

MOLYKOTE(R) P-74 PASTE

Version 1.3 Revision Date: 11.11.2015 SDS Number: 655219-00004 Date of last issue: 15.10.2015
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, 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.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

MOLYKOTE(R) P-74 PASTE

Version 1.3 Revision Date: 11.11.2015 SDS Number: 655219-00004 Date of last issue: 15.10.2015
Date of first issue: 21.10.2014

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/doctor.
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	Concentration (% w/w)
Dec-1-ene, homopolymer, hydrogenated	68037-01-4 500-183-1 01-2119486452-34	Asp. Tox. 1; H304	>= 20 - < 30
Calcium hydroxide	1305-62-0 215-137-3	Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335	>= 10 - < 20
Paraffin oil	8012-95-1 232-384-2	Asp. Tox. 1; H304	>= 10 - < 20
(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxyphenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters	118832-72-7	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 0.25 - < 1

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

MOLYKOTE(R) P-74 PASTE

Version	Revision Date:	SDS Number:	Date of last issue: 15.10.2015
1.3	11.11.2015	655219-00004	Date of first issue: 21.10.2014

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
Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical

- 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_x)

5.3 Advice for firefighters

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

MOLYKOTE(R) P-74 PASTE

Version	Revision Date:	SDS Number:	Date of last issue: 15.10.2015
1.3	11.11.2015	655219-00004	Date of first issue: 21.10.2014

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.
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.

MOLYKOTE(R) P-74 PASTE

Version	Revision Date:	SDS Number:	Date of last issue: 15.10.2015
1.3	11.11.2015	655219-00004	Date of first issue: 21.10.2014

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

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	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			
		TWA (Respirable)	4 mg/m3	GB EH40

MOLYKOTE(R) P-74 PASTE

Version 1.3 Revision Date: 11.11.2015 SDS Number: 655219-00004 Date of last issue: 15.10.2015
Date of first issue: 21.10.2014

Further information	dust)			
Further information	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			
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
Further information	Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used			

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

Substance name	End Use	Exposure routes	Potential health effects	Value
Graphite	Consumers	Inhalation	Long-term local effects	0.3 mg/m3
	Consumers	Ingestion	Long-term systemic effects	813 mg/kg bw/day
	Workers	Inhalation	Long-term local effects	1.2 mg/m3
Calcium hydroxide	Workers	Inhalation	Acute local effects	4 mg/m3
	Workers	Inhalation	Long-term local effects	1 mg/m3
	Consumers	Inhalation	Acute local effects	4 mg/m3
	Consumers	Inhalation	Long-term local effects	1 mg/m3
Paraffin oil	Workers	Inhalation	Long-term systemic effects	5 mg/m3
	Workers	Inhalation	Short-term exposure	5 mg/m3

MOLYKOTE(R) P-74 PASTE

Version 1.3 Revision Date: 11.11.2015 SDS Number: 655219-00004 Date of last issue: 15.10.2015
Date of first issue: 21.10.2014

	Workers	Inhalation	Long-term local effects	5 mg/m ³
	Workers	Inhalation	Acute local effects	5 mg/m ³
(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxyphenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters	Workers	Inhalation	Long-term systemic effects	1.47 mg/m ³
	Workers	Skin contact	Long-term systemic effects	0.42 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	0.36 mg/m ³
	Consumers	Skin contact	Long-term systemic effects	0.21 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	0.21 mg/kg bw/day

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

Substance name	Environmental Compartment	Value
Calcium hydroxide	Fresh water	0.49 mg/l
	Marine water	0.32 mg/l
	Intermittent use/release	0.49 mg/l
	Sewage treatment plant	3 mg/l
	Soil	1080 mg/kg
(((3,5-Bis(1,1-Dimethylethyl)-4-Hydroxyphenyl)Methyl)Thio)Acetic Acid C10-14-Isoalkyl Esters	Fresh water	0.0056 µg/l
	Marine water	0.00056 µg/l
	Intermittent use/release	0.0016 mg/l
	Sewage treatment plant	1 mg/l
	Fresh water sediment	2.62 mg/kg
	Marine sediment	0.262 mg/kg
	Soil	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

MOLYKOTE(R) P-74 PASTE

Version	Revision Date:	SDS Number:	Date of last issue: 15.10.2015
1.3	11.11.2015	655219-00004	Date of first issue: 21.10.2014

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

MOLYKOTE(R) P-74 PASTE

Version	Revision Date:	SDS Number:	Date of last issue: 15.10.2015
1.3	11.11.2015	655219-00004	Date of first issue: 21.10.2014

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
------------------	---	-------------------

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
--------------------	---	------------------

MOLYKOTE(R) P-74 PASTE

Version 1.3 Revision Date: 11.11.2015 SDS Number: 655219-00004 Date of last issue: 15.10.2015
Date of first issue: 21.10.2014

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

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

MOLYKOTE(R) P-74 PASTE

Version	Revision Date:	SDS Number:	Date of last issue: 15.10.2015
1.3	11.11.2015	655219-00004	Date of first issue: 21.10.2014

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

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

Species: Rabbit
Method: OECD Test Guideline 405

MOLYKOTE(R) P-74 PASTE

Version 1.3 Revision Date: 11.11.2015 SDS Number: 655219-00004 Date of last issue: 15.10.2015
Date of first issue: 21.10.2014

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

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

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

Carcinogenicity

Not classified based on available information.

Components:

MOLYKOTE(R) P-74 PASTE

Version 1.3 Revision Date: 11.11.2015 SDS Number: 655219-00004 Date of last issue: 15.10.2015
Date of first issue: 21.10.2014

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

MOLYKOTE(R) P-74 PASTE

Version 1.3 Revision Date: 11.11.2015 SDS Number: 655219-00004 Date of last issue: 15.10.2015
Date of first issue: 21.10.2014

Paraffin oil:

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

(((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 Days
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.

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

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

MOLYKOTE(R) P-74 PASTE

Version 1.3 Revision Date: 11.11.2015 SDS Number: 655219-00004 Date of last issue: 15.10.2015
Date of first issue: 21.10.2014

Toxicity to bacteria : NOEC : 2 mg/l
Exposure time: 28 d
Method: OECD Test Guideline 301D

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

NOELR (Skeletonema costatum (marine diatom)): 993 mg/l

MOLYKOTE(R) P-74 PASTE

Version 1.3 Revision Date: 11.11.2015 SDS Number: 655219-00004 Date of last issue: 15.10.2015
Date of first issue: 21.10.2014

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
Method: OECD Test Guideline 301D

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
Method: OECD Test Guideline 301B

MOLYKOTE(R) P-74 PASTE

Version	Revision Date:	SDS Number:	Date of last issue: 15.10.2015
1.3	11.11.2015	655219-00004	Date of first issue: 21.10.2014

12.3 Bioaccumulative potential

Components:

Dec-1-ene, homopolymer, hydrogenated:

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

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

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 : Empty containers should be taken to an approved waste handling site for recycling or disposal.
If not otherwise specified: Dispose of as unused product.

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)

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,



MOLYKOTE(R) P-74 PASTE

Version 1.3 Revision Date: 11.11.2015 SDS Number: 655219-00004 Date of last issue: 15.10.2015
Date of first issue: 21.10.2014

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
EmS Code : F-A, S-F

IATA (Cargo)
Packing instruction (cargo aircraft) : 956
Packing instruction (LQ) : Y956
Packing group : III



MOLYKOTE(R) P-74 PASTE

Version 1.3 Revision Date: 11.11.2015 SDS Number: 655219-00004 Date of last issue: 15.10.2015
Date of first issue: 21.10.2014

Labels : Miscellaneous

IATA (Passenger)

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 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
E1	ENVIRONMENTAL HAZARDS	100 t	200 t

The components of this product are reported in the following inventories:

KECI : All ingredients listed, exempt or notified.

MOLYKOTE(R) P-74 PASTE

Version	Revision Date:	SDS Number:	Date of last issue: 15.10.2015
1.3	11.11.2015	655219-00004	Date of first issue: 21.10.2014

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.

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

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)

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 (Cana-

MOLYKOTE(R) P-74 PASTE

Version	Revision Date:	SDS Number:	Date of last issue: 15.10.2015
1.3	11.11.2015	655219-00004	Date of first issue: 21.10.2014

da); 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; 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

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