

**Dow Corning Silicone Trading (Shanghai) Co., Ltd.
Material Safety Data Sheet**Page No.: 1/7
Version No. 3.0
Revision Date: 29.04.2007**MOLYKOTE(R) CO 220****1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY**

- 1.1 Product Name:** MOLYKOTE(R) CO 220
- 1.2 Manufacturer's Product Code:** 01935208
- 1.3 Chemical Classification:** Organic compound.
- 1.4 Dangerous Goods Classification:** Not applicable.
- 1.5 Company Details:**
- Manufacturer/Supplier:** Dow Corning Silicone Trading (Shanghai) Co., Ltd.
Address: No.268, De Lin Road, WaiGaoQiao Free Trade Zone, Shanghai 200131, China
Telephone Number: (86 21)37747110 **Fax Number:** (86 21) 57741162
Emergency Telephone Number: (86 21) 37741000
Contact Person: Environment, Health and Safety Manager

2. COMPOSITION / INFORMATION ON INGREDIENTS

- 2.1 Chemical characterization:** Mixture
2.2 Physical Form: Liquid
2.3 Color: Brown
2.4 Use: Lubricant
2.5 Hazardous Ingredients*:

<u>Chemical Name</u>	<u>CAS No.</u>	<u>% (w/w)</u>	<u>Symbols & Health Risk Phrases</u>
Octylated diphenylamines	68411-46-1	<10	Dangerous for the environment. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Zinc dialkyldithiophosphate	68649-42-3	<10	Irritant. Dangerous for the environment. Irritating to skin. Risk of serious damage to eyes. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

*According to European Commission Directive 1999/45/EC (Article 3 [3])

3. HAZARDS IDENTIFICATION

- 3.1 Overall Hazard Classification:** Not hazardous.

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3.2 Hazard Information:	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do not breathe spray. Avoid contact with skin and eyes. Use only in well-ventilated areas. Avoid release to the environment. Refer to special instructions/Safety data sheets.
3.3 Route of Exposure:	Inhalation, Skin Contact and Accidental Ingestion.
3.4 Possible Health Effects:	
	<u>Acute</u>
Eyes:	Direct contact may cause mild irritation.
Skin:	No significant irritation expected from a single short-term exposure.
Inhalation:	Irritates respiratory passages very slightly.
Ingestion:	Low ingestion hazard in normal use.
	<u>Chronic</u>
Skin:	Repeated or prolonged contact may cause defatting and drying of skin which may result in skin irritation and dermatitis.
Inhalation:	No known applicable information.
Ingestion:	Repeated ingestion or swallowing large amounts may injure internally.
3.5 Signs and Symptoms of Overexposure:	No significant adverse effects from a single exposure expected from normal use.

4. FIRST AID MEASURES

4.1 Eyes:	Immediately flush with water for 15 minutes.
4.2 Skin:	No first aid should be needed.
4.3 Inhalation:	No first aid should be needed.
4.4 Ingestion:	Get medical attention.
4.5 Comments:	Treat according to person's condition and specifics of exposure.
4.6 Note to physicians:	Treat symptomatically. For further information, the medical practitioner should contact Dow Corning Silicone Trading (Shanghai) Co., Ltd.

5. FIRE FIGHTING MEASURES

5.1 Flammability:	Non-flammable.
5.2 Flash Point:	> 200 °C (Closed Cup)
5.3 Autoignition temperature:	Not determined.
5.4 Lower Flammability Limit:	Not determined.
5.5 Upper Flammability Limit:	Not determined.
5.6 Hazardous Properties:	None.
5.7 Extinguishing Media:	On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO ₂), dry chemical or water spray. Water can be used to cool fire exposed containers.

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5.8 Special Fire Fighting Procedures and Equipment:	Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool. Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals.
5.9 Hazardous Combustion Products:	Carbon oxides and traces of incompletely burned carbon compounds. Nitrogen oxides. Metal oxides. Sulfur oxides. Phosphorous oxides. Formaldehyde.
5.10 Unsuitable Extinguishing Media:	None established.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions:	Avoid skin and eye contact. Do not take internally.
6.2 Environmental Precautions:	Do not empty into drains. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth or other appropriate barriers.
6.3 Methods for Cleaning up:	Determine whether to evacuate or isolate the area according to your local emergency plan. Observe all personal protective equipment recommendations described in this MSDS. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbant. 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

7.1 Handling Precautions:	Use with adequate ventilation. Avoid skin and eye contact. Do not take internally. Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.
7.2 Storage Conditions:	Use reasonable care and store away from oxidizing materials.
7.3 Unsuitable Packaging Materials:	None established.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Industrial Hygiene Standards:			
	<u>Ingredients</u>	<u>CAS No.</u>	<u>Exposure Limits</u>
	Octylated diphenylamines	68411-46-1	None established.
	Zinc dialkyldithiophosphate	68649-42-3	None established.
8.2 Engineering Controls			

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

8.3 Personal Protective Equipment for Routine Handling

Respiratory protection: No respiratory protection should be needed.

Suitable Respirator: None should be needed.

Eye protection: Use proper protection - safety glasses as a minimum.

Hand protection: No special protection needed.

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.

8.4 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.

Comments: If this product is heated to > 150 degrees C, trace quantities of formaldehyde may be released, and adequate ventilation is required.

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

9.1 Physical Form:	Liquid
9.2 Color:	Brown
9.3 Odor:	Ester-like odor
9.4 pH:	Not determined.
9.5 Solubility in Water:	Not determined.
9.6 Boiling Point:	> 100 °C
9.7 Melting Point:	Not determined.
9.8 Flash Point:	> 200 °C (Closed Cup)
9.9 Autoignition temperature:	Not determined.
9.10 Explosive properties:	No
9.11 Oxidizing properties:	No
9.12 Vapor Pressure @ 25°C:	Not determined.
9.13 Specific Gravity:	0.94

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9.14 Octanol/water partition coefficient:	Not determined.
9.15 Vapour Density (air=1):	Not determined.
9.16 Viscosity:	220 cSt
9.17 Molecular Weight:	Not determined.

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

10. STABILITY AND REACTIVITY

10.1 Stability:	Stable.
10.2 Reactivity	
Conditions to Avoid:	None.
Materials to Avoid:	Can react with strong oxidising agents.
Hazardous Decomposition Products:	Carbon oxides and traces of incompletely burned carbon compounds. Nitrogen oxides. Metal oxides. Sulfur oxides. Phosphorous oxides. Formaldehyde.
Hazardous Polymerization:	Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

11.1 Possible Health Effects:	Refer to Section 3.4
11.2 Sensitizing Effects:	None known.
11.3 Mutagenic Effects:	None known.
11.4 Reproductive Effects:	None known.
11.5 Carcinogenic Effects:	None known.
11.6 Other Health Hazard 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

12.1 Environmental Fate and Distribution:	No specific information is available.
12.2 Environmental Effects:	Harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment.
Bioaccumulation:	Potential to bioaccumulate.
12.3 Fate and Effects in Waste Water Treatment Plants:	No adverse effects on bacteria are predicted.

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Not applicable.

14.2 Sea Transport (IMDG):

Not subject to IMDG code.

14.3 Air Transport (IATA):

Not subject to IATA regulations.

15. REGULATORY INFORMATION**15.1 Applicable Laws:**

Provisions of the Regulations for the Safe Handling of Chemicals in the Workplace, particularly those relating to the safe use, production, storage and transportation of dangerous chemicals.

15.2 Chemical Inventories:**AICS:** All ingredients listed or exempt.
DSL: All chemical substances in this material are included on or exempted from the DSL.
IECSC: All ingredients listed or exempt.
EINECS: All ingredients listed or exempt.
KECL: All ingredients listed, exempt or notified.
PICCS: All ingredients listed or exempt.
TSCA: Not determined.
MITI: Not determined.**16. OTHER INFORMATION****Contact Point:** Technical Information Center (86 21)37747110
Prepared by: Dow Corning Silicone Trading (Shanghai) Co., Ltd.

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This information is offered in good faith as typical values and not as a product specification. No warranty, 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.

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