

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

Version: 5.0 Revision Date: 21.03.2013 Superseded date: 23.04.2009

# **MOLYKOTE(R) D-708 AF COATING**

1. ID	1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY					
1.1	Product name	:	MOLYKOTE(R) D-708 AF COATING	3		
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 - Zon B-7180 Seneffe Belgium	e C		
	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		
1.4	Emergency Phone Number	:	Dow Corning (Barry U.K. 24h) Dow Corning (Wiesbaden 24h) Dow Corning (Seneffe 24h)	Fax: +32 64888683 Tel: +44 1446732350 Tel: +49 61122158 Tel: +32 64 888240		

### 2. HAZARDS IDENTIFICATION

2.1	Classification	of	the substance or mixture	
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According to EU Directives 67/548/EEC or 1999/45/EC:

R11 Highly flammable.R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.R41 Risk of serious damage to eyes.R68 Possible risk of irreversible effects.

### 2.2 Label elements

Labelling	according	to	EEC	Directive	
Lasening					

Contains	: Isobutyl methyl ketone
	: Cyclohexanone
	: Phenol
Symbols	: F Highly flammable. Xn Harmful.



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R-phrases	<ul> <li>R11 Highly flammable.</li> <li>R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.</li> <li>R41 Risk of serious damage to eyes.</li> <li>R68 Possible risk of irreversible effects.</li> </ul>
S-phrases	<ul> <li>S23(S) Do not breathe spray.</li> <li>S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.</li> <li>S23(V) Do not breathe vapour.</li> <li>S39 Wear eye/face protection.</li> <li>S51 Use only in well-ventilated areas.</li> <li>S36/37 Wear suitable protective clothing and gloves.</li> </ul>
2.3 Other hazards	

Vapours may form explosive mixtures with air.



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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization: Organic compound in solvent

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

Name	CAS-No.	EINECS/	REACH	Conc.	Classification	
		ELINCS No.	Registration Number	(% w/w)		
Butanone	78-93-3	201-159-0	-	40.0	F	R11
					Xi	R36
						R66
						R67
Isobutyl methyl ketone	108-10-1	203-550-1	-	17.0	F	R11
					Xn	R20
					Xi	R36/37
						R66
Cyclohexanone	108-94-1	203-631-1	-	15.0		R10
2					Xn	R20/21/22
					Xi	R38
						R41
Polytetrafluoroethylene	9002-84-0	Exempt or	-	8.3		a Community workplace
		not available			exposure limit	
Carbon black	1333-86-4	215-609-9	-	2.0	Substance with exposure limit	a Community workplace
Phenol	108-95-2	203-632-7	-	1.6	С	R34
					-	ategory 3. R68
					T	R23/24/25
					Xn	R48/20/21/22
Methylphenol	1319-77-3	Exempt or	-	0.34	Т	R24/25
		not available			С	R34
According to Regulation	n (EC) No. 127	2/2008:				
Name	CAS-No.	EINECS/	REACH	Conc.	Classification	
		ELINCS	Registration	(% w/w)		
Dutonono	79 02 2	No.	Number	40.0	Elemmoble liquid:	Category 2 - H225
Butanone	78-93-3	201-159-0	-	40.0		e/eye irritation: Category 2 -
					H319	
						an toxicity - single exposure (r): Category 3 (narcotic effects)
					- H336	r): Category 5 (narcouc enects)
					EUH066	
Isobutyl methyl ketone	108-10-1	203-550-1	_	17.0	Flammable liquid:	Category 2 - H225
1555 duyi metnyi ketolle	100 10-1	205 550-1		17.0	Acute toxicity (Inh	alation - vapour): Category 4 -
					H332 Serious eve damag	e/eye irritation: Category 2 -
					H319	Geye mination. Category 2 -
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					Specific target organ toxicity - single exposure (Inhalation - vapour): Category 3 (respiratory trad irritation) - H335
					EUH066
Cyclohexanone	108-94-1	203-631-1	-	15.0	Flammable liquid: Category 3 - H226 Acute toxicity (Oral): Category 4 - H302 Acute toxicity (Dermal): Category 4 - H312 Acute toxicity (Inhalation - vapour): Category 4 H332 Skin corrosion/irritation: Category 2 - H315 Serious eye damage/eye irritation: Category 1 - H318
Polytetrafluoroethylene	9002-84-0	Exempt or not available	-	8.3	Substance with a Community workplace exposure limit
Carbon black	1333-86-4	215-609-9	-	2.0	Substance with a Community workplace exposure limit
Phenol	108-95-2	203-632-7	-	1.6	Acute toxicity (Oral): Category 3 - H301 Acute toxicity (Dermal): Category 3 - H311 Acute toxicity (Inhalation - dust and mist): Categor 3 - H331 Skin corrosion/irritation: Category 1B - H314 Germ cell mutagenicity: Category 2 - H341 Specific target organ toxicity - repeated exposure (Oral): Category 2 (central nervous system, kidne - H373 Specific target organ toxicity - repeated exposure (Inhalation): Category 2 (lungs, heart, kidney, liv central nervous system) - H373 Specific target organ toxicity - repeated exposure (Dermal): Category 2 (central nervous system, muscle) - H373
Methylphenol	1319-77-3	Exempt or not available	-	0.34	Acute toxicity (Oral): Category 3 - H301 Acute toxicity (Dermal): Category 3 - H311 Skin corrosion/irritation: Category 1B - H314



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### 4. FIRST AID MEASURES

4.1	1 Description of First Aid Measures:							
	<b>On contact with eyes</b> : Immediately flush with water. Obtain medical attention immediately.							
	On skin contact	:	Wipe off and wash with soap and water. Obtain medical attention.					
	If inhaled	:	Remove to fresh air. Obtain medical attention.					
	On ingestion	:	Do not induce vomiting. Obtain medical attention.					
4.2	Most important symptoms/effects, acute and delayed	:	Harmful by inhalation, in contact with skin and if swallowed. Risk of serious damage to eyes. Possible risk of irreversible effects.					

5. FI	RE-FIGHTING MEASUR	ES	
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	:	Vapours are heavier than air and can travel along ground to remote ignition sources. Electrostatic charges may be generated during transfer of product from its container. Ensure that all equipment is electrically earthed. Vapours may form explosive mixtures with air.
	Hazardous Combustion Products	:	Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Silica. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde. Fluorine compounds.
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	:	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. Eliminate all possible sources of ignition.
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 containment and cleaning up	:	Determine the need to evacuate or isolate the area according to your local emergency plan. Eliminate all possible sources of ignition. Very large spills should be contained by bunding, etc procedures. Mop, wipe or soak up with absorbent material and place in a

DOW CORNING

## SAFETY DATA SHEET

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container with a lid. The spilled product produces an extremely slippery surface.

7. HANDLING AND STORAGE					
7.1 Advice on safe handling	:	General ventilation is required. Local ventilation is recommended. Avoid skin and eye contact. Do not breathe vapour. Do not empty into drains. Do not ingest. Do not breathe spray or mist.			
7.2 Advice on storage	:	Store in a flameproof, well ventilated area. Electrostatic charges may be generated during transfer of product from its container. Ensure that all equipment is electrically earthed. Keep container tightly closed. Vapours may form explosive mixtures with air. Storage temperature: 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
Butanone	78-93-3	200 ppm TWA 300 ppm STEL 600 mg/m3 TWA 899 mg/m3 STEL
Isobutyl methyl ketone	108-10-1	50 ppm TWA 100 ppm STEL 208 mg/m3 TWA 416 mg/m3 STEL
Cyclohexanone	108-94-1	10 ppm TWA 20 ppm STEL
Polytetrafluoroethylene	9002-84-0	4 mg/m3 TWA Respirable dust 10 mg/m3 TWA Inhalable dust
Carbon black	1333-86-4	3.5 mg/m3 TWA 7 mg/m3 STEL
Phenol	108-95-2	2 ppm TWA
8.2 Exposure controls		
Engineering Controls	: Ventilation : R	efer to Section 7.1



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Personal protection equipm	<u>nent</u>
Respiratory protection	<ul> <li>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.</li> <li>A suitable respirator must be worn if the product is used in any circumstances where ar aerosol or mist may be generated, such as during spraying or similar activities.</li> <li>Depending on the working conditions, wear a respiratory mask with filter(s) AP or use self-contained respirator.</li> <li>The choice of a filter type depends on the amount and type of chemical being handled i the workplace. Regarding filter characteristics, contact your respiratory protection supplier.</li> </ul>
Hand protection	: Chemical protective gloves should be worn: Polyvinyl alcohol(PVA). Nitrile rubber. Silver shield(TM). 4H(TM). Viton(TM). Regarding glove's breakthrough time,contac your chemical protective glove supplier.
Eye/face protection	: Face shield or safety goggles.
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. Remove contaminated clothing immediately.
<u>Environmental exposure</u> <u>controls</u>	: Refer to section 6 and 12.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	Liquid
Colour	:	Black
Odour	:	Solvent
Boiling point/range	:	> 35 °C
Flash point	:	0 °C (Closed Cup)
Autoignition temperature	:	514 °C
Explosive properties	:	No Vapours may form explosive mixtures with air.
Specific Gravity	:	0.95
Viscosity	:	28 mm2/s at 25°C.
Oxidizing properties	:	No
Decomposition temperature	:	200 °C
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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.
10.2	Stability	:	Stable under normal usage conditions.
10.3	Possibility of hazardous reactions	:	None known.
10.4	Conditions to avoid	:	Eliminate all possible sources of ignition.
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: Silica. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde. Fluorine compounds.

## 11. TOXICOLOGICAL INFORMATION

Acute toxicity:		
On contact with eyes	:	Causes serious eye damage.
On skin contact	:	Harmful in contact with skin.
If inhaled	:	Harmful if inhaled.
On ingestion	:	Harmful if swallowed.
<u>Chronic toxicity:</u>		
On skin contact	:	Can irritate on prolonged or repeated contact. Suspected of causing genetic defects.
If inhaled	:	Prolonged or repeated inhalation may cause systemic adverse effects. Suspected of causing genetic defects.
On ingestion	:	Repeated swallowing may cause systemic adverse effects. Suspected of causing genetic defects.
<u>Toxicokinetics, metabolism</u> and distribution	:	Dangerous amounts can be absorbed through the skin.
<u>Other Health Hazard</u> <u>Information</u>	:	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.
<sup>1</sup> Based on product test da	ita.	

<sup>2</sup> Based on test data from similar products.



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### **12. ECOLOGICAL INFORMATION**

#### **12.1 Ecotoxicity effects**

No adverse effects on aquatic organisms are predicted.

#### 12.2 Persistence and degradability

The organic solvents in the product are biodegradable. Organic solvents may evaporate into the atmosphere, where they degrade.

#### **12.3 Bioaccumulation**

Low potential to bioaccumulate.

#### 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
 :
 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

<u>Road / Rail (ADR/RID)</u>		
UN No.	: UN 1224	
Proper Shipping Name	: KETONES, LIQUID, N.O.S. (Methyl ethyl ketone / Methyl isobutyl ketone)	
Class	: 3	
Packing group	: II	
Labels	: 3	
<u>Sea transport (IMDG)</u>		
UN No.	: UN 1224	
Proper Shipping Name	: KETONES, LIQUID, N.O.S.(Methyl ethyl ketone / Methyl isobutyl ketone)	
Class	: 3	
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Packing group	: II	
Emergency Schedule	: F-E	
(EmS)	S-D	
Labels	: flammable liquid	
<u>Air transport (IATA)</u>		
UN No.	: UN 1224	
Proper Shipping Name	: Ketones, liquid, n.o.s.(Methyl ethyl ketone / Methyl isobutyl ketone)	
Class	: 3	
Packing group	: П	
Labels	: Flammable Liquid	

15. REGULATORY INFORMATION		
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture		
<u>Status</u>		
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	: All ingredients listed, exempt or notified.	
IECSC	: All ingredients listed or exempt.	
ENCS/ISHL	: All ingredients listed, exempt or notified.	
DSL	: All ingredients listed or exempt.	
KECL	: One or more ingredients are not listed or exempt or identified.	



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### **16. OTHER INFORMATION**

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 amendements, 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

**R10** Flammable., **R11** Highly flammable., **R20** Harmful by inhalation., **R20/21/22** Harmful by inhalation, in contact with skin and if swallowed., **R23/24/25** Toxic by inhalation, in contact with skin and if swallowed., **R24/25** Toxic in contact with skin and if swallowed., **R34** Causes burns., **R36** Irritating to eyes., **R36/37** Irritating to eyes and respiratory system., **R38** Irritating to skin., **R41** Risk of serious damage to eyes., **R48/20/21/22** Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed., **R66** Repeated exposure may cause skin dryness or cracking., **R67** Vapours may cause drowsiness and dizziness., **R68** Possible risk of irreversible effects.

H225 Highly flammable liquid and vapour., H226 Flammable liquid and vapour., H301 Toxic if swallowed., H302 Harmful if swallowed., H311 Toxic in contact with skin., H312 Harmful in contact with skin., H314 Causes severe skin burns and eye damage., H315 Causes skin irritation., H318 Causes serious eye damage., H319 Causes serious eye irritation., H331 Toxic if inhaled., H332 Harmful if inhaled., H335 May cause respiratory irritation., H336 May cause drowsiness or dizziness., H341 Suspected of causing genetic defects.