



## SAFETY DATA SHEET

DRY MOLY FLUID

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Revision date: 20/01/2017

Revision No: 8

### Section 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

**Product name:** DRY MOLY FLUID

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Use of substance / mixture:** Dry film lubricant.

#### 1.3. Details of the supplier of the safety data sheet

**Company name:** ROCOL

ROCOL House

Swillington

Leeds

West Yorkshire

LS26 8BS

ENGLAND

**Tel:** +44 (0) 113 232 2700

**Fax:** +44 (0) 113 232 2740

**Email:** [customer-service@rocol.com](mailto:customer-service@rocol.com)

#### 1.4. Emergency telephone number

**Emergency tel:** +44 (0) 113 232 2600

### Section 2: Hazards identification

#### 2.1. Classification of the substance or mixture

**Classification under CLP:** Eye Irrit. 2: H319; Flam. Liq. 2: H225; Skin Sens. 1A: H317; STOT SE 3: H336; -: EUH066; -: EUH208

**Most important adverse effects:** Repeated exposure may cause skin dryness or cracking. Contains fatty acids, c-18,unsatd. trimers, compd with 9-octadecen-1-amine, (z)-. May produce an allergic reaction. Highly flammable liquid and vapour. May cause an allergic skin reaction. Causes serious eye irritation. May cause drowsiness or dizziness.

#### 2.2. Label elements

**Label elements:**

**Hazard statements:** EUH066: Repeated exposure may cause skin dryness or cracking.

EUH208: Contains fatty acids, c-18,unsatd. trimers, compd with 9-octadecen-1-amine, (z)-. May produce an allergic reaction.

H225: Highly flammable liquid and vapour.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

[cont...]

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**Hazard pictograms:** GHS02: Flame

GHS07: Exclamation mark



**Signal words:** Danger

**Precautionary statements:** P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P233: Keep container tightly closed.

P241: Use explosion-proof electrical/ventilating/lighting equipment.

P261: Avoid breathing dust/fumes/gas/mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312: Call a POISON CENTER/doctor if you feel unwell.

P501: Dispose of contents/container to local/national regulations.

## 2.3. Other hazards

**PBT:** This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous ingredients:

ACETONE

EINECS	CAS	PBT / WEL	CLP Classification	Percent
200-662-2	67-64-1	-	Flam. Liq. 2: H225; Eye Irrit. 2: H319; STOT SE 3: H336; -: EUH066	50-70%

PROPAN-2-OL

200-661-7	67-63-0	-	Flam. Liq. 2: H225; Eye Irrit. 2: H319; STOT SE 3: H336	10-20%
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MOLYBDENUM DISULPHIDE

215-263-9	1317-33-5	Substance with a Community workplace exposure limit.	-	10-20%
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ORGANIC DERIVATIVE OF BENTONITE CLAY - REACH registered number(s): 01-0000015005-83-XXXX

401-480-8	-	Substance with a Community workplace exposure limit.	-	<1%
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FATTY ACIDS, C-18,UNSATD. TRIMERS, COMPD WITH 9-OCTADECEN-1-AMINE, (Z)-

604-612-4	147900-93-4	-	Acute Tox. 4: H302; Skin Sens. 1: H317; STOT RE 2: H373; Aquatic Chronic 2: H411	<1%
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FATTY ACIDS, TALL-OIL, COMPDS. WITH OLEYLAMINE

288-315-1	85711-55-3	-	STOT RE 2: H373; Eye Dam. 1: H318; Skin Sens. 1A: H317	<1%
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## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Wash out mouth with water. Consult a doctor.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

### 4.2. Most important symptoms and effects, both acute and delayed

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. May cause drowsiness.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest. Drowsiness or mental confusion may occur.

**Delayed / immediate effects:** No data available.

### 4.3. Indication of any immediate medical attention and special treatment needed

**Immediate / special treatment:** Eye bathing equipment should be available on the premises.

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Use water spray to cool containers. Suitable extinguishing media for the surrounding fire should be used. Alcohol resistant foam. Dry chemical powder. Carbon dioxide.

### 5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** Forms explosive air-vapour mixture. In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

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## Section 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Refer to section 8 of SDS for personal protection details. Eliminate all sources of ignition.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers.

### 6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Do not use equipment in clean-up procedure which may produce sparks. Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

### 6.4. Reference to other sections

**Reference to other sections:** Refer to section 8 of SDS.

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

**Handling requirements:** Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Smoking is forbidden. Avoid the formation or spread of mists in the air.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Store in a cool, well ventilated area. Keep away from sources of ignition. Keep away from direct sunlight. Ensure lighting and electrical equipment are not a source of ignition.

**Suitable packaging:** Must only be kept in original packaging.

### 7.3. Specific end use(s)

**Specific end use(s):** No data available.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

**Hazardous ingredients:**

**ACETONE**

**Workplace exposure limits:**

**Respirable dust**

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	1210 mg/m <sup>3</sup>	3620 mg/m <sup>3</sup>	-	-

**PROPAN-2-OL**

UK	400 ppm, 999 mg/m <sup>3</sup>	500 ppm, 1250 mg/m <sup>3</sup>	-	-
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## MOLYBDENUM DISULPHIDE

UK	-	-	15mg/m3	10mg/m3
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## ORGANIC DERIVATIVE OF BENTONITE CLAY

UK	-	0.3	0.1	-
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## DNEL/PNEC Values

### Hazardous ingredients:

#### ACETONE

Type	Exposure	Value	Population	Effect
DNEL	Dermal	186	Workers	Local
DNEL	Inhalation	2420	Workers	Local
DNEL	Oral	62	Consumers	Systemic
PNEC	Fresh water	10.6	-	-
PNEC	Marine water	1.06	-	-
PNEC	Soil (agricultural)	33.3	-	-
PNEC	-	-	-	-

## 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.

**Respiratory protection:** Self-contained breathing apparatus must be available in case of emergency. Gas/vapour filter, type A: organic vapours (EN141).

**Hand protection:** Protective gloves. Nitrile gloves.

**Eye protection:** Safety glasses. Ensure eye bath is to hand.

**Skin protection:** Protective clothing.

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**State:** Liquid

**Colour:** Black

**Odour:** Sweet-smelling

**Evaporation rate:** Fast

**Oxidising:** Non-oxidising (by EC criteria)

**Solubility in water:** Slightly soluble

**Viscosity:** Non-viscous

**Kinematic viscosity:** <=20.5

**Viscosity test method:** Kinematic viscosity in 10<sup>-6</sup> m<sup>2</sup>/s at 40°C (ISO 3104/3105)

**Boiling point/range°C:** >35

**Melting point/range°C:** < 0

**Flammability limits %: lower:** 3.5

**upper:** 9.5

**Flash point°C:** -5

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**Autoflammability°C:** > 200

**Relative density:** 0.9

**VOC g/l:** 731

**Part.coeff. n-octanol/water:** No data available.

**Vapour pressure:** No data available.

**pH:** Approx. 7

## 9.2. Other information

**Other information:** No data available.

## Section 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

### 10.2. Chemical stability

**Chemical stability:** Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.

### 10.4. Conditions to avoid

**Conditions to avoid:** Sources of ignition. Heat. Direct sunlight.

### 10.5. Incompatible materials

**Materials to avoid:** Strong oxidising agents. Strong acids.

### 10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

**Hazardous ingredients:**

#### ACETONE

IVN	RAT	LD50	5500	mg/kg
ORL	MUS	LD50	3	gm/kg
ORL	RAT	LD50	5800	mg/kg

#### PROPAN-2-OL

IVN	RAT	LD50	1088	mg/kg
ORL	MUS	LD50	3600	mg/kg
ORL	RAT	LD50	5045	mg/kg
SCU	MUS	LDLO	6	gm/kg

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## ORGANIC DERIVATIVE OF BENTONITE CLAY

ORAL	RAT	LD50	> 5000	mg/kg
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### Relevant hazards for product:

Hazard	Route	Basis
Serious eye damage/irritation	OPT	Hazardous: calculated
Respiratory/skin sensitisation	-	Hazardous: calculated
STOT-single exposure	-	Hazardous: calculated

## Symptoms / routes of exposure

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. May cause drowsiness.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest. Drowsiness or mental confusion may occur.

**Delayed / immediate effects:** No data available.

## Section 12: Ecological information

### 12.1. Toxicity

#### Hazardous ingredients:

#### ACETONE

BLUEGILL ( <i>Lepomis macrochirus</i> )	LC50	8300	mg/l
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#### ORGANIC DERIVATIVE OF BENTONITE CLAY

Daphnia magna	48H EC50	> 300	mg/l
Daphnia magna	96H ErC50	>230	mg/l
RAINBOW TROUT ( <i>Oncorhynchus mykiss</i> )	96H LC50	> 500	mg/l

### 12.2. Persistence and degradability

**Persistence and degradability:** Only slightly biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** Slightly bioaccumulable.

### 12.4. Mobility in soil

**Mobility:** No data available.

### 12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

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## 12.6. Other adverse effects

**Other adverse effects:** No data available.

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.

**Disposal of packaging:** Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

### 14.1. UN number

**UN number:** UN1993

### 14.2. UN proper shipping name

**Shipping name:** FLAMMABLE LIQUID, N.O.S.  
(contains acetone, propan-2-ol)

### 14.3. Transport hazard class(es)

**Transport class:** 3

### 14.4. Packing group

**Packing group:** II

### 14.5. Environmental hazards

**Environmentally hazardous:** No

**Marine pollutant:** No

### 14.6. Special precautions for user

**Special precautions:** No special precautions.

## Section 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**Specific regulations:** Not applicable.

### 15.2. Chemical Safety Assessment

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

## Section 16: Other information

### Other information

**Other information:** EC Directive 1999/45/EC relating to the classification, packaging and labelling of dangerous preparations.

EC Directive 91/155/EEC defining the laying down and detailed arrangements for the system

[cont...]



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of specific information relating to dangerous preparations.

Compiled in accordance with REACH.

**Phrases used in s.2 and s.3:** EUH066: Repeated exposure may cause skin dryness or cracking.

EUH208: Contains <name of sensitising substance>. May produce an allergic reaction.

H225: Highly flammable liquid and vapour.

H302: Harmful if swallowed.

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H411: Toxic to aquatic life with long lasting effects.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.