

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

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

### 1.1 Product identifier

Product Name: GMS Marking fluid  
Contains: Ethanol, Molybdenum trioxide, ammonium trioxovanadate, 2-butoxyethanol, ethyl acetate, solvent naphtha (petroleum), light, aromatic and condensation products of dimerised fatty acids, C18-unsaturated, with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine

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

Identified Use(s): Restricted to professional users. For the electrolytic chemical etching of metals  
Uses Advised Against: Not recommended for use on titanium, plastics or aluminium substrates.  
Not for private (household) purposes.

### 1.3 Details of the supplier of the safety data sheet

Manufacturer  
Company Identification: Pryor Marking Technology  
Address of Manufacturer: Global HQ: Egerton Street  
Sheffield  
UK  
Postal code: S1 4JX  
Telephone: +44 (0) 1142766044  
Fax: +44 (0)1142766890  
E-mail: info@pryormarking.com  
Office hours: 8:30-17:00

### 1.4 Emergency telephone number

+44 (0)114 276 6044  
Monday to Thursday, 08:30 - 17:30 GMT  
Friday, 08:30 - 15:30, English

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

#### 2.1.1 Classification according to Regulation (EC) No 1272/2008 (CLP)

Flam Liq. 2	H225
Acute Tox. 4	H302
Skin Irrit.2	H315
Eye Irrit. 2	H319
STOT SE 3	H335
Muta. 1B	H340
Carc. 1B	H350
Repr. 2	H361
STOT RE 2	H373

Aquatic Chronic 3 H412  
For full text see section 16.

## 2.2 Label elements

According to Regulation (EC) No. 1272/2008 (CLP)  
Product Name



GHS02

GHS07

GHS08

Signal Word(s)	Danger	
Hazard Statement(s)	H225	Highly flammable liquid and vapour
	H302	Harmful if swallowed
	H315	Causes skin irritation
	H319	Causes serious eye irritation
	H335	May cause respiratory irritation
	H340	May cause genetic defects
	H350	May cause cancer
	H361	Suspected of damaging fertility or the unborn child (oral)
	H373	May cause damage to organs through prolonged or repeated exposure (respiratory tract, inhalation)
Precautionary Statement(s)	H412	Harmful to aquatic life with long lasting effects
	P201	Obtain special instructions before use
	P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P260	Do not breathe dust/fumes/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P308 + P313	IF exposed or concerned: Get medical advice/attention
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	P501	Dispose of contents/container in accordance with local/national regulation
Supplementary Hazard Information (EU)	EUH208	Contains condensation products of dimerised fatty acids, C18-unsaturated, with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine. May produce an allergic reaction.
Hazard Determining Component(s)	Ethanol Molybdenum trioxide Ammonium trioxovanadate 2-butoxyethanol Ethyl acetate Solvent naphtha (petroleum), light, aromatic	
Special labelling of certain mixtures	Restricted to professional users.	

### 2.3 Other hazards

May form explosive peroxides. None of the components are considered to be PBT or vPvB. Restricted to professional users.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

Hazardous ingredient(s)	CAS No. / EC No. / Index No.	%W/W	Classification according to Regulation EC 1272/2008 (CLP)	Notes
Ethanol	64-17-5 200-578-6	≥50 - <70	Flam. Liq. 2; H225 Eye Irrit. 2; H319	Eye Irrit. 2; H319 >50%
Molybdenum trioxide	1313-27-5 215-204-7	≥15 - <35	Eye Irrit. 2; H319 STOT SE 3; H335 Carc. 2; H351	
Ammonium trioxovanadate	7803-55-6 232-261-3	≥2 - <7	Acute Tox. 3; H301 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Repr. 2; H361 STOT RE 1; H372 Aquatic Chronic 2; H411	
Mica	12001-26-2 601-648-2	<7	-	WEL
2-butoxyethanol	111-76-2 203-905-0	≥0.5 - <2	Acute Tox. 4; H302 Acute Tox. 4; H312 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319	
ethyl acetate	141-78-6 205-500-4	≥0.5 - <2	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	EUH066
Solvent naphtha (petroleum), light, aromatic	64742-95-6 265-199-0	≥0.3 - <1	Flam. Liq. 2 H225 Asp. Tox. 1; H304 Skin Irrit. 2 H315 Muta. 1B; H340 Carc. 1B; H350 Repr. 2 H361 STOT SE 3 H336 Aquatic Chronic 2 H411	
Condensation products of dimerised fatty acids, C18-unsaturated, with N,N-dimethyl-1,3-	162627-17-0 605-296-0	≥0.3 - <1	Skin Sens.1; H317	

Hazardous ingredient(s)	CAS No. / EC No. / Index No.	%W/W	Classification according to Regulation EC 1272/2008 (CLP)	Notes
propanediamine and 1,3-propanediamine				
Methanol	67-56-1 200-578-6	<0.3	Flam. Liq. 2; H225 Acute Tox. 3; H301 Acute Tox. 3; H311 Acute Tox. 3; H331 STOT SE 1; H370	STOT SE 1 ≥ 10% STOT SE 2 ≥ 3 - <10

For full text of H Statements, see section 16.

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

General notes	If symptoms occur, consult a doctor. Show this safety data sheet to the doctor in attendance.
Inhalation	Get immediate medical attention. Remove person to fresh air and keep comfortable for breathing.
Skin Contact	If skin irritation or a rash occurs, get medical attention. Take off immediately all contaminated clothing. Wash with plenty of soap and water for at least 15 minutes. Wash contaminated clothing before reuse.
Eye Contact	If eye irritation persists, get medical attention. Remove contact lenses, if present and easy to do. Rinse cautiously with water for at least 15 minutes.
Ingestion	If swallowed, call a POISON CENTRE/doctor if you feel unwell. Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting.
Self-protection of the first aider	When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.

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

Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause allergic skin reaction. May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. May cause damage to respiratory tract through prolonged or repeated inhalation.

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

Treat symptomatically. Seek medical attention.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media

Suitable Extinguishing media                      Foam, water spray, CO<sub>2</sub> or dry powder.

Unsuitable extinguishing media

Do not use water jet. Direct water jet may spread the fire.

## 5.2 Special hazards arising from the substance or mixture

Flammable liquid and vapour. May form explosive peroxides.

Cool containers exposed to flames with plenty of water until well after the fire is out.

Vapour may form explosive mixture with air. Vapour is heavier than air and may accumulate in confined spaces.

This material is harmful to aquatic life with long lasting effects. Fire water contaminated with the material must be contained. Do not empty into drains.

Hazardous combustion products

Carbon oxides (CO and CO<sub>2</sub>), nitrogen oxides (NO and NO<sub>2</sub>)

## 5.3 Advice for firefighters

A self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

Move containers from the fire area if it is safe to do so. Cool containers exposed to flames with plenty of water until well after the fire is out.

Do not allow product or run-off to enter drains, sewers or watercourses.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency responders

Eliminate sources of ignition. Ensure adequate ventilation. Do not touch or walk through split material. Avoid contact with skin, eyes or clothing. Do not breathe fumes/mist/vapours/spray. Wear suitable personal protective equipment. Wear appropriate respirator when ventilation is inadequate (see section 8). The vapour is heavier than air; it will concentrate in low lying areas, beware of pits and confined spaces.

For emergency responders

Keep unnecessary personnel away. Wear suitable protective clothing (See Section 8). Wash contaminated clothing before reuse. Do not breathe fumes/mist/vapours/spray. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. The vapour is heavier than air; it will concentrate in low lying areas, beware of pits and confined spaces.

### 6.2 Environmental precautions

Collect spillage. Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.

### 6.3 Methods and material for containment and cleaning up

#### For containment

Stop the leak if it is safe to do so. Eliminate all sources of ignition. Provide adequate ventilation. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots and

protective clothing. Contain the spillage with sand, earth or any suitable non-combustible adsorbent material.

**For cleaning**

Use sand, earth or any suitable non-combustible adsorbent material to adsorb spillages. Using non-sparking tools transfer the contaminated adsorbent material into a UN approved container for disposal. Containers should be sealed before being disposed of via an authorised waste disposal contractor

**Other advice**

Collect spillage. Avoid release to the environment.

**6.4 Reference to other sections**

See Section 8 for personal protective equipment. See Section 13 for waste disposal

**SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Use only outdoors or in a well-ventilated area. Provide adequate ventilation, including local extraction, to ensure occupational exposure limits are not exceeded. Open containers carefully as contents may be under pressure.

Avoid contact with skin, eyes or clothing. Avoid formation of aerosols, mists or sprays. Do not breathe vapour/fume/mist or spray. Wear suitable personal protective equipment (See Section 8).

Eliminate all sources of ignition. Take precautionary measures against electrostatic discharges. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

Avoid release to the environment.

Obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood.

Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse. Contaminated clothing should be thoroughly cleaned or disposed of as hazardous waste.

**7.2 Conditions for safe storage, including any incompatibilities**

Ground/bond container and receiving equipment. Keep only in original container. Store in a well-ventilated place. Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. May form explosive peroxides. Keep away from direct sunlight.

Storage temperature

Ambient

Storage life

12 months

Incompatible materials

Keep away from strong acids and oxidising agents. Do not store in aluminium metal

### 7.3 Specific end use(s)

For the electrolytic chemical etching of metals.  
Follow supplier's recommendations on correct use of the product.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### 8.1.1 Occupational Exposure Limits

Source UK EH40/2005, 3<sup>rd</sup> edition 2018. Workplace exposure limits

SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m <sup>3</sup> )	STEL (ppm)	STEL (mg/m <sup>3</sup> )	Note
Ethanol	64-17-5	1000	1920	-	-	
Molybdenum compounds (as Mo)	1313-27-5					
Soluble compounds		-	5	-	10	
Insoluble compounds		-	10	-	20	
Mica	12001-26-2					
Total inhalable		-	10	-	-	
Respirable		-	0.8	-	-	
2-butoxyethanol	111-76-2	25	123	50	246	Sk, BGMV
ethyl acetate	141-78-6	200	734	400	1468	
Solvent naphtha (petroleum), light, aromatic	64742-95-6	-	500	-	-	Total hydrocarbon vapour (1)
Methanol	67-56-1	200	266	250	333	Sk

Short term is 15 minutes unless otherwise specified. Sk = Can be absorbed through skin. BGMV = Biological monitoring guidance values. 1 – Hydrocarbon solvents supplied as a complex mixture, HSE ACTS procedure, see EH40, paragraphs 84-87.

#### Biological Monitoring Guidance Values

Substance	Biological Monitoring Guidance Values	Sampling time
2-butoxyethanol	240 mmol butoxyacetic acid/mol creatinine in urine	Post shift

#### DNEL (Derived no effect level) - Workers

Substances	Route	Acute/short-term exposure		Long-term exposure	
		Systemic effects	Local effects	Systemic effects	Local effects
Ethanol	Inhalation	No hazard identified	1900 mg/m <sup>3</sup>	950 mg/m <sup>3</sup>	No hazard identified
	Dermal	No hazard identified		343 mg/kg bw/day	No hazard identified
	Eyes	Medium hazard			
Molybdenum trioxide	Inhalation	No hazard identified		16.76 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>
	Dermal	No hazard identified			

Substances	Route	Acute/short-term exposure		Long-term exposure	
		Systemic effects	Local effects	Systemic effects	Local effects
	Eyes	No hazard identified			
Ammonium trioxovanadate	Inhalation	No hazard identified	-	640 µg/m <sup>3</sup>	180 µg/m <sup>3</sup>
	Dermal	No hazard identified			
	Eyes	Low hazard			
2-butoxyethanol	Inhalation	1091 mg/m <sup>3</sup>	246 mg/m <sup>3</sup>	98 mg/m <sup>3</sup>	No hazard identified
	Dermal	89 mg/kg bw/day	Medium hazard	125 mg/kg bw/day	No hazard identified
	Eyes	Medium hazard			
ethyl acetate	Inhalation	1468 mg/m <sup>3</sup>	1468 mg/m <sup>3</sup>	734 mg/m <sup>3</sup>	734 mg/m <sup>3</sup>
	Dermal	No hazard identified	Low hazard	63 mg/kg bw/day	No hazard identified
	Eyes	Low hazard			
Solvent naphtha (petroleum), light, aromatic	Inhalation	-	-	No hazard identified	-
	Dermal	No hazard identified	Low hazard	No hazard identified	High hazard
	Eyes	No hazard identified			
Condensation products of dimerised fatty acids, C18-unsaturated, with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine	Inhalation	No hazard identified	Hazard unknown	No hazard identified	Hazard unknown
	Dermal	No hazard identified	High hazard	No hazard identified	High hazard
	Eyes	No hazard identified			

### PNEC (Predicted No Effect Concentration)

Substance	Aqua (fresh water)	Aqua (marine water)	Aqua (intermittent releases)	Sewage Treatment Plants	Sediment (fresh water)	Sediment (marine water)	Soil	Oral
Ethanol	960 µg/L	790 µg/L	2.75 mg/L	580 mg/L	3.6 mg/kg sediment dw	2.9 mg/kg sediment dw	630 µg/kg soil dw	380-720 mg/kg
Molybdenum trioxide	19.05 mg/L	3.42 mg/L	-	32.55 mg/L	33.9 g/kg sediment dw	3.56 g/kg sediment dw	14.25 mg/kg soil dw	No potential for bio-accumulation
Ammonium trioxovanadate	7.6 µg/L	2.5 µg/L	6.93 µg/L	450 µg/L	240 mg/kg sediment dw	79 mg/kg sediment dw	7.2 mg/kg soil dw	167 µg/kg
2-butoxyethanol	8.8 mg/L	880 µg/L	26.4 mg/L	463 mg/L	34.6 mg/kg sediment dw	3.46 mg/kg sediment dw	2.33 mg/kg soil dw	20 mg/kg
ethyl acetate	240 µg/L	24 µg/L	1.65 mg/L	650 mg/L	1.15 mg/kg sediment dw	115 µg/kg sediment dw	148 µg/kg soil dw	200 mg/kg



Substance	Aqua (fresh water)	Aqua (marine water)	Aqua (intermittent releases)	Sewage Treatment Plants	Sediment (fresh water)	Sediment (marine water)	Soil	Oral
Condensation products of dimerised fatty acids, C18-unsaturated, with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine	No hazard identified	No data – aquatic toxicity unlikely	No hazard identified	No hazard identified	No hazard identified	No data – aquatic toxicity unlikely	No hazard identified	No hazard identified

## 8.2 Exposure controls

### 8.2.1. Appropriate engineering controls

Provide adequate ventilation, including appropriate local extraction, to minimise exposure to vapours. A washing facility/water for eye and skin cleaning purposes should be present.

### 8.2.2. Personal protection equipment

#### Eye and Face Protection



Goggles or safety glasses with side shields giving complete protection to eyes. (EN 166) or face shield.

#### Skin protection – hand



Chemical resistant gloves. (EN 374). Contact glove supplier to confirm suitable glove material, thickness and breakthrough times. If contact with forearms is likely, wear gauntlet-style gloves.

#### Skin protection - other

Long sleeve chemical resistant protective clothing. Plastic apron. Nitrile rubber boots.

#### Respiratory protection



In the case of insufficient ventilation, wear respiratory equipment. Suitable respiratory protection for lower concentrations or short-term effect: Filter type ABEK-P3 (EN 14387).

#### Thermal hazards

None known.

### 8.2.3. Environmental Exposure Controls

Avoid release to the environment. Contain spillages.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance:	Physical State: Paste
	Colour: Yellow
Odour:	Characteristic
Odour threshold:	No data available
pH:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash Point:	14 °C (calculated)
Evaporation rate:	No data available
Flammability (solid, gas):	Flammable
Upper/lower flammability or explosive limits:	UEL: 19% (w/w); LEL: 1.1% (w/w)
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	No data available
Solubility(ies):	Soluble in water
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition Temperature (°C):	No data available
Viscosity:	No data available
Explosive properties:	Not explosive
Oxidising properties:	Not oxidising

### 9.2 Other information

No additional information

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

Stable under recommended storage conditions.

### 10.2 Chemical Stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Flammable liquid and vapour. May form explosive peroxides. Vapour may form explosive mixture with air. Vapour is heavier than air and may accumulate in confined spaces.

### 10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Keep away from direct sunlight.

## 10.5 Incompatible materials

Keep away from strong acids and oxidising agents. Keep away from metals and aluminium.

## 10.6 Hazardous decomposition products

Carbon oxides (CO and CO<sub>2</sub>), nitrogen oxides (NO and NO<sub>2</sub>)

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Acute toxicity - Oral	Harmful if swallowed. Acute toxicity estimate (ATE): 300 – 2000 mg/kg bw
Acute toxicity - Dermal	Not classified, based on the available data the classification criteria are not met. Acute toxicity estimate (ATE): >2000mg/kg bw
Acute toxicity - Inhalation	Not classified, based on the available data the classification criteria are not met. Acute toxicity estimate (ATE): >20 mg/L

Component	Acute toxicity - oral	Acute toxicity - dermal	Acute toxicity - inhalation
Ammonium trioxovanadate	LD <sub>50</sub> (rat, female): 141.43 mg/kg bw	LD <sub>50</sub> (rat): >2500 mg/kg bw	LC <sub>50</sub> (rat, female): 2.43 mg/L air
2-butoxyethanol	LD <sub>50</sub> (guinea pig): 1414 mg/kg	LD <sub>0</sub> 1h (guinea pig, female): >2000 mg/kg	LC <sub>0</sub> 1h (guinea pig, female): >3.1 mg/L

Skin corrosion/irritation	Causes skin irritation
Serious eye damage/irritation	Causes serious eye irritation.
Skin sensitization	Contains <1% condensation products of dimerised fatty acids, C18-unsaturated, with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine may cause an allergic skin reaction
Respiratory sensitization	Not classified, based on the available data the classification criteria are not met.
Germ cell mutagenicity	May cause genetic defects
Carcinogenicity	May cause cancer
Reproductive toxicity	Suspected of damaging fertility or the unborn child
STOT - single exposure	May cause respiratory irritation.
STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure (respiratory tract, inhalation).
Aspiration hazard	Not classified, based on the available data the classification criteria are not met.

### 11.2 Information on likely routes of exposure

<b>Inhalation</b>	May cause genetic defects. May cause cancer. May cause respiratory irritation. May cause damage to respiratory tract through prolonged or repeated inhalation.
<b>Skin contact</b>	Causes skin irritation.
<b>Eye contact</b>	Causes serious eye irritation. May cause an allergic skin reaction.

**Ingestion**

Suspected of damaging fertility or the unborn child through ingestion. Harmful if swallowed.

**11.3 Other information**

Not known.

**SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity**

The product is harmful to aquatic life with long lasting effects.

**Ammonium trioxovanadate**

Fish (LC <sub>50</sub> , 48 h)	1.4 – 30.7 mg/L
Fish (NOEC, 28 d)	41 µg/L
Aquatic invertebrates (LC <sub>50</sub> , 48 h)	1.52 – 13.3 mg/L
Aquatic invertebrates (NOEC, 72 h)	16.8 µg/L
Algae (EC <sub>50</sub> , 3 h)	4.5 mg/L

**12.2 Persistence and Degradation**

Degradation studies are not considered relevant for inorganic or UVCB substances, including ammonium trioxovanadate, molybdenum trioxide, mica and solvent naphtha (petroleum), light arom. Test data for condensation products of dimerised fatty acids, C18-unsaturated, with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine suggests that it is not a biodegradable substance. Organic solvents such as ethanol, ethyl acetate and 2-butoxyethanol are readily biodegradable.

**12.3 Bioaccumulative potential**

Based on the available data, the components in this mixture are expected to have a low potential to bioaccumulate.

**Ammonium trioxovanadate**

Partition coefficient: n-octanol/water (log Kow):	No data available.
Bioconcentration Factor (BCF):	12.3 L/kg (w/w) (aquatic species)

**12.4 Mobility in Soil**

Ammonium trioxovanadate is readily soluble in water (7.81 g/L). It is expected to be highly mobile in soils.

Inorganic substances and organic solvents (ethanol, 2-butoxyethanol, ethyl acetate) are also readily soluble in water and expected to be mobile in soils.

Condensation products of dimerised fatty acids, C18-unsaturated, with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine (Log Koc: >5.6) and solvent naphtha (petroleum), light arom. are poorly soluble and expected to persist in soils.

**12.5 Results of PBT and vPvB assessment**

This mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## 12.6 Other adverse effects

No known significant effects or critical hazards

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Product and packaging to be disposed of as hazardous waste. Disposal should be in accordance with local or national legislation. Do not landfill. Avoid release to the environment.

Empty containers retain product residue and can be hazardous. Dispose of uncleaned empty containers as hazardous waste in accordance with local, state or national legislation.

Contaminated adsorbent must be removed and disposed of via an authorised waste disposal contractor. Do not empty into drains; dispose of this material and its container in a safe way.

## SECTION 14: TRANSPORT INFORMATION

According to ADR/ADN/RID/IMDG/ICAO/IATA.

### 14.1 UN Number

UN 1210

### 14.2 UN Proper shipping name

PRINTING INK RELATED MATERIAL

### 14.3 Transport hazard class(es)

3

### 14.4 Packing Group

II

### 14.5 Environmental Hazards

None

### 14.6 Special precautions for user

None

### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code

Not applicable.

## SECTION 15: REGULATORY INFORMATION

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

Candidate List of Substances of Very High Concern for Authorisation	No components listed
REACH: Annex XIV list of substances subject to authorisation	No components listed
REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Solvent naphtha (petroleum), light arom. Entry 28 and Entry 29: 'Restricted to professional users'.	
Community Rolling Action Plan (CoRAP)	No components listed
Regulation (EC) N° 850/2004 of the European Parliament and of the Council on persistent organic pollutants	No components listed
Regulation (EC) N° 2037/2000 on substances that deplete the ozone layer	No components listed
Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals	No components listed
National regulations - Other	Not known.

### 15.2 Chemical Safety Assessment

A REACH chemical safety assessment has not been carried out.

## SECTION 16: OTHER INFORMATION

### Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE	Acute toxicity estimate
BCF	Bioconcentration factor
CAS number	Chemical Abstracts Service number
CLP	Classification, Labelling and Packaging
CoRAP	Community rolling action plan
DNEL	Derived No Effect Level
EC number	European Inventory of Existing Commercial Chemical Substances or European List of Notified Chemical Substances number
ECHA	European Chemicals Agency
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
L(E)C50	Lethal concentration, 50%; Effect concentration, 50%
LD50	Lethal dose, 50%
LEL	Lower explosion limit
NOEC	No observed effect concentration

PBT	persistent, bioaccumulative and toxic
PNEC	Predicted no effect concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STOT	Specific target organ toxicity
TWA	Time-weighted average
UEL	Upper explosion limit
UVCB	Unknown or variable composition, complex reaction products or of biological materials
vPvB	very persistent and very bioaccumulative

#### Key Literature and sources of data

Regulation (EC) 1907/2006  
Regulation (EC) No. 1272/2008  
Regulation (EU) No. 2015/830  
Supplier's SDS  
ECHA REACH dossier

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

Classification according to Regulations (EC) No. 1272/2008	Classification procedure
Flam Liq. 2	Flash point
Acute. Tox. 4 (oral)	Calculation
Skin Irrit.2	Calculation method
Eye Irrit. 2	Calculation method
STOT SE 3	Expert judgement
Muta. 1B	Calculation method
Carc. 1B	Calculation method
Repr. 2	Calculation method
STOT RE 2	Expert judgement
Aquatic Chronic 3	Calculation method

#### Full list of Hazard Statement(s)

Flam Liq. 2	Flammable Liquid, Category 2
Acute Tox. 3/4	Acute Toxicity, Category 3/4
Skin Irrit.2	Skin irritation/corrosion, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 1/2/3	Specific Target Organ Toxicity – Single Exposure, Category 1/2/3
Muta. 1B	Germ Cell Mutagenicity, Category 1B
Carc. 1B/2	Carcinogenicity, Category 1B/2
Repr. 2	Reproductive Toxicity, Category 1/2
STOT RE 1/2	Specific Target Organ Toxicity – Repeated Exposure, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Aquatic Chronic 2/3	Hazardous to the Aquatic Environment – Chronic Exposure, Category 2/3
H225	Highly 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

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H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H340	May cause genetic defects
H350	May cause cancer
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H370	Causes damage to organs
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
H412	Harmful to aquatic life with long lasting effects
EUH066	Repeated exposure may cause skin dryness or cracking
EUH208	Contains <name of sensitising substance>. May produce an allergic reaction.

#### Training advice

Always read the label, safety data sheet and product information before use. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

#### Indication of changes

Issue date:	22/11/19
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Sections changed from previous version:	-

#### Disclaimers

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