

LIQUID ARMOUR

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Issued: 18/07/2018; Revision No.1
Regulation (EC) No. 453/2010

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product Identifier

Material name : Liquid Armour (Yellow)

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

Product use : Paint **Restricted to professional users**

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: IMG Ltd.,
Unit M
Riverside Industrial Estate
Fazeley
Tamworth
B78 3RW

Tel. : 01827 283322

Fax. : 01827 250143

Email (for SDSs) : sales@img-limited.co.uk

1.4 Emergency tel. no.: 01827 283322 (Available from 08.30 – 17.00 hours).

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

According to 1272/2008/EC: Classification, Labelling and Packaging of Substances and Mixtures (CLP) Regulation:

Physical and Chemical Hazards	Flam. Liq.3; H226
Human health	Carc.1B, H350; Repr.1A, H361df; STOT SE3, H336; STOT RE2, H373
Environment	Aq.Chron.2; H411

2.2 Label elements

Labelling according to EC Directives: 1272/2008/EC

Signal word: Danger **Contains:** White spirit, Lead chromate pigment(s)

Pictogram(s):



Hazard Statements:	H226	Flammable liquid and vapour.
	H336	May cause drowsiness or dizziness.
	H350	May cause cancer.
	H361df	May damage the unborn child. Suspected of damaging fertility.
	H373	May cause damage to organs through prolonged or repeated exposure.
	H411	Toxic to aquatic life with long-lasting effects

Precautionary Statements:

P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing 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.

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Precautionary Statements (cont.)	P304+340 P308+313 P370+378 P403+235 P501	IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF exposed or concerned: Get medical advice/attention. In case of fire: Use foam, CO ₂ , dry powder, water fog to extinguish. Store in a well ventilated place. Keep cool. Dispose of in accordance with local/national regulations.
Supplemental labelling Information	EUH201 EUH208	Contains Lead. Should not be used on surfaces liable to be chewed or sucked by children. Contains Ethyl methyl ketoxime. May produce an allergic reaction.
2.3 Other hazards	In use, may form flammable / explosive vapour-air mixture.	

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures:

Hazardous components

Chemical Name	CAS No./ EC No./ Reg. No	Classification (1272/2008/EC)	Content
WHITE SPIRIT	64742-88-7 265-191-7	Asp.Tox.1 H304 STOT RE1 H372	30-60%
LEAD CHROMATE PIGMENTS	1344-37-2	Acute Tox.4, H332 Sk.Irrit.2, H315 Eye Irrit.2, H319 Carc.1B, H350 Repr.1A, H361df STOT SE3, H335 STOT RE2, H373 Aq.Chron.2, H411	5-10%
2-METHOXY-1- METHYLETHYL ACETATE	108-65-6 203-603-9 01-2119475791-29	Flam.Liq.3; H226	<1%
ETHYL METHYL KETOXIME	96-29-7 202-496-6	Flam. Liq. 3, H226 Acute Tox. 4, H312 Eye Dam.1, H318 Sk.Sens.1, H317 Carc.2, H351	<1%

See Section 16 for the full text of the H-statements noted above.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Remove casualty from exposure ensuring one's own safety whilst doing so. Take off any contaminated clothing and shoes/boots immediately. Never give anything by mouth to an unconscious person.

Skin contact: Wash with soap and water. Seek medical advice if irritation develops.

Eye contact: Rinse with water for 10 minutes and seek medical advice if irritation persists.

Ingestion: Rinse mouth with water and give water to drink. Do not induce vomiting. Seek medical advice.

Inhalation: Remove to fresh air. Seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed: May cause irritation to skin and eyes with prolonged contact.

4.3 Indication of any immediate medical attention and special treatment needed: See skin and eye contact information above.

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5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Carbon dioxide; dry chemical powder; alcohol or polymer foam.
Unsuitable extinguishing media: High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting: Irritating/toxic fumes may be released at elevated temperatures.

5.3 Advice for fire-fighters:

Special protective equipment: Wear self-contained breathing apparatus. Use personal protective equipment.
Further information: Standard procedure for chemical fires. Use water spray to cool containers.
Do not allow fire run-off to enter drains.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Use personal protective equipment to deal with spillage.

6.2 Environmental precautions

Contain the spillage using sufficient appropriate absorbent material. Do not discharge into drains or rivers, but if contamination to waterways has occurred, inform local authorities.

6.3 Methods and materials for containment and cleaning up

Wipe up liquid spillage with absorbent material such as sand, earth, or vermiculite, and place in a labelled container for disposal in accordance with local/national regulations.

6.4 References to other sections

See sections 8 and 13 for personal protection and disposal information.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Do not breathe vapour. Avoid contact with skin and eyes. Handle with care.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, well ventilated area. Protect from frost, heat and sunlight. Keep away from food, drink and animal feed.

7.3 Specific end use(s): No information available.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Chemical name	8hr TWA	15min STEL	Comment	Reference
White Spirit	600 ppm	-		Supplier
2-Methoxy-1-methylethyl acetate	274 mg/m ³	822 mg/m ³	(Sk)	EH40

DNEL/PNEC: No information available.

8.2 Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Personal protective equipment

Respiratory protection: If vapour levels are high, wear a respirator conforming to EN 140 with type A filter or better.

Hand protection: Wear chemically resistant gloves such as butyl rubber approved to standard EN 374; material thickness 0.5mm; break through time \geq 480 min. Gloves must be replaced after 8 hours of wear. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Check with glove manufacturer for specific advice. (Sk) noted above means can be absorbed through skin.

Eye protection: Chemical splash goggles of EN 166 standard if eye contact is reasonably probable.

Skin and body protection: General workwear.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practices. Do not eat or drink whilst using the product. Wash hands before breaks and at the end of the work day. Wash contaminated clothing before re-use.

Environmental exposure controls: Do not discharge into drains or rivers.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

State and colour	Yellow viscous liquid
Odour	Characteristic
Odour Threshold	No data available
Flammability	Flammable
Flash point	>30°C
Lower explosion limit	0.7%
Upper explosion limit	7.0%
Explosive properties	Not explosive
Thermal decomposition	No data available
Auto-ignition temperature	No data available
Oxidising properties	Non-oxidising
Solubility in water	Insoluble
Solubility in other solvents	Not determined
pH	Not applicable
Melting point/range	No data available
Boiling point/range	No data available
Relative density	1.05-1.15
Vapour pressure	No data available
Vapour density	No data available

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9.1 Information on basic physical and chemical properties (continued)

Partition coefficient: n-octanol/water	No data available
Viscosity (kinematic)	No data available
Evaporation rate	No data available

9.2 Other information No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity	Generally non-reactive.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	None if stored and used as directed.
10.4 Conditions to avoid	Heat, flames and other sources of ignition.
10.5 Incompatible materials	Strong acids, strong oxidising agents.
10.6 Hazardous decomposition products	Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Chemical name	Oral (LD50)	Inhalation (LC50)	Dermal (LD50)
2-Methoxy-1-methylethyl acetate	8532 mg/kg (Rat)	No data available	5000 mg/kg (Rabbit)

Skin corrosion/irritation:	May cause skin irritation. May dry the skin leading to discomfort and dermatitis.
Serious eye damage/eye irritation:	May cause eye irritation.
Respiratory or skin sensitisation:	Not classed as a sensitizer, but contains a small amount of Ethyl methyl ketoxime which may produce an allergic reaction.
Repeated dose toxicity:	No data available.
Carcinogenicity:	Increased incidences of lung cancer have been identified in the chromate pigment manufacturing industry, but there is no evidence of lung cancer arising from the use of products containing lead chromate.
Mutagenicity:	No known significant effects.
Toxicity for reproduction:	All lead compounds are classified as causing developmental toxicity in humans.
Specific target organ toxicity (STOT):	High levels of vapour may cause drowsiness or dizziness.
Further information:	No data available.

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12. ECOLOGICAL INFORMATION

12.1 Toxicity

Chemical name	Species	Test	Value
2-Methoxy-1-methylethyl acetate	Fish	LC50 96h	134 mg/l

12.2 Persistence and degradability	Partially biodegradable.
12.3 Bioaccumulative potential	No data available.
12.4 Mobility in soil	Insoluble in water. Absorbed by soil.
12.5 Results of PBT and vPvB assessment	Contains no PBT or vPvB substances.
12.6 Other adverse effects	Toxic to aquatic life with long-lasting effects.

13. DISPOSAL CONSIDERATIONS



13.1 Waste treatment methods

Disposal operations: Dispose of in accordance with local and national regulations. Do not dispose of waste into sewer.
Do not dispose of together with household waste. Contact licensed waste disposal company.
Treat as hazardous waste.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not burn or use a cutting torch on the empty container.

European Waste

Catalogue (EWC): 08 01 11* – Waste paint and varnish containing organic solvents or other hazardous substances.
15 01 10* - Packaging containing residues of or contaminated by hazardous substances.

14. TRANSPORT INFORMATION

14.1 UN number	ADR/RID/ADN; IMDG; ICAO	1263
14.2 UN proper shipping name	PAINT	
14.3 Transport hazard class(es)	ADR/RID/ADN Class	3
	ADR Label No.	3.3
	IMDG Class	3
	ICAO Class/Division	3 ICAO Subsidiary risk 3.3
Transport labels	T	
		
14.4 Packing Group	ADR/RID/ADN; IMDG; ICAO	III
14.5 Environment hazards	Marine Pollutant	Yes Environmentally hazardous: Yes
14.6 Special precautions for user	EMS	3-05
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.	

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15. REGULATORY INFORMATION

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

UK Regulatory References

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2001 No.2677) with amendments.

EU Directives

Regulations (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

Statutory Instruments

The Chemicals (Hazard information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Guidance Notes

Health and Safety Executive Workplace Exposure Limits EH40.

HSE The control of lead at work. L132

HSE Lead and you. INDG305

15.2 Chemical Safety Assessment

Chemical Safety Assessments/Reports (CSA/CSR) are not required for mixtures.

16. OTHER INFORMATION

This safety data sheet is prepared in accordance with Regulation (EC) No 1907/2006 (REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals) as amended and Regulation EU 453/2010.

Tariff code 32082090

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008 (CLP):

Physical hazards: On basis of test data.

Health hazards: Calculation method

Environmental hazards: Calculation method

Full text of H-statements referred to under sections 2 and 3

H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin
H315	Causes skin irritation.
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness.
H350	May cause cancer
H351	Suspected of causing cancer
H361df	May damage the unborn child. Suspected of damaging fertility.
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects.

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Abbreviations and acronyms

CAS: Chemical Abstract Service (division of the American Chemical Society). {Section 3}.

STOT: Single Target Organ Toxicity (Section 2;3;11).

SE: Single exposure (Section 2;3)

TWA: Time-weighted average. (Section 8).

STEL: Short-term exposure limit. (Section 8).

DNEL: Derived No Effect Level (Section 8).

PNEC: Predicted No Effect Concentration (Section 8).

PBT: Persistent, Bioaccumulative, Toxic. (Section 12).

vPvB: very Persistent and very Bioaccumulative. (Section 12).

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.

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