

Dow Corning Toray Co., Ltd.
Material Safety Data SheetRevision Date: 2005/08/04
MSDS No.: 01283561

MOLYKOTE(R) LONGTERM W2

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : MOLYKOTE(R) LONGTERM W2
Company Name : Dow Corning Toray Co., Ltd.
Address : 100-0005, AIG Bldg., 1-1-3 Marunouchi, Chiyoda-ku, Tokyo, Japan
Phone Number : 03-3287-8300 (Customer Service)
Fax Number : 03-3287-8311
Product Code : 01283561
Emergency Telephone Number : 0436-21-3101

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization : Mixture
Generic Name : Inorganic and organic compounds in mineral oil

Ingredients and Contents

<u>CAS Number</u>	<u>ENCS Number</u>	<u>Chemical formula</u>	<u>Wt %</u>	<u>Component Name</u>
64741-96-4	(9)-1692	-	40 - 50	Solvent refined heavy naphthenic distillate (petroleum)
64741-88-4	(9)-1692	-	10 - 20	Solvent-refined heavy paraffinic petroleum distillate
64742-54-7	(9)-1692	-	10 - 20	Hydrotreated heavy paraffinic petroleum distillate
64742-65-0	(9)-1692	-	10 - 20	Solvent dewaxed heavy paraffinic petroleum distillate
1305-62-0	(1)-181	Ca(OH) ₂	1 - 10	Calcium hydroxide
13463-67-7	(1)-558	TiO ₂	1 - 10	Titanium dioxide

Comments : This product contains the above chemical(s) listed by regulations and/or European Commission Directive 1999/45/EC (Article 3[3]).

3. HAZARDS IDENTIFICATION

Overall Hazard Classification

Hazardous Properties : Not hazardous.
Environmental Effects : Not applicable.
Physical and Chemical Risks : Not applicable.

Signs and Symptoms : No significant adverse effects from a single exposure expected from normal use.
Hazard Classification (Japanese system) : Not applicable.

4. FIRST AID MEASURES

In Case of Inhalation : No first aid should be needed.
In Case of Skin Contact : No first aid should be needed.

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In Case of Eye Contact : Immediately flush with water for 15 minutes.
In Case of Ingestion : Get medical attention.
Comments : Treat according to person's condition and specifics of exposure.
Note to physicians : Treat symptomatically. For further information, the medical practitioner should contact Dow Corning Toray Co.,Ltd.

5. FIRE FIGHTING MEASURES

Extinguishing Media : On large fires use dry chemical, foam or water spray. 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 established.
Specific Hazards during Fire : None.
Specific Fire Fighting : Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.
Protection for Fire-fighter : Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions : Avoid skin and eye contact. Do not take internally.
Environmental Precautions : Do not allow large quantities to enter drains or surface waters.
Methods for Cleaning or Taking up : Observe all personal protective equipment recommendations described in this MSDS. If diked material can be pumped, store recovered material in appropriate container. Wipe up or scrape up and contain for salvage or disposal. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Laws and 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 laws and regulations are applicable.

7. HANDLING AND STORAGE

Handling
Technical Measures : Use with adequate ventilation.
Precautions : Avoid skin and eye contact.
Advice on safe handling : Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.

Storage
Advice on storage : Use reasonable care and store away from oxidizing materials.
Suitable packaging materials : None established.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls
Local Ventilation : None should be needed.
General Ventilation : Recommended.

Concentration Control Notification #26 from Ministry of Labor
None known.

Industrial Hygiene Standards

<u>Component Name</u>	<u>Exposure Limits</u>
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Solvent refined heavy naphthenic distillate (petroleum)	Observe oil mist limits. OSHA PEL (final rule) and ACGIH TLV: TWA 5 mg/m ³ ; ACGIH STEL 10 mg/m ³ .
Solvent-refined heavy paraffinic petroleum distillate	Observe oil mist limits. OSHA PEL (final rule) and ACGIH TLV: TWA 5 mg/m ³ ; ACGIH STEL 10 mg/m ³ .
Hydrotreated heavy paraffinic petroleum distillate	Observe oil mist limits. OSHA PEL (final rule) and ACGIH TLV: TWA 5 mg/m ³ ; ACGIH STEL 10 mg/m ³ .
Solvent dewaxed heavy paraffinic petroleum distillate	Observe oil mist limits. OSHA PEL (final rule) and ACGIH TLV: TWA 5 mg/m ³ ; ACGIH STEL 10 mg/m ³ .
Calcium hydroxide	OSHA PEL and ACGIH TLV: TWA 5 mg/m ³ .
Titanium dioxide	Japan Association on Industrial Health Guideline (2001): TWA 1 mg/m ³ Respirable dust. TWA 4 mg/m ³ Total dust. Observe titanium dioxide limits. OSHA PEL (final rule): TWA 15 mg/m ³ and ACGIH TLV: TWA 10 mg/m ³ .

Personal Protective Equipment**Personal Protective Equipment for Routine Handling**

Respiratory protection	: No respiratory protection should be needed.
Suitable Respirator	: None should be needed.
Hand protection	: No special protection needed.
Eye protection	: Use proper protection - safety glasses as a minimum.
Skin protection	: Washing at mealtime and end of shift is adequate.
Hygiene Measures	: Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.

Personal Protective Equipment for Spills

Respiratory protection	: No respiratory protection should be needed.
Eye protection	: Use proper protection - safety glasses as a minimum.
Skin protection	: Washing at mealtime and end of shift is adequate.
Precautionary Measures	: Avoid skin and eye contact. Do not take internally. Use reasonable care.
Note	: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

9. PHYSICAL AND CHEMICAL PROPERTIES**Physical State**

Form	: Grease
Color	: White
Odour	: Slight odor
pH	: Not determined.
Phase Transition Temperature or Temperature Range	
Boiling point/range	: Not determined.
Melting point/range	: Not determined.
Decomposition Temperature	: Not determined.
Flash Point	: > 200 °C(Cleveland Open Cup)
Autoignition Temperature	: Not determined.
Characteristics of Explosives	: Not determined.
Vapor Pressure @ 25°C	: Not determined.
Vapor Density	: Not determined.
Density	: 0.96 g/cm ³
Solubility	: Not determined.

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Partition coefficient (n-octanol/water) : Not determined.

Viscosity : Not determined.

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

10. STABILITY AND REACTIVITY

Stability : Stable.

Reactivity : Hazardous polymerization will not occur.

Conditions to Avoid : None.

Materials to Avoid : Can react with strong oxidising agents.

Hazardous Decomposition Products : Metal oxides. Carbon oxides and traces of incompletely burned carbon compounds.

Phosphorous oxides. Formaldehyde.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

None known.

Local Effects

Eye : Direct contact may cause mild irritation.

Skin : No significant irritation expected from a single short-term exposure.

Acute Effects

Oral : Low ingestion hazard in normal use.

Inhalation : Irritates respiratory passages very slightly.

Sensitizers

: None known.

Chronic Effects

Skin : Repeated or prolonged contact may cause defatting and drying of skin which may result in skin irritation and dermatitis.

Oral : Repeated ingestion or swallowing large amounts may injure internally.

Inhalation : No known applicable information.

Carcinogens : None known.

Mutagens : None known.

Teratogens : None known.

Reproductive Toxins : None known.

Other information : No known applicable information.

The above listed potential effects of overexposure are based on actual data, the results of studies performed upon similar compositions, component data, and/or expert review of the products.

12. ECOLOGICAL INFORMATION

Mobility : Solid material, insoluble in water. No adverse effects are predicted.

Bioaccumulation : No bioaccumulation potential.

Ecotoxicity

Others : No adverse effects on aquatic organisms are predicted.

13. DISPOSAL CONSIDERATIONS

Waste Disposal : This product falls under Industrial Waste based on Wastes Disposal and Public Cleansing Law. Dispose of in accordance with this law and local regulations.

Note : None.

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14. TRANSPORT INFORMATION

Local Regulations : Referred to Section 15.

International Regulations

Sea Transport (IMDG)

Not subject to IMDG code.

Air Transport (IATA)

Not subject to IATA regulations.

15. REGULATORY INFORMATION

Law Concerning Examination and Regulation of Manufacture, etc. of Chemical Substances : Not applicable.

Industrial Safety and Health Law

Notification Substance	Specific Number	Notification Component(s)	Wt %
	169	Solvent refined heavy naphthenic distillate (petroleum)	40 - 50
	169	Solvent-refined heavy paraffinic petroleum distillate	10 - 20
	169	Hydrotreated heavy paraffinic petroleum distillate	10 - 20
	169	Solvent dewaxed heavy paraffinic petroleum distillate	10 - 20
	316	Calcium hydroxide	1 - 10
	192	Titanium dioxide	1 - 10

Indication Substance : Not applicable.

Ordinance on Prevention of Organic Solvent Poisoning : Not applicable.

Ordinance on Prevention of Hazards due to Specified Chemical Substances : Not applicable.

Ordinance on Prevention of Lead Poisoning : Not applicable.

Ordinance on Prevention of Teraalkyl Lead Poisoning : Not applicable.

Hazardous Material : Not applicable.

Banned Substance : Not applicable.

High Pressure Gas Safe Law : Not applicable.

Fire Service Law : DESIGNATED FLAMMABLE SUBSTANCES, OTHER PLASTICS (3,000kg)

Poisonous and Deleterious : Not applicable.

Substance Control Law

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Pollutant Release and Transfer Register	:	Not applicable.
Marine Pollutant Prevention Law	:	Not Classified as a Marine Pollutant
Chemical Inventories		
MITI	:	All components are listed on ENCS or its exempt rule.
EINECS	:	All ingredients listed or exempt.
DSL	:	All chemical substances in this material are included on or exempted from the DSL.
AICS	:	All ingredients listed or exempt.
PICCS	:	All ingredients listed or exempt.
KECL	:	All ingredients listed, exempt or notified.
IECSC	:	All ingredients listed or exempt.
TSCA	:	Not determined.

16. OTHER INFORMATION

Bibliography: Statue book of chemicals, Internal Technical Data and others

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate. This Product has been developed and manufactured for general industrial use. For medical use, or other uses where safety considerations may be required, you must in advance test and review the safety of your intended application. Moreover, this Product is not for human implant nor human injection, nor use for applications which may present risk of accumulating inside human bodies.

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