

SAFETY DATA SHEET

MOLY-DISULPHIDE DRY FILM LUBRICANT

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

1.1. Product identifier

Product name MOLY-DISULPHIDE DRY FILM LUBRICANT

Product number PL237-R2

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

Identified uses Paint.

Uses advised against Keep away from food, drink and animal feeding stuffs.

1.3. Details of the supplier of the safety data sheet

Manufacturer

INDESTRUCTIBLE PAINT LTD
19-25 Pentos Drive
Sparkhill
Birmingham
England
B11 3TA
Tel +44(0)121 702 2485
Fax +44(0)121 778 4338
sales@indestructible.co.uk

1.4. Emergency telephone number

Emergency telephone +44(0)7772968830

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 3 - H226

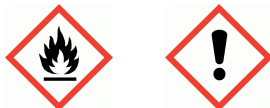
Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 3 - H412

Classification (67/548/EEC or 1999/45/EC) Xi;R36/38. R43. R10,R52/53.

2.2. Label elements

Pictogram



Signal word Warning

Hazard statements
H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

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Precautionary statements	<p>P260 Do not breathe vapour/ spray.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
Supplemental label information	RCH002a Restricted to professional users.
Contains	EPOXY RESIN (Number average MW ≤ 700), PINE OIL, FORMALDEHYDE ...%
Supplementary precautionary statements	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P233 Keep container tightly closed.</p> <p>P240 Ground/ bond container and receiving equipment.</p> <p>P241 Use explosion-proof electrical equipment.</p> <p>P242 Use only non-sparking tools.</p> <p>P243 Take precautionary measures against static discharge.</p> <p>P261 Avoid breathing vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P273 Avoid release to the environment.</p> <p>P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P310 Immediately call a POISON CENTER/ doctor.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P363 Wash contaminated clothing before reuse.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p> <p>P405 Store locked up.</p>

2.3. Other hazards

None Identified

SECTION 3: Composition/information on ingredients

3.2. Mixtures

4-HYDROXY-4-METHYLPENTAN-2-ONE	20-40%
CAS number: 123-42-2	EC number: 204-626-7
Classification	Classification (67/548/EEC or 1999/45/EC)
Eye Irrit. 2 - H319	Xi;R36

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EPOXY RESIN (Number average MW ≤700)		10-20%
CAS number: 25068-38-6		EC number: 500-033-5
Classification	Classification (67/548/EEC or 1999/45/EC)	
Skin Irrit. 2 - H315	R43 Xi;R36/38 N;R51/53	
Eye Irrit. 2 - H319		
Skin Sens. 1 - H317		
Aquatic Chronic 2 - H411		
METHYL N.AMYL KETONE		5-10%
CAS number: 110-43-0		EC number: 203-767-1
Classification	Classification (67/548/EEC or 1999/45/EC)	
Flam. Liq. 3 - H226	Xn;R20,R22. R10.	
Acute Tox. 4 - H302		
Acute Tox. 4 - H332		
METHYL ISO AMYL KETONE		5-10%
CAS number: 110-12-3		EC number: 203-737-8
Classification	Classification (67/548/EEC or 1999/45/EC)	
Flam. Liq. 3 - H226	Xn;R20. R10.	
Acute Tox. 4 - H332		
BUTYL ACETATE -norm		5-10%
CAS number: 123-86-4		EC number: 204-658-1
Classification	Classification (67/548/EEC or 1999/45/EC)	
Flam. Liq. 3 - H226	R10 R66 R67	
STOT SE 3 - H336		
1-METHOXY-2-PROPANOL		5-10%
CAS number: 107-98-2		EC number: 203-539-1
Classification	Classification (67/548/EEC or 1999/45/EC)	
Flam. Liq. 3 - H226	R10 R67	
STOT SE 3 - H336		
PINE OIL		< 1%
CAS number: 94266-48-5		EC number: 304-455-9
Classification	Classification (67/548/EEC or 1999/45/EC)	
Skin Irrit. 2 - H315	Xi;R36/37/38.	
Eye Irrit. 2 - H319		
Skin Sens. 1 - H317		
Asp. Tox. 1 - H304		
Aquatic Chronic 3 - H412		

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CRESOL -ortho	<0.3%
CAS number: 95-48-7	EC number: 202-423-8
Classification Acute Tox. 3 - H301 Acute Tox. 3 - H311 Skin Corr. 1B - H314 Eye Dam. 1 - H318	Classification (67/548/EEC or 1999/45/EC) T;R24/25 C;R34
FORMALDEHYDE ...%	<0.1%
CAS number: 50-00-0	EC number: 200-001-8
Classification Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Muta. 2 - H341 Carc. 1B - H350 STOT SE 3 - H335	Classification (67/548/EEC or 1999/45/EC) Carc. Cat. 3;R40 T;R23/24/25 C;R34 R43
PHENOL	<0.1%
CAS number: 108-95-2	EC number: 203-632-7
Classification Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 Skin Corr. 1B - H314 Muta. 2 - H341 STOT RE 2 - H373	Classification (67/548/EEC or 1999/45/EC) Muta. Cat. 3;R68 T;R23/24/25 C;R34 Xn;R48/20/21/22
BUTANOL-norm	<0.1%
CAS number: 71-36-3	EC number: 200-751-6
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT SE 3 - H335, H336	Classification (67/548/EEC or 1999/45/EC) R10 Xn;R22 Xi;R37/38,R41 R67

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

Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

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Inhalation	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention.
Skin contact	Get medical attention if any discomfort continues. Remove contaminated clothing. Wash skin thoroughly with soap and water.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

General information Effects may be delayed. Keep affected person under observation.

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

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with the following media: Foam, carbon dioxide or dry powder. Dry chemicals, sand, dolomite etc.

5.2. Special hazards arising from the substance or mixture

Specific hazards Irritating gases or vapours. Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m³. Oxides of carbon. Oxides of nitrogen.

5.3. Advice for firefighters

Protective actions during firefighting Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Cool containers exposed to flames with water until well after the fire is out.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Keep combustible materials away from spillage. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb in vermiculite, dry sand or earth and place into containers.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Keep away from heat, sparks and open flame. Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level.

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7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from oxidising materials, heat and flames. Store in tightly-closed, original container in a dry, cool and well-ventilated place.

Storage class Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

4-HYDROXY-4-METHYLPENTAN-2-ONE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 241 mg/m³

Short-term exposure limit (15-minute): WEL 75 ppm 362 mg/m³

METHYL N.AMYL KETONE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 237 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 475 mg/m³

Sk

METHYL ISO AMYL KETONE

Long-term exposure limit (8-hour TWA): WEL 20 ppm 95 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 475 mg/m³

Sk

BUTYL ACETATE -norm

Long-term exposure limit (8-hour TWA): WEL 150 ppm 724 mg/m³

Short-term exposure limit (15-minute): WEL 200 ppm 966 mg/m³

1-METHOXY-2-PROPANOL

Long-term exposure limit (8-hour TWA): WEL 100 ppm 375 mg/m³

Short-term exposure limit (15-minute): WEL 150 ppm 560 mg/m³

Sk

FORMALDEHYDE ...%

Long-term exposure limit (8-hour TWA): WEL 2 ppm 2.5 mg/m³

Short-term exposure limit (15-minute): WEL 2 ppm 2.5 mg/m³

PHENOL

Long-term exposure limit (8-hour TWA): WEL 2 ppm 7.8 mg/m³

Short-term exposure limit (15-minute): WEL 4 ppm 16 mg/m³

Sk

BUTANOL-norm

Short-term exposure limit (15-minute): WEL 50 ppm 154 mg/m³

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

Ingredient comments WEL = Workplace Exposure Limits

METHYL N.AMYL KETONE (CAS: 110-43-0)

Ingredient comments WEL = Workplace Exposure Limits

METHYL ISO AMYL KETONE (CAS: 110-12-3)

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Ingredient comments WEL = Workplace Exposure Limits

BUTYL ACETATE -norm (CAS: 123-86-4)

Ingredient comments WEL = Workplace Exposure Limits

1-METHOXY-2-PROPANOL (CAS: 107-98-2)

Ingredient comments WEL = Workplace Exposure Limits

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients. All handling should only take place in well-ventilated areas.

Eye/face protection

Wear chemical splash goggles.

Hand protection

Wear protective gloves made of the following material: Neoprene. Nitrile rubber. Rubber (natural, latex).

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

Respiratory protection

Wear a respirator fitted with the following cartridge: Organic vapour filter.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Coloured liquid.
Colour	Brown.
Odour	Characteristic.
Initial boiling point and range	119-122°C @ 1013 hPa
Flash point	27°C CC (Closed cup).
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 7 g/m ³
Relative density	1.22 g/ml @ 23°C
Solubility(ies)	Insoluble water @ 23°C

9.2. Other information

Volatile organic compound This product contains a maximum VOC content of 690 g/litre.

SECTION 10: Stability and reactivity

10.1. Reactivity

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Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability No particular stability concerns.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not determined.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects This product is toxic.

Acute toxicity - oral

ATE oral (mg/kg) 5,124.89

Acute toxicity - dermal

ATE dermal (mg/kg) 138,083.4

Acute toxicity - inhalation

ATE inhalation (gases ppm) 26,737.97

ATE inhalation (vapours mg/l) 65.36

ATE inhalation (dusts/mists mg/l) 8.91

General information Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing.

Ingestion Gastrointestinal symptoms, including upset stomach.

Skin contact Irritating to skin.

Eye contact Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

SECTION 12: Ecological Information

Ecotoxicity Dangerous for the environment. May cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

Toxicity Avoid releasing into the environment.

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12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility in soil

Mobility The product hardens to a solid, immobile substance.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment No data available.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	1263
UN No. (IMDG)	1263
UN No. (ICAO)	1263
UN No. (ADN)	1263

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	PAINT
Proper shipping name (IMDG)	PAINT
Proper shipping name (ICAO)	PAINT
Proper shipping name (ADN)	PAINT

14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID classification code	F1
ADR/RID label	3
IMDG class	3
ICAO class/division	3
ADN class	3

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Transport labels



14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ADN packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS	F-E, S-E
ADR transport category	3
Emergency Action Code	•3Y
Hazard Identification Number (ADR/RID)	30
Tunnel restriction code	(D/E)

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date	31/01/2017
Revision	6

MOLY-DISULPHIDE DRY FILM LUBRICANT

Risk phrases in full

R10 Flammable.
R20 Harmful by inhalation.
R22 Harmful if swallowed.
R24/25 Toxic in contact with skin and if swallowed.
R34 Causes burns.
R36 Irritating to eyes.
R36/38 Irritating to eyes and skin.
R43 May cause sensitisation by skin contact.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.

Hazard statements in full

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.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
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.
H350 May cause cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.