# MOLY DRY FILM LUBRICANT R218

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

1.1 Product identifier

Trade name: MOLY DRY FILM LUBRICANT

Article number: R218

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

**Product category:** PC24: Lubricants, greases, release products

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: TYGRIS Industrial

Unit 31, Kyle Road Industrial Estate

Irvine Ayrshire KA12 8LE

Tel +44 (0) 1294 311 066

Email technical@tygrisindustrial.com

Further information obtainable from:

Technical Department

1.4 Emergency telephone

number:

Tel +44 (0) 1294 311 066

#### **SECTION 2: Hazards identification**

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

Physical hazards: Flam. Aerosol 1 - H222

**Health hazards:** EUH066, Eye Irrit. 2 - H319, STOT SE 3 - H336

**Environmental hazards:** Aquatic Chronic 3 - H412

2.2. Label elements

**Hazard statements:** H222: Extremely flammable aerosol.

H319: Causes serious eye irritation. H336: May cause drowsiness or dizziness.

H412: Harmful to aquatic life with long lasting effects.

Hazard pictograms: GHS02: Flame

GHS07: Exclamation mark





Signal word: Danger

**Precautionary statements:** P102: Keep out of reach of children.

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P211: Do not spray on an open flame or other ignition source. P251: Pressurized container: Do not pierce or burn, even after use.

P261: Avoid breathing vapour/spray.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection. P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P337+313: If eye irritation persists: Get medical advice/attention.

P410+412: Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

P501 Dispose of contents/container in accordance with local regulations.









**Supplementary** P264: Wash contaminated skin thoroughly after handling.

precautionary statements: P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a

position comfortable for breathing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell. P403+233: Store in a well-ventilated place. Keep container tightly closed

P405: Store locked up.

**Additional information:** EUH066: Repeated exposure may cause skin dryness or cracking.

**2.3. Other hazards** H229: Pressurised container: May burst if heated

#### **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

#### Hazardous ingredients:

### DIMETHYL ETHER

EC	CAS	Index number	CLP Classification	Percent
204-065-8	115-10-6	-	Flam. Gas 1 - H220	60-100%
ETHYL ACETAT	E			
205-500-4	141-78-6	-	Flam. Liq. 2 - H225 EUH066 Eye Irrit. 2 - H319 STOT SE 3 - H336	10-30%
SOLVENT NAPI	HTHA(PETROLEUM)	, LIGHT AROM.		
-	64742-95-6	-	Flam. Liq. 3 - H226 EUH066 STOT SE 3 - H335, H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	1-5%
2-BUTOXYETH	ANOL			
203-905-0	111-76-2	-	Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	1-5%
ETHANOL	,	,		,
200-578-6	64-17-5	-	Flam. Liq. 2 - H225	1-5%
ACETONE				
200-662-2	67-64-1	-	Flam. Liq. 2 - H225 EUH066 Eye Irrit. 2 - H319 STOT SE 3 - H336	1-5%
1-METHOXY-2-I	PROPANOL			, ,
203-539-1	107-98-2	-	Flam. Liq. 3 - H226 STOT SE 3 - H336	1-5%







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#### XYLENE

215-535-7	1330-20-7	-	Flam. Liq. 3 - H226 Acute Tox. 4 - H312, H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 STOT RE 2 - H373 Asp. Tox. 1 - H304 Aquatic Chronic 3 - H412	< 1%
2-METHOXY-1-I	METHYLETHYL ACE	TATE		,
203-603-9	108-65-6	-	Flam. Liq. 3 - H226	< 1%
BUTANONE		'		
201-159-0	78-93-3	-	Flam. Liq. 2 - H225 EUH066 Eye Irrit. 2 - H319 STOT SE 3 - H336	< 1%
METHANOL				<u>'</u>
200-659-6	67-56-1	-	Flam. Liq. 2 - H225 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 1 - H370	< 1%
PROPAN-2-OL		1	1	'
200-661-7	67-63-0	-	Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	< 1%

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

## **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

**General information:** Move the exposed person to fresh air at once. Get medical attention if any discomfort

continues.

**Skin contact:** Wash the skin immediately with soap and water. Get medical attention if any discomfort

continues.

Eye contact: Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes

with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get

medical attention if any discomfort continues.

**Ingestion:**DO NOT INDUCE VOMITING! Rinse mouth thoroughly with water and give large amounts of

milk or water to people not unconscious. Get medical attention if any discomfort

continues.

**Inhalation:** Move the exposed person to fresh air at once. When breathing is difficult, properly trained

personnel may assist affected person by administering oxygen. Keep the affected person

warm and at rest. Get prompt medical attention.

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

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





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## **SECTION 5: Firefighting measures**

5.1 Extinguishing media

Extinguishing media: Powder. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.

5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** Aerosol cans may explode in a fire.

5.3. Advice for fire-fighters

Special fire fighting procedures:s

Containers close to fire should be removed or cooled with water. Use water to keep fire

exposed containers cool and disperse vapours.

#### **SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

6.2. Environmental precautions

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Wear necessary protective equipment. Extinguish all ignition sources. Avoid sparks, flames,

heat and smoking. Ventilate. Let evaporate. Keep out of confined spaces because of

explosion risk. If leakage cannot be stopped, evacuate area.

6.4. Reference to other sections

#### **SECTION 7: Handling and storage**

7.1 Precautions for safe handling

Handling requirements: Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate

well, avoid breathing vapours. Use approved respirator if air contamination is above

accepted level.

7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C.

7.3. Specific end use(s)



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## **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

## Workplace exposure limits:

## **ACETONE**

Long-term exposure limit (8-hour TWA)	Short-term exposure limit (15-minute)
WEL 500 ppm, 1210 mg/m <sup>3</sup>	WEL 1500 ppm, 3620 mg/m <sup>3</sup>
2-METHOXY-1-METHYLETHYL ACETATE	
WEL 50 ppm, 274 mg/m³	WEL 100 ppm, 548 mg/m³
1-METHOXY-2-PROPANOL	
WEL 100 ppm, 375 mg/m³	WEL 150 ppm, 560 mg/m³
2-BUTOXYETHANOL	
WEL 25 ppm (Sk)	WEL 50 ppm (Sk)
BUTANONE	
WEL 200 ppm (Sk), 600 mg/m³ (Sk)	WEL 100 ppm (Sk), 441 mg/m³ (Sk)
DIMETHYL ETHER	
WEL 400 ppm, 766 mg/m <sup>3</sup>	WEL 500 ppm, 958 mg/m³
ETHANOL	
WEL 1000 ppm, 1920 mg/m³	-
ETHYLACETATE	
WEL 200 ppm	WEL 400 ppm
METHANOL	
WEL 200 ppm (Sk), 266 mg/m³ (Sk)	WEL 250 ppm (Sk), 333 mg/m³ (Sk)
PROPAN-2-OL	
WEL 400 ppm, 999 mg/m <sup>3</sup>	WEL 500 ppm, 1250 mg/m³
XYLENE	
WEL 50 ppm (Sk), 220 mg/m³ (Sk)	WEL 100 ppm (Sk), 441 mg/m³ (Sk)

WEL = Workplace Exposure Limits



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8.2. Exposure controls

Protective equipment:





**Engineering measures:** Provide adequate general and local exhaust ventilation.

General protective and hygienic measures:

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes

contaminated. When using do not eat, drink or smoke.

Respiratory protection: No specific recommendation made, but respiratory protection must be used if the general

level exceeds the recommended occupational exposure limit. Use chemical cartridge

protection with appropriate cartridge.

**Hand protection:** Use protective gloves.

Eye protection: Wear approved chemical safety goggles where eye exposure is reasonably probable. Use

approved safety goggles or face shield.

Other Protection: Wear appropriate clothing to prevent any possibility of liquid contact and repeated or

prolonged vapour contact.

### **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

State: Aerosol
Colour: Black

Odour: Characteristic
Solubility: Insoluble in water

Flammability limits: Lower: 3.0 % Upper: 18.6 %

9.2. Other information

#### **SECTION 10: Stability and reactivity**

10.1. Reactivity

10.2. Chemical stability

Chemical stability: Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Conditions to avoid: Avoid heat, flames and other sources of ignition. Avoid contact with: Strong oxidising agents.

Strong alkalis. Strong mineral acids.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Hazardous decomposition

products:

Fire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2).



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#### **SECTION 11: Toxicological Information**

### 11.1. Information on toxicological effects

**Skin contact:** Prolonged or repeated exposure may cause severe irritation. Acts as a defatting agent on

skin. May cause cracking of skin, and eczema. May cause allergic contact eczema. May

cause sensitisation by skin contact. Irritating to skin.

Eye contact: Irritating to eyes. May cause chemical eye burns.

**Inhalation:** May cause irritation to the respiratory system. Vapours may cause headache, fatigue,

dizziness and nausea. Prolonged inhalation of high concentrations may damage respiratory

system.

Ingestion: May cause discomfort if swallowed. May cause stomach pain or vomiting. Gastrointestinal

symptoms, including upset stomach.

Route of entry: Inhalation. Skin and/or eye contact.

## **SECTION 12: Ecological information**

12.1. Toxicity

**Ecotoxicity:** Dangerous for the environment if discharged into watercourses.

12.2. Persistence and degradability

12.3. Bioaccumulative potential

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

# **SECTION 13: Disposal Considerations**

## 13.1. Waste treatment methods

General information: Empty containers must not be burned because of explosion hazard. Dispose of waste and

residues in accordance with local authority requirements.





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#### **SECTION 14: Transport Information**

**UN Number (ADR):** 1950 **UN Number (IMDG):** 1950 **UN Number (IATA):** 1950

14.2 UN proper shipping name

Proper shipping name:

**AEROSOLS** 

14.3. Transport hazard class(es)

ADR/RID/ADN Class: 2, Class 2: Gases

ADR Label No. IMDG 2.1 Class: 2.1 ICAO Class/Division: 2.1

Transport labels:



14.4. Packing group

Packing group: Not applicable.

14.5 Environmental hazards

Marine pollutant: No 14.6 Special precautions for user

EmS: F-D, S-U

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

### **SECTION 15: Regulatory information**

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

**Statutory Instruments:** The Aerosol Dispensers (Amendment) Regulations 2014 No.1130.

**Guidance Notes:** Workplace Exposure Limits EH40.

Introduction to Local Exhaust Ventilation HS(G)37.

**EU** Legislation: The Aerosol Dispensers Directive 1975/324 EEC.

Regulation (EC) No.1272/2008: The Classification, Labelling and Packaging of

substances and mixtures Regulations.

Regulation (EC) No. 1907/2006: The Registration, Evaluation, Authorisation and

Restriction of Chemicals Regulations (REACH).

2001/95/EC The General Product Safety Directive (GPSD).

Commission Regulation (EU) 2015/830: Requirements for the compilation of safety data

sheets (amending REACH).

Authorisations (Title VII Regulation 1907/2006): No specific authorisations are noted for this product.

Restrictions (Title VIII Regulation 1907/2006): No specific restrictions of use are noted for

this product.

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





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#### **SECTION 16: Other information**

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No

2015/830.

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

H220: Extremely flammable gas. H222: Extremely flammable aerosol. H225: Highly flammable liquid and vapour. H226: Flammable liquid and vapour.

H301: Toxic if swallowed. H302: Harmful if swallowed.

H304: May be fatal if swallowed and enters airways.

H311: Toxic in contact with skin. H312: Harmful in contact with skin. H315: Causes skin irritation. H319: Causes serious eye irritation.

H331: Toxic if inhaled. H332: Harmful if inhaled.

H335: May cause respiratory irritation. H336: May cause drowsiness or dizziness. H370: Causes damage to organs << Organs>>.

H373: May cause damage to organs << Organs>> through prolonged or repeated exposure.

H411: Toxic to aquatic life with long lasting effects. H412: Harmful to aquatic life with long lasting effects.

The above information is believed to be correct but does not purport to be all inclusive and Legal disclaimer 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.

