

**SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006 (REACH) and (EC) No. 1272/2008 (CLP)**
**PM5 Paint Marker Ink (Pigmented) (colours listed in Section 16\*)**

 Data Sheet No: DS352  
 Issue Date: 18<sup>th</sup> January 2017

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**1.0 – Identification of the substance/mixture and of the company/undertaking**
**1.1 – Product identification**

Trade name	:	Multichem PM5 Paint Marker Ink (Pigmented) (see section 16)
Substance name	:	n/a
Index-No.	:	n/a
CAS-No.	:	n/a
EC-No.	:	n/a

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

Use of the substance/mixture	:	Preparation for use in writing instruments.
Recommended restrictions on use	:	At this time we do not yet have information on use restrictions. They will be included in this safety data sheet when available.

**1.3 – Details of the supplier of the safety data sheet**

Company	:	Multichem Ltd Tyne Mills Industrial Estate Hexham Northumberland NE46 1XL United Kingdom
Telephone	:	+44 1434 606 085
Fax	:	+44 1434 601 804
e-mail address	:	mail@multichem.net

**1.4 – Emergency telephone number**

Emergency telephone	:	+44 7887 612787
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**2.0 – Hazards Identification**
**2.1 – Classification of the substance or mixture**

Regulation (EC) No. 1272/2008			
Hazard class	Hazard category	Target organs	Hazard statements
Flammable liquids	2		H225

For the full text of the H-Statements mentioned in this Section, see Section 16.

**Most important adverse effects**

Human health	:	See Section 11 for toxicological information. No further information available.
Physical and chemical hazards	:	See Section 9 for physicochemical information. No further information available.
Potential environmental effects	:	See Section 12 for environmental information. No further information available.

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**2.2 – Label elements**

**Labelling according to Regulation (EC) No. 1272/2008**

Hazard symbols: :



Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.  
 Precautionary statements : P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
 Prevention P233 Keep container tightly closed.  
 P240+P243 Ground/bond container and receiving equipment. Take precautionary measures against static discharge.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 Storage : P403+P235 Store in a well-ventilated place. Keep cool.

**2.3 – Other hazards**

No other information is available.

**3.0 – Composition/information on ingredients**

**3.1 – Substances**

Chemical nature : mixture

Chemical name	Index No.	REACH Reg. No.	CAS No.	EC No.	Amount (%)
Ethanol	603-002-00-5	01-2119457610-43	64-17-5	200-578-6	<70%

Chemical name	Classification according to Regulation (EC) No. 1272/2008
Ethanol	H225 (2)

For the full text of the H-Statements mentioned in this Section, see Section 16.

**4.0 – First aid measures**

**4.1 – Description of first aid measures**

General advice : Take off all contaminated clothing immediately  
 In case of inhalation : Remove to fresh air. If symptoms persist, seek medical advice. If unconscious place in recovery position.  
 In case of skin contact : Wash off with plenty of water. If skin irritation persists, seek medical advice.  
 In case of eye contact : Rinse thoroughly with plenty of water, also under the eyelids. Consult an eye specialist immediately.  
 In case of ingestion : Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting – seek medical advice.

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**4.2 – Most important symptoms and effects, both acute and delayed**

Symptoms	:	No further information available.
Effects	:	No further information available.

**4.3 – Indication of immediate medical attention and special treatment needed**

Treatment	:	Treat symptomatically. No further information available.
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**5.0 – Fire-fighting measures**
**5.1 – Extinguishing media**

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	:	High volume water jet.

**5.2 – Special hazards arising from the substance or mixture**

Specific hazards during fire-fighting	:	Highly flammable. Vapours may form explosive mixtures with air. In case of fire hazardous decomposition products may be produced, such as carbon monoxide (CO) and carbon dioxide (CO <sub>2</sub> ).
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**5.3 – Advice for fire-fighters**

Special protective equipment for fire-fighters	:	In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit).
Further information	:	Cool closed containers exposed to fire with water spray. Heating will cause a pressure rise – with risk of bursting. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

**6.0 – Accidental release measures**
**6.1 – Personal precautions, protective equipment and emergency procedures**

Personal precautions	:	Use personal protective equipment. Provide adequate ventilation. Keep away from heat and sources of ignition. Avoid contact with skin and eyes. Do not breathe vapours. For personal protection see Section 8.
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**6.2 – Environmental precautions**

Environmental precautions	:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.
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**6.3 – Methods and materials for containment and cleaning up**

Methods and materials for containment and cleaning up	:	Contain spillage, and then collect with non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (see Section 13).
Further information	:	Treat recovered material as described in Section 13.

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**6.4 – Reference to other sections**

For personal protection see Section 8.

**7.0 – Handling and storage**
**7.1 – Precautions for safe handling**

- Advice on safe handling : Keep container tightly closed. Ensure adequate ventilation. Avoid contact with skin and eyes. Do not breathe vapours. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.
- Hygiene measures : Keep away from food, drink and animal feeding stuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of the working day. Take off all contaminated clothing immediately. Avoid contact with skin and eyes. Do not breathe vapours of spray mist.

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

- Requirements for storage areas and containers : Keep in an area equipped with solvent resistant flooring. Store in original container.
- Advice on protection against fire and explosion : Combustible liquid. Keep away from sources of ignition – no smoking. Take measures to prevent the build-up of electrostatic charge. Vapours may form explosive mixtures in air. Use only in an area containing explosion proof equipment.
- Further information on storage conditions : Keep tightly closed in a dry and cool place. Keep in a well-ventilated place. Keep away from heat. Keep away from direct sunlight.
- Advice on common storage : Incompatible with oxidizing agents. Keep away from food, drink and animal feeding stuffs.

**7.3 – Specific end uses**

- Specific use(s) : No information available.

**8.0 – Exposure controls/personal protection**
**8.1 – Control parameters**

<b>Component: ethanol; ethyl alcohol</b>		<b>CAS No. 64-17-5</b>
<b>Other OELs</b>		
Regulatory basis	:	UK. EH40 Workplace Exposure Limits (WELs)
Regulatory list	:	EH40 WEL
Value type	:	Time Weighted Average (TWA):
Value	:	1000 ppm
Value	:	1920 mg/m <sup>3</sup>

**8.2 – Exposure controls**
**Engineering measures**

Refer to protective measures listed in Sections 7 and 8.

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**Personal protective equipment**

*Respiratory protection*

Advice : Required, if exposure limit is exceeded (e.g. OEL). Respirator with a gas filter. Recommended filter type: A.

*Hand protection*

Advice : Wear suitable gloves. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Protective gloves should be replaced at first signs of wear.

Material : Butyl-rubber

Gloves :  $\geq 8$  h

Glove thickness : 0.5 mm

Material : Fluorocarbon rubber

Gloves :  $\geq 8$  h

Glove thickness : 0.4 mm

Material : Polychloroprene

Gloves :  $\geq 2$  h

Glove thickness : 0.5 mm

*Eye protection*

Advice : Safety glasses.

*Skin and body protection*

General advice : Wear suitable protective clothing.

**Environmental exposure controls**

General advice : Do not let product enter drains. If the product contaminates rivers and lakes or drains inform respective authorities.

FAIPMYEL/RED  
FAIPMBLK/WHI

PAINT MARKER PEN YELLOW & RED (2)  
PAINT MARKER PEN BLACK & WHITE (2)

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Appearance	: Various colours, liquid
Odour	: Alcohol-like
Odour threshold	: Not determined
pH	: 6 to 8
Melting point / freezing point	: -114.5°C
Initial boiling point and boiling range	: 78.3°C
Flash point	: 12°C
Evaporation rate	: Not determined
Flammability	: Not determined
Upper/lower flammability or explosive limits	: 15% (V), 3.5% (V)
Vapour pressure	: 59 hPa 20°C
Vapour density	: Not determined
Relative density	: Not determined
Solubility	: Miscible in water, readily miscible with solvents
Partition coefficient: n-octanol/water	: Not determined
Auto-ignition temperature	: 425°C
Decomposition temperature	: Not determined
Viscosity	: 10 to 40cP (20°C)
Explosive properties	: Not determined
Oxidising properties	: Not determined

**9.2 – Other information**

No further information available.

**10.0 – Stability and reactivity****10.1 – Reactivity**

Advice : Stable under recommended storage conditions.

**10.2 – Chemical stability**

Advice : Stable under normal conditions.

**10.3 – Possibility of hazardous reactions**

Hazardous reactions : No information available.

**10.4 – Conditions to avoid**

Conditions to avoid : Heat, flames and sparks.

**10.5 – Incompatible Materials**

Materials to avoid : Alkali metals, alkaline earth metals, strong oxidizing agents, nitric acid, sulphuric acid, peroxides (e.g. hydrogen peroxide).

**10.6 – Hazardous decomposition products**Hazardous decomposition products : Under fire conditions: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>).

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**11.0 – Toxicological information**

**11.1 – Information on toxicological effects**

<b>Component: ethanol; ethyl alcohol</b>	<b>CAS No. 64-17-5</b>
<b>Acute toxicity</b>	
<b>Oral</b>	
Value type	: LD50
Value	: 6200 mg/kg
Species	: rat
<b>Inhalation</b>	
Value type	: LC50
Value	: 124.7 mg/kg
Exposure time	: 4 h
Species	: rat
<b>Irritation</b>	
<b>Skin</b>	
Remarks	: Degreases the skin, which may cause dryness. Prolonged or repeated skin contact may result in dermatitis.
<b>Eyes</b>	
Remarks	: Splashes in eyes may cause strong pain. Vapour can cause irritation.
<b>Sensitisation</b>	
Remarks	: Did not cause sensitisation on laboratory animals.
<b>Further information</b>	
Other relevant toxicity information	: All numerical values for acute toxicity are calculated on the pure substances.
Experiences with human exposure	: Repeated and prolonged exposure to solvents may cause brain and nervous system damage.

**12.0 – Ecological information**

**12.1 – Toxicity**

<b>Component: ethanol; ethyl alcohol</b>	<b>CAS No. 64-17-5</b>
<b>Acute toxicity</b>	
<b>Fish</b>	
Species	: Leuciscus idus (Golden orfe)
Value type	: LC50
Value	: 8150 mg/l
<b>Toxicity to daphnia and other aquatic invertebrates</b>	
Species	: Daphnia magna
Exposure time	: 48 h
Value type	: EC50
Value	: 9268 – 14221 mg/l
<b>Algae</b>	
Species	: Scenedesmus quadricauda
Exposure time	: 168 h
Value type	: EC0
Value	: 5000 mg/l

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**Bacteria**

Species	:	Pseudomonas putide
Value type	:	EC0
Value	:	6500 mg/l
Remarks	:	Cell-proliferation inhibition test

**12.2 – Persistence and degradability**

<b>Component: ethanol; ethyl alcohol</b>	<b>CAS No. 64-17-5</b>
<b>Persistence and biodegradability</b>	
<b>Biodegradability</b>	
Remarks	: Readily biodegradable

**12.3 – Bioaccumulative potential**

No information available.

**12.4 – Mobility in soil**

Mobile in water environment.

**12.5 – Results of PBT and vPvB assessment**

No information available.

**12.6 – Other adverse effects**

All numerical values for ecotoxicity effects are calculated on the pure substances. Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

**13.0 – Disposal considerations**
**13.1 – Waste treatment methods**

Product	:	Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not empty into drains. Contact waste disposal services.
Contaminated packaging	:	Empty contaminated packaging thoroughly. They can be recycled after thorough and proper cleaning. Packaging that cannot be cleaned is to be disposed of in the same manner as the product. Do not burn, or use a cutting torch on the empty drum. Risk of explosion.
European Waste Catalogue Number	:	080312 – waste ink containing dangerous substances



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**14.0 – Transport information**
**14.1 – UN number**

1993

**14.2 – UN proper shipping name**

ADR	:	Flammable Liquid n.o.s (contains ethanol)
RID	:	Flammable Liquid n.o.s (contains ethanol)
IMDG	:	Flammable Liquid n.o.s (contains ethanol)

**14.3 – Transport hazard class(es)**

ADR-Class	:	3
(Labels ; classification code ; hazard identification number ; tunnel restriction code)	:	3 ; F1 ; 33 : (D/E)
RID-Class	:	3
(Labels ; classification code ; hazard identification number)	:	3 : F1 ; 33
IMDG-Class	:	3
(Labels ; EmS)	:	3 ; (F-E, <u>S-E</u> )

**14.4 – Packaging group**

ADR	:	II
RID	:	II
IMDG	:	II

**14.5 – Environmental hazards**

Labelling according to 5.2.1.8 ADR	:	No
Labelling according to 5.2.1.8 RID	:	No
Labelling according to 5.2.1.6.3 IMDG	:	No
Classification as environmentally hazardous according to 2.9.3 IMDG	:	No
Classified as 'P' according to 2.10 IMDG	:	No

**14.6 – Special precautions for user**

Not applicable.

**14.7 – Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

IMDG	:	Not applicable.
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**15.0 – Regulatory information**
**15.1 – Safety, health and environmental regulations/legislation specific for the substance or mixture**

No information available.

**15.2 – Chemical safety assessment**

No information available.

**16.0 – Other information**
**16.1 – Full text of H-Statements referred to under Sections 2 and 3**

H225 : Highly flammable liquid and vapour.

**16.2 – Further information**

\*Ink colour shades : White 1-36, White 57A, Black, Blue 160B, Blue 166I, Blue 9-157B, Royal Blue 131A, Red 166H, Red 9-120, Orange 27D, Orange 88A, Yellow 51C, Yellow 2, Pink 10-050A, Green 10-050B, Green 87A, Green 131C, Lime Green 141A, Emerald 166D, Purple 160A, Brown 92A, Brown 10-65D Turquoise 10-068A, Green 10-068A, Orange 4241

Other information : The information provided in this safety data sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this safety data sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

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