

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

1.1	Product identifiers Product name	:	DI-Lauroyl peroxide	
	Product Number Brand Index-No. REACH No.	:	52-7592 RAPID 617-003-00-3 A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.	
	CAS-No.	:	105-74-8	
1.2	Relevant identified uses of the substance or mixture and uses advised against			
	Identified uses	:	Laboratory chemicals, Manufacture of substances	
1.3	Details of the supplier of the Company	ie s :	afety data sheet Rapid Electronics, Severalls Lane, Colchester, Essex, CO4 5JS, United Kingdom	
	Telephone Fax E-mail address	:	+44 (0) 1206 751166 +44 (0) 1206 751188 sales@rapidelec.co.uk	
	Emergency telephone numbe	er	+44 (0) 1206 751166	
SECT	ION 2: Hazards identification	n		
2.1	Classification of the substa	anc	e or mixture	
	Classification according to Regulation (EC) No 1272/2008 Organic peroxides (Type D), H242			
	For the full text of the H-Statements mentioned in this Section, see Section 16.			
	Classification according to EU Directives 67/548/EEC or 1999/45/EC O Oxidising R 7			
	For the full text of the R-phra	ses	mentioned in this Section, see Section 16.	
2.2	Label elements			
	Labelling according Regulation (EC) No 1272/2008 Pictogram			
	Signal word		Danger	

Hazard statement(s) H242

Heating may cause a fire.

Precautionary statement(s)	
P220	Keep/Store away from clothing/ combustible materials.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P410	Protect from sunlight.
P411 + P235	Store at temperatures not exceeding .? °C/ .? °F. Keep cool.
P420	Store away from other materials.
Supplemental Hazard Statements	none

#### 2.3 Other hazards - none

#### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Synonyms	:	Lauroyl peroxide Dilauroyl peroxide Dodecanoyl peroxide
Formula	:	C <sub>24</sub> H <sub>46</sub> O <sub>4</sub>
Molecular Weight	:	398.62 g/mol
CAS-No.	:	105-74-8
EC-No.	:	203-326-3
Index-No.	:	617-003-00-3

No components need to be disclosed according to the applicable regulations.

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

### **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

# In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3** Indication of any immediate medical attention and special treatment needed no data available

# **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

- 5.2 Special hazards arising from the substance or mixture Carbon oxides
- **5.3** Advice for firefighters Wear self contained breathing apparatus for fire fighting if necessary.
- 5.4 Further information

Use water spray to cool unopened containers.

### **SECTION 6: Accidental release measures**

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

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal. Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).

# 6.4 Reference to other sections

For disposal see section 13.

### SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.Keep away from sources of ignition - No smoking.Keep away from heat and sources of ignition. For precautions see section 2.2.

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

Store in original container. Keep container tightly closed in a dry and well-ventilated place. Store in cool place.

Recommended storage temperature: 2 - 8 °C

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## Personal protective equipment

### Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of

contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### **Body Protection**

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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#### **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

a)	Appearance	Form: solid Colour: white
b)	Odour	no data available
c)	Odour Threshold	no data available
d)	рН	no data available
e)	Melting point/freezing point	Melting point/range: 53 - 57 °C -
f)	Initial boiling point and boiling range	no data available
g)	Flash point	no data available
h)	Evapouration rate	no data available
i)	Flammability (solid, gas)	no data available
j)	Upper/lower flammability or explosive limits	no data available

k)	Vapour pressure	no data available
I)	Vapour density	no data available
m)	Relative density	no data available
n)	Water solubility	0.0001 g/l at 20 °C - insoluble
o)	Partition coefficient: n- octanol/water	log Pow: > 6.5
p)	Auto-ignition temperature	no data available
q)	Decomposition temperature	no data available
r)	Viscosity	no data available
s)	Explosive properties	no data available
t)	Oxidizing properties	no data available
Ot no d	h <b>er safety information</b> data available	

## **SECTION 10: Stability and reactivity**

# 10.1 Reactivity no data available

9.2

- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3** Possibility of hazardous reactions no data available
- **10.4 Conditions to avoid** Heat, flames and sparks.
- **10.5** Incompatible materials Strong reducing agents, Powdered metals, Strong bases
- **10.6 Hazardous decomposition products** Other decomposition products - no data available In the event of fire: see section 5

### **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - rat - male and female - > 2,000 mg/kg (OECD Test Guideline 401)

LD50 Dermal - rat - male and female - > 2,000 mg/kg (OECD Test Guideline 402)

#### Skin corrosion/irritation

Skin - rabbit Result: No skin irritation (OECD Test Guideline 404)

# Serious eye damage/eye irritation

Eyes - rabbit Result: No eye irritation (OECD Test Guideline 405)

**Respiratory or skin sensitisation** Maximisation Test - guinea pig Did not cause sensitisation on laboratory animals. (OECD Test Guideline 406)

#### Germ cell mutagenicity

Chromosome aberration test in vitro lymphocyte Result: negative

### Carcinogenicity

Carcinogenicity - mouse - Subcutaneous Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Tumorigenic:Tumors at site or application.

Carcinogenicity - mouse - Unreported Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Blood:Lymphomas including Hodgkin's disease.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Dilauroyl peroxide)

#### **Reproductive toxicity**

no data available

Specific target organ toxicity - single exposure no data available

Specific target organ toxicity - repeated exposure no data available

# Aspiration hazard

no data available

#### **Additional Information**

Repeated dose toxicity - rat - male and female - Oral - No observed adverse effect level - 1,000 mg/kg RTECS: OF2625000

Cough, Shortness of breath, Headache, Nausea, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# **SECTION 12: Ecological information**

### 12.1 Toxicity

Toxicity to fish	semi-static test LC50 - Poecilia reticulata (guppy) - > 0.3 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - > 9.7 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test EC50 - Pseudokirchneriella subcapitata - > 1 mg/l - 72 h (OECD Test Guideline 201)

#### 12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d Result: 61 % - Readily biodegradable. (OECD Test Guideline 301D)

- **12.3 Bioaccumulative potential** no data available
- **12.4 Mobility in soil** no data available

#### 12.5 Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

# **SECTION 13: Disposal considerations**

### 13.1 Waste treatment

#### methods Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

### Contaminated packaging

Dispose of as unused product.

### **SECTION 14: Transport information**

14.1	UN number ADR/RID: 3	106	IMDG: 3106	IATA: 3106
14.2	UN proper shipping nameADR/RID:ORGANIC PEROXIDE TYPE D, SOLID (DILAUROYL PEROXIDE) (Dilauroyl peroxide)IMDG:ORGANIC PEROXIDE TYPE D, SOLID (DILAUROYL PEROXIDE) (Dilauroyl peroxide)IATA:Organic peroxide type D, solid (Dilauroyl peroxide) (Dilauroyl peroxide)Special Provisions: "Keep away from heat" label required.			
14.3	<b>Transport I</b> ADR/RID: 5	h <b>azard class(es)</b> .2	IMDG: 5.2	IATA: 5.2 (HEAT)
14.4	Packaging ADR/RID: -	group	IMDG: -	IATA: -
14.5	<b>Environme</b> ADR/RID: n	<b>ntal hazards</b> 0	IMDG Marine pollutant: no	IATA: no
14.6	Special pre no data ava	ecautions for user ilable		

### **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

no data available

#### 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

### **SECTION 16: Other information**

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

H242 Heating may cause a fire.

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

R 7 May cause fire.

#### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.