

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## CATALYST M

Version 1

Revision Date 18.09.2015

Print Date 21.10.2015

IE / EN

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

#### 1.1 Product identifier

Trade name : CATALYST M

REACH Registration Number : 01-2119514691-43

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

Use of the Substance/Mixture : Specific use(s): Curing agent

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

Company : Akzo Nobel Functional Chemicals B.V.  
Stationsstraat 77  
NL 3811 MH Amersfoort  
Netherlands

Telephone : +31334676767  
Telefax : +31334676100  
E-mail address : RegulatoryAffairs@akzonobel.com

#### 1.4 Emergency telephone number

Emergency telephone number : AkzoNobel: +31 57 06 79211

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### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

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

Organic peroxides, D, H242, On basis of test data.

Acute toxicity, 4, H302, On basis of test data.

Skin corrosion, 1B, H314, Calculation method

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

##### Classification (67/548/EEC, 1999/45/EC)

Oxidising, O, R 7

Corrosive, C, R34

Harmful, Xn, R22

For the full text of the R-phrases mentioned in this Section, see Section 16.

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## 2.2 Label elements

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

Symbol(s)



Signal word

: Danger

Hazard statements

: H242  
H302  
H314

Heating may cause a fire.  
Harmful if swallowed.  
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.

P220

Keep away from dirt, rust, chemicals in particular.

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.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### Hazardous components which must be listed on the label:

Methyl ethyl ketone peroxide; Reaction mass of butane- 1338-23-4  
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.

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## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

#### Hazardous substance

Chemical Name	PBT vPvB OEL	CAS-No. EC-No. REACH No.	Classification (REGULATION (EC) No 1272/2008)	Classification (67/548/EEC)	Concentration [%]
Methyl ethyl ketone peroxide; Reaction mass of butane-2,2-diy l dihydroperoxide and di-sec-butylhexaoxidane		1338-23-4 215-661-2 01- 2119514691- 43	Org. Perox. A; H240 Acute Tox. 4; H302 Skin Corr. 1B; H314	E; R 2 C; R34 O; R 7 Xn; R22	30 - 40
Methyl ethyl ketone		78-93-3 201-159-0	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	F; R11 Xi; R36 R66 R67	1 - 3

Remarks : Methyl ethyl ketone peroxide 30-37% solution in dimethyl phthalate

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

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

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: 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

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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.

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

Treatment : Treat symptomatically.

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## 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 arising from the chemical : CAUTION: reignition may occur.  
Supports combustion.  
Water spray may be ineffective unless used by experienced firefighters.  
Heating may cause decomposition with release of toxic fumes  
Do not allow run-off from fire fighting to enter drains or water courses.

Combustion products : Fire will produce smoke containing hazardous combustion products (see section 10).

### 5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.  
Further information : 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.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Personal precautions : Use personal protective equipment.  
Ensure adequate ventilation.  
Remove all sources of ignition.

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

## 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 / : Keep wetted with water.  
Methods for containment : Soak up with inert absorbent material and dispose of as hazardous waste.  
Confinement must be avoided.  
Never return spills in original containers for re-use.

## 6.4 Reference to other sections

Additional advice : For personal protection see section 8.

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## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Open drum carefully as content may be under pressure.  
Dispose of rinse water in accordance with local and national regulations.

Advice on protection against : Use explosion protected equipment.  
fire and explosion : 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 : 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 : No decomposition if stored and applied as directed.

### 7.3 Specific end use(s)

Specific use(s) : Consult the technical guidelines for the use of this substance/mixture.

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis	Form of exposure
Dimethyl phthalate	131-11-3	OELV - 8 hrs (TWA)	5 mg/m <sup>3</sup>	2002-03-12	IE OEL	
		OELV - 15 min (STEL)	10 mg/m <sup>3</sup>	2002-03-12	IE OEL	
Methyl ethyl ketone peroxide; Reaction mass of butane-2,2-diy l dihydroperoxide and di-sec-butylhexaoxidane	1338-23-4	OELV - 15 min (STEL)	0.2 ppm 1.5 mg/m <sup>3</sup>	2002-03-12	IE OEL	
Methyl ethyl ketone	78-93-3	TWA	200 ppm 600 mg/m <sup>3</sup>	2009-12-19	2000/39/EC	
	Further information	:	Indicative			
		STEL	300 ppm 900 mg/m <sup>3</sup>	2009-12-19	2000/39/EC	
	Further information	:	Indicative			
		OELV - 8 hrs (TWA)	200 ppm 600 mg/m <sup>3</sup>	2007-08-17	IE OEL	
	Further information	:	Sk: Substances w hich have the capacity to penetrate intact skin w hen they come in contact w ith it, and be absorbed into the body IOELV: Indicative Occupational Exposure Limit Value			
		OELV - 15 min (STEL)	300 ppm 900 mg/m <sup>3</sup>	2007-08-17	IE OEL	
	Further information	:	Sk: Substances w hich have the capacity to penetrate intact skin w hen they come in contact w ith it, and be absorbed into the body IOELV: Indicative Occupational Exposure Limit Value			

STEL: Short term exposure limit

TWA: Time Weighted Average

#### Occupational exposure limits of decomposition products

Decomposition products	CAS-No.	Value	Control parameters	Update	Basis	Form of exposure
Formic acid	64-18-6, 64-18-6	TWA	5 ppm 9 mg/m <sup>3</sup>	2009-12-19		
	Further information	:				
		OELV - 8 hrs (TWA)	5 ppm 9 mg/m <sup>3</sup>	2007-08-17		
	Further information	:				
Acetic acid	64-19-7, 64-19-7	TWA	10 ppm 25 mg/m <sup>3</sup>	2009-12-19		
	Further information	:				

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		OELV - 8 hrs (TWA)	10 ppm 25 mg/m <sup>3</sup>	2002-03-12		
		OELV - 15 min (STEL)	15 ppm 37 mg/m <sup>3</sup>	2002-03-12		
Propionic acid	79-09-4, 79-09-4	TWA	10 ppm 31 mg/m <sup>3</sup>	2009-12-19		
	Further information	:				
		STEL	20 ppm 62 mg/m <sup>3</sup>	2009-12-19		
	Further information	:				
		OELV - 8 hrs (TWA)	10 ppm 31 mg/m <sup>3</sup>	2010-04-30		
	Further information	:				
		OELV - 15 min (STEL)	20 ppm 62 mg/m <sup>3</sup>	2010-04-30		
	Further information	:				
Methyl ethyl ketone	78-93-3, 78-93-3	TWA	200 ppm 600 mg/m <sup>3</sup>	2009-12-19		
	Further information	:				
		STEL	300 ppm 900 mg/m <sup>3</sup>	2009-12-19		
	Further information	:				
		OELV - 8 hrs (TWA)	200 ppm 600 mg/m <sup>3</sup>	2007-08-17		
	Further information	:				
		OELV - 15 min (STEL)	300 ppm 900 mg/m <sup>3</sup>	2007-08-17		
	Further information	:				

## 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/m <sup>3</sup>
	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/m <sup>3</sup>
Methyl ethyl ketone	Workers	Inhalation	Long-term systemic	600 mg/m <sup>3</sup>

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			effects	
	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 w ater	0.0056 mg/l
	Intermittent w ater	0.056 mg/l
	Marine w ater	0.00056 mg/l
	Fresh w ater sediment	0.019 mg/kg dry w eight
	Marine sediment	0.0019 mg/kg dry w eight
	Sew age treatment plant	1.2 mg/l
	Soil	0.00231 mg/kg dry w eight
Methyl ethyl ketone	Fresh w ater	55.8 mg/l
	Marine w ater	55.8 mg/l
	Intermittent w ater	55.8 mg/l
	Sew age treatment plant	709 mg/l
	Fresh w ater sediment	284.74 mg/kg dry w eight
	Marine sediment	284.74 mg/kg dry w eight
	Soil	22.5 mg/kg dry w eight
	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 : butyl-rubber

Neoprene

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



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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.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### Appearance

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) : 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

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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 mm <sup>2</sup> /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.

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## 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.
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### 10.5 Incompatible materials

Materials to avoid	: Contact with incompatible materials will result in hazardous decomposition. For queries regarding the suitability of other materials please contact the supplier. Do not mix with peroxide accelerators, unless under controlled
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processing.  
Use only stainless steel 316, PP, polyethylene or glass-lined equipment.  
Acids and bases  
Iron  
Copper  
Reducing agents  
Heavy metals  
Rust

## 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

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## SECTION 11: TOXICOLOGICAL INFORMATION

### Product information:

#### Hazard Summary

Inhalation	: Inhalation of aerosols may cause irritation to mucous membranes. Thermal decomposition can lead to release of irritating gases and vapours.
Skin	: Symptoms may be delayed. May be harmful in contact with skin. Causes severe skin burns.
Eyes	: Causes serious eye damage.
Ingestion	: Harmful if swallowed. Causes burns.

#### Toxicology Assessment

Acute effects	: Causes eye burns. Causes skin burns. Harmful if swallowed. May be harmful in contact with skin or if inhaled.
Further information	: No further data available.

## 11.1 Information on toxicological effects

### Test result

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Acute oral toxicity	: LD50: 1,017 mg/kg Species: rats Method: OECD Test Guideline 401
Acute inhalation toxicity	: LC50 (Rat): 17 mg/l Exposure time: 4 h Test atmosphere: vapour Method: OECD Test Guideline 403 Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	: LD50: 4,000 mg/kg Species: Rat Method: OECD Test Guideline 402
Skin irritation	: Species: Rabbit Result: Sub-category 1B Classification: Sub-category 1B Method: Tested according to Annex V of Directive 67/548/EEC.
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:

### Test result

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

Acute oral toxicity	: LD50: 1,017 mg/kg Species: Rat
Acute inhalation toxicity	: LC50 (Rat): 17 mg/l Exposure time: 4 h Test atmosphere: dust/mist
Acute dermal toxicity	: LD50: 4,000 mg/kg Species: Rat
Skin irritation	: Result: Causes burns.
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

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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/day  
Method: OECD Test Guideline 421  
GLP: yes

Target Organ Systemic Toxicant - Repeated exposure : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration toxicity : No aspiration toxicity classification

**Methyl ethyl ketone**

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

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

Skin irritation : Result: Repeated exposure may cause skin dryness or cracking.  
Moderately irritating.

Eye irritation : Result: Irritating to eyes.

Target Organ Systemic Toxicant - Single exposure : Exposure routes: Inhalation  
The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

Aspiration toxicity : No aspiration toxicity classification

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## SECTION 12: ECOLOGICAL INFORMATION

### Product information:

#### Ecotoxicology Assessment

Acute aquatic toxicity : Harmful to fish.

Chronic aquatic toxicity : No toxicity at the limit of solubility

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Harmful to aquatic life.

### 12.1 Toxicity

#### Components:

#### Ecotoxicology Assessment

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

Acute aquatic toxicity : Harmful to aquatic life.

#### Test result

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## **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 aquatic invertebrates : 39 mg/l  
Exposure time: 48 h  
Species: Daphnia magna (Water flea)  
Test Type: Immobilization
- Toxicity to algae : LC50: 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** : No information available.

### **12.4 Mobility in soil**

**Product information** : No information available.

**Components** : 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.

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**Components** : No information available.

## 12.6 Other adverse effects

**Product information** : No information available.

**Components** : No information available.

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## 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.

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## SECTION 14: TRANSPORT INFORMATION

### 14.1 UN number

**ADN** : UN 3105  
**ADR** : UN 3105  
**RID** : UN 3105  
**IMDG-Code** : UN 3105  
**IATA-DGR** : UN 3105

### 14.2 Proper shipping name

**ADN** : ORGANIC PEROXIDE TYPE D, LIQUID  
(Methyl ethyl ketone peroxide)  
**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

**ADN** : 5.2  
**ADR** : 5.2  
**RID** : 5.2  
**IMDG-Code** : 5.2  
**IATA-DGR** : 5.2 (HEAT)

### 14.4 Packing group

**ADN**  
**Packing group** : Not Assigned  
**Classification Code** : P1

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Labels : 5.2  
**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 aircraft) : 570  
Packing instruction (passenger aircraft) : 570  
Packing group : Not Assigned  
Labels : 5.2 (HEAT)

## 14.5 Environmental hazards

**ADN**  
Environmentally hazardous : no

**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.

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## SECTION 15: REGULATORY INFORMATION

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

Major Accident Hazard Legislation : ZEU\_SEVES3  
SELF-REACTIVE SUBSTANCES AND MIXTURES and  
ORGANIC PEROXIDES  
P6b  
Quantity 1: 50 t  
Quantity 2: 200 t

Water contaminating class (Germany) : WGK 1 slightly water endangering



## Notification status

CH INV	: YES. On the inventory, or in compliance with the inventory
TSCA	: YES. All chemical substances in this product are either listed on the TSCA Inventory or in compliance with a TSCA Inventory exemption.
DSL	: YES. All components of this product are on the Canadian DSL.
AICS	: YES. On the inventory, or in compliance with the inventory
NZIoC	: YES. On the inventory, or in compliance with the inventory
ENCS	: 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

For explanation of abbreviation see section 16.

## Further information

This product is to be considered as a substance according to EU-legislation.

## 15.2 Chemical Safety Assessment

Methyl ethyl ketone peroxide; Reaction mass of butane-2,2-diyl dihydroperoxide and di-sec-butylhexaoxidane : A Chemical Safety Assessment has been carried out for this substance.

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## 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.
H319	: Causes serious eye irritation.
H336	: May cause drowsiness or dizziness.

### Full text of R-phrases referred to under sections 2 and 3

R 2	Risk of explosion by shock, friction, fire or other sources of ignition.
R 7	May cause fire.
R11	Highly flammable.
R22	Harmful if swallowed.
R34	Causes burns.
R36	Irritating to eyes.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

### Explanations for possible abbreviations mentioned in section 2

PBT	: PBT: Persistent, bioaccumulative and toxic.
vPvB	: vPvB: Very persistent and very bioaccumulative.
OEL	: OEL: Occupational exposure limit.

### Notification status explanation

CH INV	Switzerland. New notified substances and declared preparations
TSCA	United States TSCA Inventory
DSL	Canadian Domestic Substances List (DSL)
AICS	Australia Inventory of Chemical Substances (AICS)
NZIoC	New Zealand. Inventory of Chemical Substances

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ENCS	Japan. ENCS - Existing and New Chemical Substances Inventory
ISHL	Japan. ISHL - Inventory of Chemical Substances
KECI	Korea. Korean Existing Chemicals Inventory (KECI)
PICCS	Philippines Inventory of Chemicals and Chemical Substances (PICCS)
IECSC	China. Inventory of Existing Chemical Substances in China (IECSC)

## 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 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.

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