Report Date: 10/03/2014 1 / 8
Revision Date: 10/03/2014 Revision 3

Revision 3

Supersedes date 18/06/2013



SAFETY DATA SHEET Graphite Dry Film Lubricant

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name Graphite Dry Film Lubricant

Product No. IP9136-R1

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

1.3. Details of the supplier of the safety data sheet

Supplier 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

+44 (0) 121 244 5671

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards Flam. Liq. 3 - H226

Human health Acute Tox. 4 - H312; Acute Tox. 4 - H332; Carc. 2 - H351

Environment Not classified.

Classification (1999/45/EEC) Xn;R20/21. Carc. Cat. 3;R40. R10.

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

2.2. Label elements

Contains CYCLOHEXANONE

ISOPHORONE

Label In Accordance With (EC) No. 1272/2008



Signal Word Warning

Hazard Statements

H226 Flammable liquid and vapour.
H312 Harmful in contact with skin.
H332 Harmful if inhaled.

H351 Suspected of causing cancer.

Report Date : 10/03/2014 2 / 8
Revision 3

Graphite Dry Film Lubricant

Contains FORMALDEHYDE ...%. May produce an allergic reaction.

Graphite Dry Film Lubricant					
Precautionary Statements					
	P280	Wear protective gloves/protective clothing/eye protection/face protection.			
	P281	Use personal protective equipment as required.			
	P501	Dispose of contents/container to			
Supplementary Precautionary Statem	ents				
	P201	Obtain special instructions before use.			
	P202	Do not handle until all safety precautions have been read and understood.			
	P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.			
	P233	Keep container tightly closed.			
	P240	Ground/bond container and receiving equipment.			
	P241	Use explosion-proof electrical equipment.			
	P242	Use only non-sparking tools.			
	P243	Take precautionary measures against static discharge.			
	P271	Use only outdoors or in a well-ventilated area.			
	P261	Avoid breathing vapour/spray.			
	P370+378	In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction.			
	P302+352	IF ON SKIN: Wash with plenty of soap and water.			
	P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.			
	P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.			
	P308+313	IF exposed or concerned: Get medical advice/attention.			
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.			
	P322	Specific measures (see on this label).			
	P363	Wash contaminated clothing before reuse.			
	P403+235	Store in a well-ventilated place. Keep cool.			
	P405	Store locked up.			

2.3. Other hazards

Supplemental label information

Classification (EC 1272/2008)

Flam. Liq. 3 - H226

Acute Tox. 4 - H332

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

EUH208

3.2. Mixtures

BUTANOL-norm			1-5%
CAS-No.: 71-36-3	EC No.: 200-751-6		
Classification (EC 1272/2008) Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT SE 3 - H335		Classification (67/548/EEC) R10 Xn;R22 Xi;R37/38,R41 R67	
STOT SE 3 - H336 CYCLOHEXANONE			40-60%
CAS-No.: 108-94-1	EC No.:		

Classification (67/548/EEC)

Xn;R20.

R10.

Report Date: 10/03/2014 3 / 8

Revision 3

Graphite Dry Film Lubricant

ETHYLBENZENE			1-5%
CAS-No.: 100-41-4	EC No.: 202-849-4		
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Acute Tox. 4 - H332		Classification (67/548/EEC) F;R11 Xn;R20	
FORMALDEHYDE%			<0.2
CAS-No.: 50-00-0	EC No.: 200-001-8		
Classification (EC 1272/2008) Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 Skin Corr. 1B - H314 Skin Sens. 1 - H317 Carc. 2 - H351 STOT SE 3 - H335		Classification (67/548/EEC) Carc. Cat. 3;R40 T;R23/24/25 C;R34 R43	
ISOPHORONE			5-10%
CAS-No.: 78-59-1	EC No.:		
Classification (EC 1272/2008) Acute Tox. 4 - H302 Acute Tox. 4 - H312 Eye Irrit. 2 - H319 Carc. 2 - H351 STOT SE 3 - H335		Classification (67/548/EEC) Xn;R21/22. Carc. Cat. 3;R40. Xi;R36/37.	
MELAMINE P/W FORMALDEHYDE E	BUTYLATED		5-10%
CAS-No.: 68002-25-5	EC No.:		

Classification (EC 1272/2008) Aquatic Chronic 4 - H413	Classification (67/548/EEC) R53.	
XYLENE		5-10%

CAS-No.: 1330-20-7 EC No.: 215-535-7

Classification (EC 1272/2008) Classification (67/548/EEC)
Flam. Liq. 3 - H226 R10

Flam. Liq. 3 - H226 R10

Acute Tox. 4 - H312 Xn;R20/21

Acute Tox. 4 - H332 Xi;R38

Skin Irrit. 2 - H315

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

Graphite Dry Film Lubricant

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion

Immediately rinse mouth and provide fresh air. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Get medical attention.

Skin contact

Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing. Eye contact

Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention if any discomfort continues.

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

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

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Fire can be extinguished using: Foam, carbon dioxide or dry powder. Dry chemicals, sand, dolomite etc.

5.2. Special hazards arising from the substance or mixture

Specific hazards

When heated and in case of fire, irritating vapours/gases may be formed. In case of fire, toxic gases may be formed (COx, NOx).

5.3. Advice for firefighters

Special Fire Fighting Procedures

Use pressurised air mask if product is involved in a fire. Cool containers exposed to flames with water until well after the fire is out. Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Keep combustibles away from spilled material. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers.

6.4. Reference to other sections

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

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

Flammable/combustible - Keep away from oxidisers, 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)

Report Date : 10/03/2014 5 / 8
Revision 3

Graphite Dry Film Lubricant

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA	- 8 Hrs	STEL	- 15 Min	Notes
BUTANOL-norm	WEL			50 ppm	154 mg/m3	Sk
CYCLOHEXANONE	WEL	10 ppm	41 mg/m3	20 ppm	82 mg/m3	Sk
ETHYLBENZENE	WEL	100 ppm	441 mg/m3	125 ppm	552 mg/m3	Sk
ISOPHORONE	WEL			5 ppm	29 mg/m3	
XYLENE	WEL	50 ppm	220 mg/m3	100 ppm	441 mg/m3	Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

8.2. Exposure controls

Protective equipment







Process conditions

Provide eyewash station.

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. All handling to take place in well-ventilated area.

Respiratory equipment

Wear mask supplied with: Gas cartridge suitable for organic substances.

Hand protection

Use protective gloves made of: Neoprene. Nitrile. Rubber (natural, latex).

Eye protection

Wear splash-proof eye goggles to prevent any possibility of eye contact.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Wash hands 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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance Dark coloured liquid.

Colour Black.

Odour Characteristic.

Initial boiling point and boiling range 135 760 mm Hg

(°C)

Relative density 1.03 23

Flash point (°C) 40-44 CC (Closed cup).

Flammability Limit - Lower(%) 0.8

9.2. Other information

Volatile Organic Compound (VOC) 685 g/litre

SECTION 10: STABILITY AND REACTIVITY

Report Date : 10/03/2014 6 / 8
Revision 3

Graphite Dry Film Lubricant

10.1. Reactivity

10.2. Chemical stability

No particular stability concerns.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidisers.

10.5. Incompatible materials

10.6. Hazardous decomposition products

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 information

No information available.

General information

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

Inhalation

In high concentrations, vapours may irritate throat and respiratory system and cause coughing. Harmful by inhalation.

Ingestion

Gastrointestinal symptoms, including upset stomach.

Skin contact

Harmful in contact with skin. Irritating to skin.

Eye contact

Irritating and may cause redness and pain.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product is not expected to be hazardous to the environment.

12.1. Toxicity

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

General information

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

13.1. Waste treatment methods

Report Date : 10/03/2014 7 / 8
Revision 3

Graphite Dry Film Lubricant

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

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

14.2. UN proper shipping name

Proper Shipping Name PAINT

14.3. Transport hazard class(es)

ADR/RID/ADN Class 3

ADR/RID/ADN Class Class 3: Flammable liquids.

ADR Label No. 3
IMDG Class 3
ICAO Class/Division 3

Transport Labels



14.4. Packing group

ADR/RID/ADN Packing group III

IMDG 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

Emergency Action Code •3Y
Hazard No. (ADR) 30
Tunnel Restriction Code (D/E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

Graphite Dry Film Lubricant

15.2. Chemical Safety Assessment

SECTION 16: OTHER INFORMATION

Revision Date 10/03/2014

Revision 3

Supersedes date 18/06/2013

Risk Phrases In Full

R34 Causes burns. R10 Flammable.

R20/21 Harmful by inhalation and in contact with skin.

R20 Harmful by inhalation.
R22 Harmful if swallowed.

R21/22 Harmful in contact with skin and if swallowed.

R11 Highly flammable

R36/37 Irritating to eyes and respiratory system.
R37/38 Irritating to respiratory system and skin.

R37 Irritating to respiratory system.

R38 Irritating to skin.

R40 Limited evidence of a carcinogenic effect.

R53 May cause long-term adverse effects in the aquatic environment.

R43 May cause sensitisation by skin contact.

R41 Risk of serious damage to eyes.

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R67 Vapours may cause drowsiness and dizziness.

Hazard Statements In Full

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.

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.
 H351 Suspected of causing cancer.

H413 May cause long lasting harmful effects to aquatic life.

Disclaimer

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.