

SAFETY DATA SHEET

According to article 31 and Annex II of the EU REACH Regulation

Version: 4.1
Revision Date: 21.10.2013
Superseded date: 21.02.2011**MOLYKOTE(R) DX PASTE****1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY**

1.1 Product name	:	MOLYKOTE(R) DX PASTE	
1.2 Identified uses	:	Lubricants and additives	
Uses advised against	:	None known.	
1.3 Company	:	Dow Corning Europe S.A. rue Jules Bordet - Parc Industriel - Zone C B-7180 Seneffe Belgium	
E-mail address (Safety Data Sheet)	:	sdseu@dowcorning.com	
Customer Service	:	English Deutsch Français Italiano Español	Tel: +49 611237507 Tel: +49 611237500 Tel: +32 64511149 Tel: +32 64511170 Tel: +32 64511163 Fax: +32 64888683
1.4 Emergency Phone Number	:	Dow Corning (Barry U.K. 24h) Dow Corning (Wiesbaden 24h) Dow Corning (Seneffe 24h)	Tel: +44 1446732350 Tel: +49 61122158 Tel: +32 64 888240

2. HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

According to EU Directives 67/548/EEC or 1999/45/EC:

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements**Labelling according to EEC Directive**

Symbols	:	N Dangerous for the environment.
R-phrases	:	R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrases	:	S23(V) Do not breathe vapour. S24/25 Avoid contact with skin and eyes. S29 Do not empty into drains. S51 Use only in well-ventilated areas. S57 Use appropriate container to avoid environmental contamination. S60 This material and its container must be disposed of as hazardous waste.

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3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization: Mixture of inorganic and organic compounds**According to EU Directives 67/548/EEC or 1999/45/EC:**

Name	CAS-No.	EINECS/ ELINCS No.	REACH Registration Number	Conc. (% w/w)	Classification	
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	265-155-0	01-21194617 0-45	40,0	Substance with a Community workplace exposure limit	
Distillates (petroleum), solvent refined heavy naphthenic	64741-96-4	265-097-6	-	11,0	Substance with a Community workplace exposure limit	
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	265-169-7	-	5,2	Substance with a Community workplace exposure limit	
N-Tallow Alkyltrimethylenediami ne Oleate	61791-53-5	263-186-4	-	2,8	C N	R34 R50
Zinc oxide	1314-13-2	215-222-5	01-21194638 81-32	1,9	N	R50/53

According to Regulation (EC) No. 1272/2008:

Name	CAS-No.	EINECS/ ELINCS No.	REACH Registration Number	Conc. (% w/w)	Classification	
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	265-155-0	01-21194617 0-45	40,0	Substance with a Community workplace exposure limit	
Distillates (petroleum), solvent refined heavy naphthenic	64741-96-4	265-097-6	-	11,0	Substance with a Community workplace exposure limit	
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	265-169-7	-	5,2	Substance with a Community workplace exposure limit	
N-Tallow Alkyltrimethylenediami ne Oleate	61791-53-5	263-186-4	-	2,8	Skin corrosion/irritation: Category 1B - H314 Acute aquatic hazard: Category 1 - H400	
Zinc oxide	1314-13-2	215-222-5	01-21194638 81-32	1,9	Acute aquatic hazard: Category 1 - H400 Chronic aquatic hazard: Category 1 - H410	

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

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

CLP classifications are based on all current available data including from known international organizations. These classifications are subject to revision as more information becomes available.

4. FIRST AID MEASURES

4.1 Description of First Aid Measures:

- On contact with eyes** : Flush with water.
- On skin contact** : Flush with water.
- If inhaled** : Remove to fresh air.
- On ingestion** : Do not induce vomiting. Obtain medical attention.

5. FIRE-FIGHTING MEASURES

- 5.1 Suitable extinguishing media** : On large fires use dry chemical, foam or water spray (fog). On small fires use carbon dioxide (CO₂), dry chemical or water spray. Water can be used to cool fire exposed containers.
- Unsuitable extinguishing media** : None known.
- 5.2 Hazards during fire fighting** : None known.
- Hazardous Combustion Products** : Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Traces of fluorinated products. Formaldehyde. Nitrogen products. Phosphorus products.
- 5.3 Special protective equipment/procedures** : A self-contained respirator and protective clothing should be worn. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures** : Wear proper protective equipment.
- 6.2 Environmental precautions** : Prevent from spreading or entering into drains, ditches or rivers by using sand, earth or other appropriate barriers.
- 6.3 Methods and materials for** : Scrape up and place in a container fitted with a lid. The spilled product produces an

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containment and cleaning up : extremely slippery surface.

7. HANDLING AND STORAGE

- 7.1 Advice on safe handling** : General ventilation is recommended. Local ventilation is recommended. Avoid skin and eye contact. Do not breathe vapour. Do not breathe spray or mist. Do not empty into drains.
- 7.2 Advice on storage** : Do not store with oxidizing agents.
 Storage temperature: minimum 0 °C, maximum 40 °C
- 7.3 Specific uses** : Refer to technical data sheet available on request.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Name	CAS-No.	Exposure Limits
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	5 mg/m3 TWA Oil Mist,mineral
Distillates (petroleum), solvent refined heavy naphthenic	64741-96-4	5 mg/m3 TWA Oil Mist,mineral
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	10 mg/m3 STEL Oil Mist,mineral 5 mg/m3 TWA Oil Mist,mineral
Zinc oxide	1314-13-2	2 mg/m3 TWA Respirable fraction 10 mg/m3 STEL Respirable fraction

8.2 Exposure controls

Engineering Controls : Ventilation : Refer to Section 7.1

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Personal protection equipment

- Respiratory protection** : Suitable respiratory protection should be worn if the product is used in large quantities, confined spaces or in other circumstances where the OEL may be approached or exceeded.
A suitable respirator must be worn if the product is used in any circumstances where an aerosol or mist may be generated, such as during spraying or similar activities.
Depending on the working conditions, wear a respiratory mask with filter(s) BP or use a self-contained respirator.
The choice of a filter type depends on the amount and type of chemical being handled in the workplace. Regarding filter characteristics, contact your respiratory protection supplier.
- Hand protection** : Chemical protective gloves should be worn where repeated or prolonged contact can occur: Silver shield(TM). 4H(TM). Regarding glove's breakthrough time, contact your chemical protective glove supplier.
- Eye/face protection** : Safety goggles should be worn.
- Skin protection** : Wear impervious overalls in circumstances where significant skin contact can occur.
- Hygiene measures** : Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.
- Additional information** : These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.
- Environmental exposure controls** : Refer to section 6 and 12.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form** : Paste
- Colour** : White
- Odour** : Slight
- Flash point** : > 200 °C (Closed Cup)
- Explosive properties** : No
- Specific Gravity** : 1,14
- Oxidizing properties** : No

The above information is not intended for use in preparing product specifications. Contact Dow Corning before writing specifications.

10. STABILITY AND REACTIVITY

- 10.1 Reactivity** : None known.

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10.2 Stability	:	Stable under normal usage conditions.
10.3 Possibility of hazardous reactions	:	None known.
10.4 Conditions to avoid	:	None established.
10.5 Materials to avoid	:	Can react with strong oxidising agents.
10.6 Hazardous decomposition products	:	Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Traces of fluorinated products. Formaldehyde. Nitrogen products. Phosphorus products.

11. TOXICOLOGICAL INFORMATION**Acute toxicity:**

On contact with eyes	:	Slightly irritating.
On skin contact	:	Slightly irritating.
If inhaled	:	No adverse effects are normally expected.
On ingestion	:	Smallest quantities reaching the lungs through swallowing or subsequent vomiting may result in lung oedema or pneumonia.

Chronic toxicity:

On skin contact	:	Can irritate on prolonged or repeated skin contact.
If inhaled	:	No adverse effects are normally expected.
On ingestion	:	Repeated swallowing may cause gastrointestinal irritation and disturbance.

Toxicokinetics, metabolism and distribution : No specific information is available.

Other Health Hazard Information : This product contains (a) powder(s) hazardous by inhalation. This is not relevant to the current physical form of the product, which is not in a respirable form.

¹ Based on product test data.

² Based on test data from similar products.

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Very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment. However, due to the physical form and water-insolubility of the product the bioavailability is negligible.

12.2 Persistence and degradability

Solid material, insoluble in water.

12.3 Bioaccumulation

No bioaccumulation potential.

12.4 Release to waters / Mobility in soil**Fate and effects in waste water treatment plants:**

No adverse effects on bacteria are predicted.

13. DISPOSAL CONSIDERATIONS

Product and packaging disposal : This material must be disposed of as hazardous waste. 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.

14. TRANSPORT INFORMATION**Road / Rail (ADR/RID)**

UN No. : UN 3077

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S.(Tallowalkyltriethylene diamineoleate / Zinc Oxide)

Class : 9

Packing group : III

Labels : 9

Sea transport (IMDG)

UN No. : UN 3077

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S.(Tallowalkyltriethylene diamineoleate / Zinc Oxide)

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Class	:	9
Packing group	:	III
Emergency Schedule (EmS)	:	F-A S-F
Marine pollutant	:	Tallowalkyltriethylene diamineoleate Zinc Oxide
Labels	:	Miscellaneous dangerous substances and articles
<u>Air transport (IATA)</u>		
UN No.	:	UN 3077
Proper Shipping Name	:	Environmentally hazardous substance, solid, n.o.s.(Tallowalkyltriethylene diamineoleate / Zinc Oxide)
Class	:	9
Packing group	:	III
Labels	:	Miscellaneous dangerous goods : Apply Gross Wt Supplemental Label to Outer Package if shipping Limited Quantity

15. REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Status**

EINECS	:	All ingredients listed, exempt or notified (ELINCS).
TSCA	:	All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.
AICS	:	One or more ingredients are not listed or exempt.
IECSC	:	All ingredients listed or exempt.
ENCs/ISHL	:	All ingredients listed, exempt or notified.
KECL	:	One or more ingredients are not listed or exempt or identified.
PICCS	:	One or more ingredients are not listed or exempt.
DSL	:	All ingredients listed or exempt.

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This product safety data sheet was prepared in compliance with article 31 and Annex II of the EU REACH Regulation as well as its relevant amendments, on the approximation of laws, regulations and administrative provisions relative to the classification, packaging and labelling of dangerous substances and preparations.

It is the responsibility of persons in receipt of this Product Safety Data Sheet to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces a formulation containing the Dow Corning product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from the Dow Corning Product Safety Data Sheet to their own Product Safety Data Sheet in compliance with article 31 and Annex II of the EU REACH Regulation.

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS. Dow Corning shall not be held responsible for any defect in the product covered by this SDS, should the existence of such defect not be detectable considering the current state of scientific and technical knowledge.

As stated above, this Safety Data Sheet has been prepared in compliance with applicable European law. If you purchase this material outside Europe, where compliance laws may differ, you should receive from your local Dow Corning supplier a SDS applicable to the country in which the product is sold and intended to be used. Please note that the appearance and content of the SDS may vary - even for the same product - between different countries, reflecting the different compliance requirements. Should you have any question, please refer to your local Dow Corning supplier.

Source of information: Internal data and publically available information

R34 Causes burns., **R50** Very toxic to aquatic organisms., **R50/53** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

H314 Causes severe skin burns and eye damage., **H400** Very toxic to aquatic life., **H410** Very toxic to aquatic life with long lasting effects.