

**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  
Fax +44 (0) 1294 277 115  
Email [technical@tygrisindustrial.com](mailto:technical@tygrisindustrial.com)**Further information obtainable from:** Technical Department**1.4 Emergency telephone number:** Tel +44 (0) 1294 311 066

## 2. Hazards identification

### 2.1. Classification of the substance or mixture

<b>Physical hazards:</b>	Flam. Aerosol 1 - H222
<b>Health hazards:</b>	EUH066, Eye Irrit. 2 - H319, STOT SE 3 - H336
<b>Environmental hazards:</b>	Aquatic Chronic 3 - H412

### 2.2. Label elements

<b>Hazard statements:</b>	H222: Extremely flammable aerosol. H319: Causes serious eye irritation. H336: May cause drowsiness or dizziness. H412: Harmful to aquatic life with long lasting effects.
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<b>Hazard pictograms:</b>	GHS02: Flame GHS07: Exclamation mark
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<b>Signal word:</b>	Danger
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<b>Precautionary statements:</b>	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.
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<b>Supplementary precautionary statements:</b>	P264: Wash contaminated skin thoroughly after handling. 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.
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<b>Supplemental label information:</b>	EUH066: Repeated exposure may cause skin dryness or cracking. H229: Pressurised container: May burst if heated
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### 2.3. Other hazards

### 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 ACETATE

205-500-4	141-78-6	-	Flam. Liq. 2 - H225 EUH066 Eye Irrit. 2 - H319 STOT SE 3 - H336	10-30%
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##### SOLVENT NAPHTHA(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%
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##### 2-BUTOXYETHANOL

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%
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##### ETHANOL

200-578-6	64-17-5	-	Flam. Liq. 2 - H225	1-5%
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##### ACETONE

200-662-2	67-64-1	-	Flam. Liq. 2 - H225 EUH066 Eye Irrit. 2 - H319 STOT SE 3 - H336	1-5%
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##### 1-METHOXY-2-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%
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## 2-METHOXY-1-METHYLETHYL ACETATE

203-603-9	108-65-6	-	Flam. Liq. 3 - H226	< 1%
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## BUTANONE

201-159-0	78-93-3	-	Flam. Liq. 2 - H225 EUH066 Eye Irrit. 2 - H319 STOT SE 3 - H336	< 1%
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## METHANOL

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%
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## PROPAN-2-OL

200-661-7	67-63-0	-	Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	< 1%
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The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

## 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

## 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.

## 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

## 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)

## 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/m <sup>3</sup>	WEL 100 ppm, 548 mg/m <sup>3</sup>
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##### 1-METHOXY-2-PROPANOL

WEL 100 ppm, 375 mg/m <sup>3</sup>	WEL 150 ppm, 560 mg/m <sup>3</sup>
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##### 2-BUTOXYETHANOL

WEL 25 ppm (Sk)	WEL 50 ppm (Sk)
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##### BUTANONE

WEL 200 ppm (Sk), 600 mg/m <sup>3</sup> (Sk)	WEL 100 ppm (Sk), 441 mg/m <sup>3</sup> (Sk)
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##### DIMETHYL ETHER

WEL 400 ppm, 766 mg/m <sup>3</sup>	WEL 500 ppm, 958 mg/m <sup>3</sup>
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##### ETHANOL

WEL 1000 ppm, 1920 mg/m <sup>3</sup>	-
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##### ETHYL ACETATE

WEL 200 ppm	WEL 400 ppm
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##### METHANOL

WEL 200 ppm (Sk), 266 mg/m <sup>3</sup> (Sk)	WEL 250 ppm (Sk), 333 mg/m <sup>3</sup> (Sk)
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##### PROPAN-2-OL

WEL 400 ppm, 999 mg/m <sup>3</sup>	WEL 500 ppm, 1250 mg/m <sup>3</sup>
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##### XYLENE

WEL 50 ppm (Sk), 220 mg/m <sup>3</sup> (Sk)	WEL 100 ppm (Sk), 441 mg/m <sup>3</sup> (Sk)
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WEL = Workplace Exposure Limits

## 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.

## 9. Physical and chemical properties

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

<b>State:</b>	Aerosol
<b>Colour:</b>	Black
<b>Odour:</b>	Characteristic
<b>Solubility:</b>	Insoluble in water
<b>Flammability limits:</b>	Lower: 3.0 % Upper: 18.6 %

### 9.2. Other information

## 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 (CO<sub>2</sub>).

## 11. Toxicological information

### 11.1. Information on toxicological effects

<b>Skin contact:</b>	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.
<b>Eye contact:</b>	Irritating to eyes. May cause chemical eye burns.
<b>Inhalation:</b>	May cause irritation to the respiratory system. Vapours may cause headache, fatigue, dizziness and nausea. Prolonged inhalation of high concentrations may damage respiratory system.
<b>Ingestion:</b>	May cause discomfort if swallowed. May cause stomach pain or vomiting. Gastrointestinal symptoms, including upset stomach.
<b>Route of entry:</b>	Inhalation. Skin and/or eye contact.

## 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

## 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.



## 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. 2.1

IMDG 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

## 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

## 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.

**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.