

## MOLYKOTE(R) P-74 PASTE

Version	Revision Date:	MSDS Number:	Date of last issue: 21.10.2014
1.1	31.03.2015	655219-00002	Date of first issue: 21.10.2014

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

#### 1.1 Product identifier

Trade name : MOLYKOTE(R) P-74 PASTE

Product code : 000000000002751933

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

Use of the Sub-  
stance/Mixture : Lubricants and lubricant additives

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

Company : Dow Corning Europe S.A.  
rue Jules Bordet - Parc Industriel - Zone C  
B-7180 Seneffe

Telephone : English Tel: +49 611237507  
Deutsch Tel: +49 611237500  
Français Tel: +32 64511149  
Italiano Tel: +32 64511170  
Español Tel: +32 64511163

E-mail address of person  
responsible for the SDS : sdseu@dowcorning.com

#### 1.4 Emergency telephone number

Dow Corning (Barry U.K. 24h) Tél: +44 1446732350  
Dow Corning (Wiesbaden 24h) Tél: +49 61122158  
Dow Corning (Seneffe 24h) Tel: +32 64 888240

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

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

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

Chronic aquatic toxicity, Category 1 H410: Very toxic to aquatic life with long lasting effects.

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

Irritant R41: Risk of serious damage to eyes.

Dangerous for the environment R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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### 2.2 Label elements

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

Hazard pictograms :



Signal word : Danger

Hazard statements : H318 Causes serious eye damage.  
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**  
P273 Avoid release to the environment.  
P280 Wear eye protection/ face protection.  
**Response:**  
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 or doctor/ physician.  
P391 Collect spillage.

Hazardous components which must be listed on the label:  
Calcium hydroxide

### 2.3 Other hazards

None known.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Chemical nature : Inorganic and organic compounds  
Mixture

#### Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
Dec-1-ene, homopolymer, hydrogenated	68037-01-4 500-183-1 01-2119486452-34	Xn; R65	Asp. Tox. 1; H304	>= 20 - < 30
Calcium hydroxide	1305-62-0 215-137-3	Xi; R41-R37/38	Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335	>= 10 - < 20

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Paraffin oil	8012-95-1 232-384-2	Xn; R65	Asp. Tox. 1; H304	>= 10 - < 20
(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxy-phenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters	118832-72-7	N; R50/53	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 0.25 - < 1

For explanation of abbreviations see section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

- General advice : In the case of accident or if you feel unwell, seek medical advice immediately.  
When symptoms persist or in all cases of doubt seek medical advice.
- Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.
- If inhaled : If inhaled, remove to fresh air.  
Get medical attention if symptoms occur.
- In case of skin contact : Wash with water and soap as a precaution.  
Get medical attention if symptoms occur.
- In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.  
If easy to do, remove contact lens, if worn.  
Get medical attention immediately.
- If swallowed : If swallowed, DO NOT induce vomiting.  
Get medical attention if symptoms occur.  
Rinse mouth thoroughly with water.

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

- Risks : Causes serious eye damage.

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

- Treatment : Treat symptomatically and supportively.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

- Suitable extinguishing media : Water spray

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Alcohol-resistant foam  
Dry chemical  
Carbon dioxide (CO<sub>2</sub>)

Unsuitable extinguishing media : None known.

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

Specific hazards during fire-fighting : Exposure to combustion products may be a hazard to health.

Hazardous combustion products : Carbon oxides  
Metal oxides  
Oxides of phosphorus  
Formaldehyde  
Nitrogen oxides (NO<sub>x</sub>)

### 5.3 Advice for firefighters

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

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Use water spray to cool unopened containers.  
Remove undamaged containers from fire area if it is safe to do so.  
Evacuate area.

## SECTION 6: Accidental release measures

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

Personal precautions : Use personal protective equipment.  
Follow safe handling advice and personal protective equipment recommendations.

### 6.2 Environmental precautions

Environmental precautions : Discharge into the environment must be avoided.  
Prevent further leakage or spillage if safe to do so.  
Retain and dispose of contaminated wash water.  
Local authorities should be advised if significant spillages cannot be contained.

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

Methods for cleaning up : Soak up with inert absorbent material.  
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.  
Clean up remaining materials from spill with suitable absorbent.

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Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

### 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

- Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
- Local/Total ventilation : Use only with adequate ventilation.
- Advice on safe handling : Do not swallow.  
Do not get in eyes.  
Avoid prolonged or repeated contact with skin.  
Handle in accordance with good industrial hygiene and safety practice.  
Keep container tightly closed.  
Take care to prevent spills, waste and minimize release to the environment.
- Hygiene measures : Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

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

- Requirements for storage areas and containers : Keep in properly labelled containers. Keep tightly closed.  
Store in accordance with the particular national regulations.
- Advice on common storage : Do not store with the following product types:  
Strong oxidizing agents

### 7.3 Specific end use(s)

- Specific use(s) : These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

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Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Graphite	7782-42-5	TWA (inhalable dust)	10 mg/m3	GB EH40
Further information	<p>For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust. The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used</p>			
		TWA (Respirable dust)	4 mg/m3	GB EH40
Further information	<p>For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used</p>			
Calcium hydroxide	1305-62-0	TWA	5 mg/m3	91/322/EEC
Further information	Existing scientific data on health effects appear to be particularly limited, Indicative			
		TWA	5 mg/m3	GB EH40

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Further information	Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used
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**Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:**

Graphite : End Use: Consumers  
Exposure routes: Inhalation  
Potential health effects: Long-term local effects  
Value: 0.3 mg/m<sup>3</sup>  
End Use: Consumers  
Exposure routes: Ingestion  
Potential health effects: Long-term systemic effects  
Value: 813 mg/kg bw/day  
End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Long-term local effects  
Value: 1.2 mg/m<sup>3</sup>

Calcium hydroxide : End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Acute local effects  
Value: 4 mg/m<sup>3</sup>  
End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Long-term local effects  
Value: 1 mg/m<sup>3</sup>  
End Use: Consumers  
Exposure routes: Inhalation  
Potential health effects: Acute local effects  
Value: 4 mg/m<sup>3</sup>  
End Use: Consumers  
Exposure routes: Inhalation  
Potential health effects: Long-term local effects  
Value: 1 mg/m<sup>3</sup>

Paraffin oil : End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Long-term systemic effects  
Value: 5 mg/m<sup>3</sup>  
End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Short-term exposure  
Value: 5 mg/m<sup>3</sup>  
End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Long-term local effects  
Value: 5 mg/m<sup>3</sup>  
End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Acute local effects  
Value: 5 mg/m<sup>3</sup>

(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxy-phenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters : End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Long-term systemic effects  
Value: 1.47 mg/m<sup>3</sup>  
End Use: Workers

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Exposure routes: Skin contact  
Potential health effects: Long-term systemic effects  
Value: 0.42 mg/kg bw/day  
End Use: Consumers  
Exposure routes: Inhalation  
Potential health effects: Long-term systemic effects  
Value: 0.36 mg/m<sup>3</sup>  
End Use: Consumers  
Exposure routes: Skin contact  
Potential health effects: Long-term systemic effects  
Value: 0.21 mg/kg bw/day  
End Use: Consumers  
Exposure routes: Ingestion  
Potential health effects: Long-term systemic effects  
Value: 0.21 mg/kg bw/day

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

Calcium hydroxide : Fresh water  
Value: 0.49 mg/l  
Marine water  
Value: 0.32 mg/l  
Intermittent use/release  
Value: 0.49 mg/l  
Sewage treatment plant  
Value: 3 mg/l  
Soil  
Value: 1080 mg/kg

(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxy-phenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters : Fresh water  
Value: 0.0056 µg/l

Marine water  
Value: 0.00056 µg/l  
Intermittent use/release  
Value: 0.0016 mg/l  
Sewage treatment plant  
Value: 1 mg/l  
Fresh water sediment  
Value: 2.62 mg/kg  
Marine sediment  
Value: 0.262 mg/kg  
Soil  
Value: 0.1 mg/kg

## 8.2 Exposure controls

### Engineering measures

Processing may form hazardous compounds (see section 10).  
Ensure adequate ventilation, especially in confined areas.  
Minimize workplace exposure concentrations.

### Personal protective equipment

Eye protection : Wear the following personal protective equipment:  
Chemical resistant goggles must be worn.



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	If splashes are likely to occur, wear: Face-shield
Hand protection	
Material	: Impervious gloves
Remarks	: Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.
Skin and body protection	: Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential. Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).
Respiratory protection	: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
Filter type	: Combined particulates and organic vapour type (A-P)

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Appearance	: paste
Colour	: dark grey
Odour	: slight
Odour Threshold	: No data available
pH	: Not applicable
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: Not applicable
Flash point	: Not applicable
Evaporation rate	: Not applicable
Flammability (solid, gas)	: Not classified as a flammability hazard
Upper explosion limit	: No data available

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Lower explosion limit : No data available

Vapour pressure : Not applicable

Relative vapour density : No data available

Relative density : 1.3

Solubility(ies)  
Water solubility : No data available

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity  
Viscosity, dynamic : Not applicable

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

### 9.2 Other information

Molecular weight : No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Not classified as a reactivity hazard.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : Use at elevated temperatures may form highly hazardous compounds.  
Can react with strong oxidizing agents.  
Hazardous decomposition products will be formed at elevated temperatures.

### 10.4 Conditions to avoid

Conditions to avoid : None known.

### 10.5 Incompatible materials

Materials to avoid : Oxidizing agents

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### 10.6 Hazardous decomposition products

Thermal decomposition : Formaldehyde

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Information on likely routes of exposure : Skin contact  
Ingestion  
Eye contact

#### Acute toxicity

Not classified based on available information.

#### Components:

##### **Dec-1-ene, homopolymer, hydrogenated:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5.2 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
Assessment: The substance or mixture has no acute inhalation toxicity

##### **Calcium hydroxide:**

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 425  
Assessment: The substance or mixture has no acute oral toxicity

Acute dermal toxicity : LD50 (Rabbit): > 2,500 mg/kg  
Method: OECD Test Guideline 402  
Assessment: The substance or mixture has no acute dermal toxicity  
Remarks: Based on data from similar materials

##### **Paraffin oil:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

##### **(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxyphenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters:**

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 401  
Assessment: The substance or mixture has no acute oral toxicity

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Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 402  
Assessment: The substance or mixture has no acute dermal toxicity

### **Skin corrosion/irritation**

Not classified based on available information.

### **Product:**

Species: Rabbit  
Result: No skin irritation  
Remarks: Based on data from similar materials

### **Components:**

#### **Dec-1-ene, homopolymer, hydrogenated:**

Species: Rabbit  
Result: No skin irritation

#### **Calcium hydroxide:**

Species: Rabbit  
Method: OECD Test Guideline 404  
Result: Skin irritation

#### **Paraffin oil:**

Species: Rabbit  
Result: No skin irritation

#### **(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxyphenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters:**

Species: Rabbit  
Method: OECD Test Guideline 404  
Result: No skin irritation

### **Serious eye damage/eye irritation**

Causes serious eye damage.

### **Components:**

#### **Dec-1-ene, homopolymer, hydrogenated:**

Species: Rabbit  
Method: OECD Test Guideline 405  
Result: No eye irritation

#### **Calcium hydroxide:**

Species: Rabbit  
Method: OECD Test Guideline 405  
Result: Irreversible effects on the eye

#### **Paraffin oil:**

Species: Rabbit  
Result: No eye irritation

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**(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxyphenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters:**

Species: Rabbit  
Method: OECD Test Guideline 405  
Result: No eye irritation

**Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.  
Respiratory sensitisation: Not classified based on available information.

**Components:**

**Dec-1-ene, homopolymer, hydrogenated:**

Test Type: Maximisation Test (GPMT)  
Exposure routes: Skin contact  
Species: Guinea pig  
Method: OECD Test Guideline 406  
Result: negative

**(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxyphenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters:**

Test Type: Maximisation Test (GPMT)  
Exposure routes: Skin contact  
Species: Guinea pig  
Method: OECD Test Guideline 406  
Result: negative

**Germ cell mutagenicity**

Not classified based on available information.

**Components:**

**Dec-1-ene, homopolymer, hydrogenated:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative

**Calcium hydroxide:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: negative

**(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxyphenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters:**

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test  
Method: OECD Test Guideline 476  
Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)  
Species: Hamster  
Application Route: Ingestion  
Method: OECD Test Guideline 474  
Result: negative

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### **Carcinogenicity**

Not classified based on available information.

### **Components:**

#### **Calcium hydroxide:**

Species: Rat  
Application Route: Ingestion  
Exposure time: 104 weeks  
Result: negative  
Remarks: Based on data from similar materials

### **Reproductive toxicity**

Not classified based on available information.

### **Components:**

#### **Dec-1-ene, homopolymer, hydrogenated:**

Effects on fertility : Test Type: One-generation reproduction toxicity study  
Species: Rat  
Application Route: Ingestion  
Result: negative

#### **Calcium hydroxide:**

Effects on foetal development : Test Type: Embryo-foetal development  
Species: Rat  
Application Route: Ingestion  
Result: negative  
Remarks: Based on data from similar materials

#### **(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxyphenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters:**

Effects on foetal development : Test Type: Embryo-foetal development  
Species: Rat  
Application Route: Ingestion  
Method: OECD Test Guideline 414  
Result: negative

### **STOT - single exposure**

Not classified based on available information.

### **Components:**

#### **Calcium hydroxide:**

Assessment: May cause respiratory irritation.  
Remarks: The substance is inextricably bound in the product and therefore does not contribute to a dust inhalation hazard.

### **STOT - repeated exposure**

Not classified based on available information.

### **Repeated dose toxicity**

### **Components:**

#### **Dec-1-ene, homopolymer, hydrogenated:**

Species: Rat

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NOAEL: 1,000 mg/kg  
Application Route: Ingestion  
Exposure time: 91 d

**Paraffin oil:**

Species: Rat, female  
LOAEL: 161 mg/kg  
Application Route: Ingestion  
Exposure time: 90 d

**(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxyphenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters:**

Species: Rat  
NOAEL: 50 mg/kg  
Application Route: Ingestion  
Exposure time: 28 d  
Method: OECD Test Guideline 407

**Aspiration toxicity**

Not classified based on available information.

**Components:**

**Dec-1-ene, homopolymer, hydrogenated:**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

**Paraffin oil:**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

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## SECTION 12: Ecological information

### 12.1 Toxicity

**Components:**

**Dec-1-ene, homopolymer, hydrogenated:**

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): > 1,000 mg/l  
Exposure time: 96 h  
Test substance: Water Accommodated Fraction

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 1,000 mg/l  
Exposure time: 48 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 202

Toxicity to algae : EL50 (Scenedesmus capricornutum (fresh water algae)): > 1,000 mg/l  
Exposure time: 72 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 201

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- NOELR (Scenedesmus capricornutum (fresh water algae)):  
1,000 mg/l  
Exposure time: 72 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 201
- Toxicity to bacteria : NOEC : 2 mg/l  
Exposure time: 28 d
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR: 125 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 211
- Calcium hydroxide:**
- Toxicity to fish : LC50 (Gasterosteus aculeatus (threespine stickleback)): 457 mg/l  
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 49.1 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202
- Toxicity to algae : EC10 (Pseudokirchneriella subcapitata (green algae)): 79.22 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201
- EC50 (Pseudokirchneriella subcapitata (green algae)): 184.57 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201
- Toxicity to bacteria : EC50 : 300.4 mg/l  
Exposure time: 3 h  
Method: OECD Test Guideline 209
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 32 mg/l  
Exposure time: 14 d
- Paraffin oil:**
- Toxicity to fish : LL50 (Scophthalmus maximus (turbot)): > 1,028 mg/l  
Exposure time: 96 h  
Test substance: Water Accommodated Fraction  
Remarks: Based on data from similar materials
- Toxicity to daphnia and other aquatic invertebrates : EL50 (Acartia tonsa): > 3,193 mg/l  
Exposure time: 48 h  
Test substance: Water Accommodated Fraction  
Remarks: Based on data from similar materials
- Toxicity to algae : EL50 (Skeletonema costatum (marine diatom)): > 3,200 mg/l



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Exposure time: 72 h  
Test substance: Water Accommodated Fraction  
Remarks: Based on data from similar materials

NOELR (Skeletonema costatum (marine diatom)): 993 mg/l  
Exposure time: 72 h  
Test substance: Water Accommodated Fraction  
Remarks: Based on data from similar materials

### **(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxyphenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters:**

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 74 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.3 mg/l  
Exposure time: 24 h

Toxicity to algae : NOEC (Desmodesmus subspicatus (green algae)): < 0.16 mg/l  
Exposure time: 72 h

M-Factor (Acute aquatic toxicity) : 1

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.00028 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Method: OECD Test Guideline 211

M-Factor (Chronic aquatic toxicity) : 100

## 12.2 Persistence and degradability

### **Components:**

#### **Dec-1-ene, homopolymer, hydrogenated:**

Biodegradability : Result: Not readily biodegradable.  
Biodegradation: 2 %  
Exposure time: 28 d

#### **Paraffin oil:**

Biodegradability : Result: Readily biodegradable  
Biodegradation: 82 %  
Exposure time: 24 d  
Method: OECD Test Guideline 301F  
Remarks: Based on data from similar materials

### **(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxyphenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters:**

Biodegradability : Result: Not readily biodegradable.  
Biodegradation: 0 %  
Exposure time: 28 d

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Method: OECD Test Guideline 301B

### 12.3 Bioaccumulative potential

**Components:**

**Dec-1-ene, homopolymer, hydrogenated:**

Partition coefficient: n-  
octanol/water : log Pow: > 6.5

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

Not relevant

### 12.6 Other adverse effects

No data available

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

- Product : Dispose of in accordance with local regulations.  
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.  
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.
- Contaminated packaging : Dispose of as unused product.  
Empty containers should be taken to an approved waste handling site for recycling or disposal.

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## SECTION 14: Transport information

### 14.1 UN number

ADN : UN 3077  
ADR : UN 3077  
RID : UN 3077  
IMDG : UN 3077  
IATA : UN 3077

### 14.2 UN proper shipping name

ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxyphenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters)

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**ADR** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxyphenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters)

**RID** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxyphenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters)

**IMDG** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxyphenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters)

**IATA** : Environmentally hazardous substance, solid, n.o.s.  
(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxyphenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters)

**14.3 Transport hazard class(es)**

**ADN** : 9  
**ADR** : 9  
**RID** : 9  
**IMDG** : 9  
**IATA** : 9

**14.4 Packing group**

**ADN**  
Packing group : III  
Classification Code : M7  
Hazard Identification Number : 90  
Labels : 9

**ADR**  
Packing group : III  
Classification Code : M7  
Hazard Identification Number : 90  
Labels : 9  
Tunnel restriction code : (E)

**RID**  
Packing group : III  
Classification Code : M7  
Hazard Identification Number : 90  
Labels : 9

**IMDG**  
Packing group : III  
Labels : 9



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EmS Code : F-A, S-F

**IATA**

Packing instruction (cargo aircraft) : 956  
Packing instruction (passenger aircraft) : 956  
Packing instruction (LQ) : Y956  
Packing group : III  
Labels : Miscellaneous

### 14.5 Environmental hazards

**ADN**

Environmentally hazardous : yes

**ADR**

Environmentally hazardous : yes

**RID**

Environmentally hazardous : yes

**IMDG**

Marine pollutant : yes

### 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

Remarks : Not applicable for product as supplied.

## SECTION 15: Regulatory information

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

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Seveso II - Directive 2003/105/EC amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances  
Not applicable

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

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E1	ENVIRONMENTAL HAZARDS	100 t	200 t
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**The components of this product are reported in the following inventories:**

KECI : All ingredients listed, exempt or notified.

REACH : All ingredients (pre-)registered or exempt.

TSCA : All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

AICS : All ingredients listed or exempt.

IECSC : All ingredients listed or exempt.

PICCS : All ingredients listed or exempt.

DSL : All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances List (DSL).

ENCS/ISHL : Some components are not listed or not identified on ENCS/ISHL.

NZIoC : All ingredients listed or exempt.

**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

**15.2 Chemical Safety Assessment**

A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

**Full text of R-Phrases**

R37/38 : Irritating to respiratory system and skin.  
R41 : Risk of serious damage to eyes.  
R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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R65 : Harmful: may cause lung damage if swallowed.

### Full text of H-Statements

H304 : May be fatal if swallowed and enters airways.  
H315 : Causes skin irritation.  
H318 : Causes serious eye damage.  
H335 : May cause respiratory irritation.  
H400 : Very toxic to aquatic life.  
H410 : Very toxic to aquatic life with long lasting effects.

### Full text of other abbreviations

Aquatic Acute : Acute aquatic toxicity  
Aquatic Chronic : Chronic aquatic toxicity  
Asp. Tox. : Aspiration hazard  
Eye Dam. : Serious eye damage  
Skin Irrit. : Skin irritation  
STOT SE : Specific target organ toxicity - single exposure  
91/322/EEC : Europe. Commission Directive 91/322/EEC on establishing indicative limit values  
GB EH40 : UK. EH40 WEL - Workplace Exposure Limits  
91/322/EEC / TWA : Limit Value - eight hours  
GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)

### Further information

Sources of key data used to compile the Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

GB / EN