm 899 mg/m3	2005-04-06	GB EH40	
	Further information	:		Can be absorbed throughich there are concerity.			

ACGIH: American Conference of Governmental Industrial Hygienists

AGW: Arbeitsplatzgrenzwert
BEI: Biological Exposure Index

MAC: Maximum Allowable Concentration

NIOSH: National Institute for Occupational Safety and Health

OEL: Occupational exposure limit.

STEL: Short term exposure limit

TRGS: Technische Regel für Gefahrstoffe

TWA: Time Weighted Average

# Occupational exposure limits of decomposition products

Decomposition products	CAS-No.	Va	lue	Control parameters	Update	Basis	Form of exposure
Formic acid	64-18-6, 64- 18-6	TWA	١.	5 ppm 9 mg/m3	2006-02-09	2006/15/EC	
	Further information	:	Indic	ative			
		TWA		5 ppm 9.6 mg/m3	2005-04-06	GB EH40	
	Further information	:		Where no specific sho ong-term exposure lin			ure three times
Acetic acid	64-19-7, 64- 19-7	TWA		10 ppm 25 mg/m3	2017-02-01	2017/164/EU	
	Further information	:	Indic	ative			
		STE	L	20 ppm 50 mg/m3	2017-02-01	2017/164/EU	
	Further information	:	Indic	ative			
		STE	L	20 ppm 50 mg/m3	2018-08-01	GB EH40	
		TWA	١	10 ppm 25 mg/m3	2018-08-01	GB EH40	
Propionic acid	79-09-4, 79- 09-4	TWA	٨	10 ppm 31 mg/m3	2000-06-16	2000/39/EC	
	Further information	:	Indic	ative	•		
		STE	L	20 ppm 62 mg/m3	2000-06-16	2000/39/EC	
	Further information	:	Indic	ative	•		
		TWA	À	10 ppm 31 mg/m3	2005-04-06	GB EH40	
		STE	L	15 ppm 46 mg/m3	2005-04-06	GB EH40	
Methyl ethyl ketone	78-93-3, 78- 93-3	TWA	١	200 ppm 600 mg/m3	2000-06-16	2000/39/EC	
	Further information	:	Indic	ative			
		STE	L	300 ppm 900 mg/m3	2000-06-16	2000/39/EC	
	Further information	:	Indic	ative			
		TWA	À	200 ppm 600 mg/m3	2005-04-06	GB EH40	
	Further information	:		Can be absorbed thro hich there are conce ity.			
		STE	L	300 ppm 899 mg/m3	2005-04-06	GB EH40	
	Further	:	Sk: (	Can be absorbed thro	ough the skin. The	assigned substan	ces are those

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toxicity.	ir	information	for which there are concerns that dermal absorption will lead to systemic toxicity.
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# **Biological occupational exposure limits**

Substance name	CAS-No.	Control parameters	Sampling time	Update
Methyl ethyl ketone	78-93-3	butan-2-one: 70 micromol per litre (Urine)	After shift	2011-12-18

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006

Substance name	End Use	Exposure routes	Potential health effects	Value
Methyl ethyl ketone peroxide;Reaction mass of butane-2,2-diyl dihydroperoxide and di-sec-butylhexaoxidane	Consumers	Skin contact	Long-term systemic effects	0.54 mg/kg
	Consumers	Inhalation	Long-term systemic effects	0.41 mg/m3
	Consumers	Ingestion	Long-term systemic effects	0.27 mg/kg
	Workers	Skin contact	Long-term systemic effects	1.08 mg/kg
	Workers	Inhalation	Long-term systemic effects	1.9 mg/m3
Methyl ethyl ketone	Workers	Inhalation	Long-term systemic effects	600 mg/m3
	Workers	Skin contact	Long-term systemic effects	1161 mg/kg
	Consumers	Inhalation	Long-term systemic effects	106 mg/m3
	Consumers	Skin contact	Long-term systemic effects	412 mg/kg
	Consumers	Ingestion	Long-term systemic effects	31 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006

Substance name	Environmental Compartment	Value
Methyl ethyl ketone peroxide;Reaction mass of butane- 2,2-diyl dihydroperoxide and di-sec-butylhexaoxidane	Fresh water	0.0056 mg/l
	Intermittent water	0.056 mg/l
	Marine water	0.00056 mg/l
	Fresh water sediment	0.019 mg/kg dry weight
	Marine sediment	0.0019 mg/kg dry weight
	Sewage treatment plant	1.2 mg/l
	Soil	0.00231 mg/kg dry weight
Methyl ethyl ketone	Fresh water	55.8 mg/l
	Marine water	55.8 mg/l
	Intermittent water	55.8 mg/l
	Sewage treatment plant	709 mg/l

Fresh water sediment	284.74 mg/kg dry weight
Marine sediment	284.74 mg/kg dry weight
Soil	22.5 mg/kg dry weight
Oral	1000 mg/kg food

#### 8.2 Exposure controls

#### **Engineering controls**

Explosion proof ventilation recommended.

Effective exhaust ventilation system

Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Respiratory protection : In the case of vapour or aerosol formation use a respirator

with an approved filter.

Filter A

Hand protection : Neoprene

Nitrile rubber

Breakthrough time is not determined for the product. Change

gloves often!

butyl-rubber

Break through time: >= 480 min Glove thickness: 0.5 mm

The data about break through time/strength of material are standard values! The exact break through time/strength of material has to be obtained from the producer of the protective

glove.

Eye protection : Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing

problems.

Skin and body protection : Protective suit

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice.

When using do not eat or drink. When using do not smoke.

Wash hands before breaks and at the end of workday.

**Environmental exposure controls** 

General advice : Prevent product from entering drains.

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** 

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Form : liquid

Colour : clear

colourless

Odour : Faint.

Odour Threshold : No data available

Safety data

pH : Weakly acidic

Melting point : No data available

Boiling point/boiling range : Decomposes below the boiling point.

Flash point : Above the SADT value

No flash point was obtained, but the product may release

flammable vapour.

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Flammability (liquids) : Decomposition products may be flammable.

Lower explosion limit : No data available

Upper explosion limit : No data available

Vapour pressure : 1 hPa at 84 °C

Relative vapour density : No data available

Relative density : 1.180 at 20 °C

Bulk density : Not applicable

Water solubility : at 20 °C

partly miscible

Solubility in other solvents : 20 °C

Miscible with:, Phthalates

Partition coefficient: n-

octanol/water

: No data available

Auto-ignition temperature : Test method not applicable

Decomposition temperature : SADT - (Self accelerating decomposition temperature) is the

lowest temperature at which self accelerating decomposition may occur with a substance in the packaging as used in transport. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the SADT. Contact with incompatible substances can cause

decomposition below the SADT.

Self-Accelerating

decomposition temperature

(SADT)

: 60 °C

Viscosity, dynamic : 24 mPa.s at 20 °C

Viscosity, kinematic : 20.34 mm2/s at 20 °C

Explosive properties : Not explosive

Oxidizing properties : Not classified as oxidising.

9.2 Other information

Active Oxygen Content : 8.8 - 9.0 %

Organic peroxides : 30 - 37 %

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

# **SECTION 10: STABILITY AND REACTIVITY**

# 10.1 Reactivity

Stable under normal conditions.

# 10.2 Chemical stability

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

#### 10.4 Conditions to avoid

Conditions to avoid : Confinement must be avoided.

Heat, flames and sparks.

# 10.5 Incompatible materials

Materials to avoid : Contact with the following incompatible materials will result in

hazardous decomposition:

Acids and bases

Iron Copper

Reducing agents Heavy metals

Rust

Do not mix with peroxide accelerators, unless under controlled

processing.

Use only stainless steel 316, PP, polyethylene or glass-lined

equipment.

For queries regarding the suitability of other materials please

contact the supplier.

# 10.6 Hazardous decomposition products

Hazardous decomposition

products

Carbon oxides

 Formic acid
 Acetic acid
 Propionic acid
 Methyl ethyl ketone

Thermal decomposition : SADT - (Self accelerating decomposition temperature) is the

lowest temperature at which self accelerating decomposition may occur with a substance in the packaging as used in transport. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the SADT. Contact with incompatible substances can cause

decomposition below the SADT.

Self-Accelerating decomposition temperature

(SADT)

: 60 °C

# **SECTION 11: TOXICOLOGICAL INFORMATION**

# 11.1 Information on toxicological effects

**Product information:** 

Acute toxicity : Harmful if swallowed or if inhaled.

Skin corrosion/irritation : Causes severe burns.

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory or skin

sensitisation

Respiratory sensitisation: Not classified based on available

information.

Skin sensitisation: Not classified based on available

information.

Germ cell mutagenicity : Not classified based on available information.

Carcinogenicity : Not classified based on available information.

Reproductive toxicity : Not classified based on available information.

STOT - single exposure : Not classified based on available information.

STOT - repeated exposure : Not classified based on available information.

Aspiration hazard : Not classified based on available information.

Further information : No further data available.

**Test result** 

Acute oral toxicity : LD50 Oral: 1,017 mg/kg

Species: rats

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): 1.5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50: 4,000 mg/kg

Species: Rabbit

Method: OECD Test Guideline 402

Skin corrosion/irritation : Species: Rabbit

Result: Sub-category 1B Classification: Category 1B

Method: Tested according to Annex V of Directive

67/548/EEC.

Serious eye damage/eye

irritation

Species: Rabbit

Result: Risk of serious damage to eyes.

Classification: Risk of serious damage to eyes. Method: Tested according to Annex V of Directive

67/548/EEC.

Toxicology data for the components:

Methyl ethyl ketone peroxide;Reaction mass of butane-2,2-diyl dihydroperoxide and disec-butylhexaoxidane

Acute toxicity:

Acute oral toxicity : LD50: 1,017 mg/kg

Species: Rat

Acute inhalation toxicity : LC50 (Rat): 1.5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50: 4,000 mg/kg

Species: Rat

Skin corrosion/irritation : Result: Causes burns.

Serious eye damage/eye

irritation

: Result: Risk of serious damage to eyes.

Germ cell mutagenicity

Genotoxicity in vitro : Ames test

Result: negative

Genotoxicity in vivo : Not classified due to data which are conclusive although

insufficient for classification.

Carcinogenicity : No data available

Reproductive toxicity/Fertility : Species: Rat, male and female

**Application Route: Oral** 

Dose: 0 25, 50, 75 milligram per kilogram

General Toxicity - Parent: No observed adverse effect level:

50 mg/kg bw/day

General Toxicity F1: No observed adverse effect level F1: 50

mg/kg bw/day

Fertility: No observed adverse effect level Parent: 75 mg/kg

bw/dav

Method: OECD Test Guideline 421

GLP: yes

STOT - repeated exposure : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

Aspiration hazard : No aspiration toxicity classification

Methyl ethyl ketone

Acute toxicity:

Acute oral toxicity : LD50: 2,737 mg/kg

Species: Rat

Acute dermal toxicity : LD50: 6,480 mg/kg

Species: Rabbit

Skin corrosion/irritation : Result: Repeated exposure may cause skin dryness or

cracking.

Moderately irritating.

Serious eye damage/eye

irritation

: Result: Irritating to eyes.

STOT - single exposure : Exposure routes: Inhalation

The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

Aspiration hazard : No aspiration toxicity classification

# **SECTION 12: ECOLOGICAL INFORMATION**

**Product information:** 

**Ecotoxicology Assessment** 

Additional ecological

information

: An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Toxic to aquatic life.

12.1 Toxicity

Test result

Toxicity to fish : LC50: 44.2 mg/l

Exposure time: 96 h

Species: Poecilia reticulata (guppy)

Test Type: semi-static test

Toxicity to daphnia and other

aquatic invertebrates

: 39 mg/l

Exposure time: 48 h

Species: Daphnia magna (Water flea)

Test Type: Immobilization

Toxicity to algae : ErC50: 5.6 mg/l

Exposure time: 72 h

Species: Pseudokirchneriella subcapitata (algae)

Test Type: Growth inhibition

Toxicity to bacteria : EC10: 12 mg/l

Exposure time: 0.5 h
Species: activated sludge
Test Type: Respiration inhibition

Method: Domestic OECD Guideline 209

Components:

Test result

Methyl ethyl ketone peroxide;Reaction mass of butane-2,2-diyl dihydroperoxide and di-

sec-butylhexaoxidane

Toxicity to fish : LC50: 44.2 mg/l

Exposure time: 96 h

Species: Poecilia reticulata (guppy)

Test Type: semi-static test

Toxicity to daphnia and other : 39 mg/l

aquatic invertebrates

Exposure time: 48 h

Species: Daphnia magna (Water flea)

Test Type: Immobilization

Toxicity to algae : ErC50: 5.6 mg/l

Exposure time: 72 h

Species: Pseudokirchneriella subcapitata (algae)

Test Type: Growth inhibition

Toxicity to bacteria : EC10: 12 mg/l

Exposure time: 0.5 h
Species: activated sludge
Test Type: Respiration inhibition

Method: Domestic OECD Guideline 209

Methyl ethyl ketone

Toxicity to fish : LC50: 3,220 mg/l

Exposure time: 96 h

Species: Lepomis macrochirus (Bluegill sunfish)

12.2 Persistence and degradability

**Product information** : No information available.

**Components:** 

Methyl ethyl ketone peroxide; Reaction mass of butane-2,2-diyl dihydroperoxide and di-

sec-butylhexaoxidane

Biodegradability : Result: Readily biodegradable.

Method: Closed Bottle test

Methyl ethyl ketone

Biodegradability : Result: Readily biodegradable.

# 12.3 Bioaccumulative potential

**Product information** : No information available.

**Components:** 

Methyl ethyl ketone peroxide; Reaction mass of butane-2,2-diyl dihydroperoxide and di-

sec-butylhexaoxidane

Bioaccumulation : Bioconcentration factor (BCF): 10.3

Not expected considering the low log Pow value.

12.4 Mobility in soil

**Product information**: No information available.

#### 12.5 Results of PBT and vPvB assessment

**Product information:** 

PBT and vPvB assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

12.6 Other adverse effects

**Product information** : No information available.

# **SECTION 13: DISPOSAL CONSIDERATIONS**

#### 13.1 Waste treatment methods

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

courses or the soil.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Hazardous waste

Dispose of contents/container in accordance with local

regulation.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product.

Do not burn, or use a cutting torch on, the empty drum.

Due to the high risk of contamination recycling/recovery is not

recommended.

Follow all warnings even after the container is emptied.

# **SECTION 14: TRANSPORT INFORMATION**

14.1 UN number

 ADR
 : UN 3105

 RID
 : UN 3105

 IMDG-Code
 : UN 3105

 IATA-DGR
 : UN 3105

14.2 Proper shipping name

ADR : ORGANIC PEROXIDE TYPE D, LIQUID

(Methyl ethyl ketone peroxide)

RID : ORGANIC PEROXIDE TYPE D, LIQUID

(Methyl ethyl ketone peroxide)

IMDG-Code : ORGANIC PEROXIDE TYPE D, LIQUID

(Methyl ethyl ketone peroxide)

IATA-DGR : Organic peroxide type D, liquid

(Methyl ethyl ketone peroxide)

14.3 Transport hazard class

 ADR
 : 5.2

 RID
 : 5.2

 IMDG-Code
 : 5.2

 IATA-DGR
 : 5.2

14.4 Packing group

ADR

Packing group : Not Assigned

Classification Code : P1 Labels : 5.2 Tunnel restriction code : (D)

RID

Packing group : Not Assigned

Classification Code : P1 Hazard Identification Number : 539 Labels : 5.2

**IMDG-Code** 

Packing group : Not Assigned

Labels : 5.2 EmS Code : F-J, S-R

**IATA-DGR** 

Packing instruction (cargo : 570

aircraft)

Packing instruction : 570

(passenger aircraft)

Packing group : Not Assigned Labels : 5.2 (HEAT)

14.5 Environmental hazards

**ADR** 

Environmentally hazardous : no

RID

Environmentally hazardous : no

**IMDG-Code** 

Marine pollutant : no

**IATA-DGR** 

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

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Quantity 1 Quantity 2
P6b SELF-REACTIVE 50 t 200 t

SUBSTANCES AND MIXTURES and ORGANIC

**PEROXIDES** 

#### **Notification status**

TCSI : YES. On the inventory, or in compliance with the inventory **TSCA** YES. All substances listed as active on the TSCA inventory AICS YES. On the inventory, or in compliance with the inventory DSL : YES. All components of this product are on the Canadian DSL **ENCS** : YES. On the inventory, or in compliance with the inventory : YES. On the inventory, or in compliance with the inventory ISHL : YES. On the inventory, or in compliance with the inventory KECI : YES. On the inventory, or in compliance with the inventory **PICCS** : YES. On the inventory, or in compliance with the inventory **IECSC** : YES. On the inventory, or in compliance with the inventory NZIoC

For explanation of abbreviation see section 16.

#### 15.2 Chemical safety assessment

Methyl ethyl ketone peroxide; Reaction mass of

butane-2,2-divl

butarie-2,2-diyi

dihydroperoxide and di-sec-

butylhexaoxidane

: A Chemical Safety Assessment has been carried out for this

substance.

#### **SECTION 16: OTHER INFORMATION**

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

H225 : Highly 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.

H332 : Harmful if inhaled.

H336 : May cause drowsiness or dizziness.

#### **Classification procedure:**

Organic peroxides, D, H242, Based on product data or assessment Acute toxicity, 4, H302, Based on product data or assessment Acute toxicity, 4, H332, Based on product data or assessment Skin corrosion, 1B, H314, Calculation method

Serious eye damage, 1, H318, Based on product data or assessment

# Full text of other abbreviations

2000/39/EC : Europe. Commission Directive 2000/39/EC establishing a first

list of indicative occupational exposure limit values

2006/15/EC : Europe. Indicative occupational exposure limit values

2017/164/EU : Commission Directive (EU) 2017/164 establishing a fourth list

of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU

GB EH40 : UK. EH40 WEL - Workplace Exposure Limits

2000/39/EC / TWA : Limit Value - eight hours 2000/39/EC / STEL : Short term exposure limit 2006/15/EC / TWA : Limit Value - eight hours 2017/164/EU / STEL : Short term exposure limit 2017/164/EU / TWA : Limit Value - eight hours

GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL : Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID -Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

# **Further information**

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

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