

SAFETY DATA SHEET

Metal Marking Ink

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

1.1. Product identifier

Product name Metal Marking Ink

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

Identified uses Marker

1.3. Details of the supplier of the safety data sheet

Supplier Aztec Chemicals
Unit 16, University Way
Orion Park
Crewe
Cheshire
CW1 6NG
+ 44 (0) 1270 655500 (T)
+ 44 (0) 1270 655501 (F)
info@aztecchemicals.com

1.4. Emergency telephone number

+44 (0)7831 300868

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) F;R11. R67.

2.2. Label elements

Labelling



Highly flammable

Risk Phrases

R11 Highly flammable
R67 Vapours may cause drowsiness and dizziness.

Safety Phrases

S2 Keep out of the reach of children.
S9 Keep container in a well-ventilated place.
S16 Keep away from sources of ignition - No smoking.
S51 Use only in well-ventilated areas.
S60 This material and its container must be disposed of as hazardous waste.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

1-ETHOXYPROPAN-2-OL		30-60%
CAS-No.: 1569-02-4	EC No.: 216-374-5	Registration Number: 01-2119462792-3
Classification (EC 1272/2008)	Classification (67/548/EEC)	
Flam. Liq. 3 - H226	R10	
STOT SE 3 - H336	R67	

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ETHANOL		30-60%
CAS-No.: 64-17-5	EC No.: 200-578-6	Registration Number: 01-2119457610-43
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Eye Irrit. 2 - H319		Classification (67/548/EEC) F;R11
ETHYL ACETATE		< 1
CAS-No.: 141-78-6	EC No.: 205-500-4	Registration Number: 01-2119475103-46
Classification (EC 1272/2008) Flam. Liq. 2 - H225 EUH066 Eye Irrit. 2 - H319 STOT SE 3 - H336		Classification (67/548/EEC) F;R11 Xi;R36 R66 R67
METHANOL		< 1
CAS-No.: 67-56-1	EC No.: 200-659-6	Registration Number: 01-2119433307-44
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 1 - H370		Classification (67/548/EEC) F;R11 T;R23/24/25,R39/23/24/25
PROPAN-2-OL		< 1
CAS-No.: 67-63-0	EC No.: 200-661-7	Registration Number: 01-2119457558-25
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336		Classification (67/548/EEC) F;R11 Xi;R36 R67

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

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

If you feel unwell, seek medical advice.

Inhalation

Move the exposed person to fresh air at once. Consult a physician for specific advice. Perform artificial respiration if breathing has stopped.

Ingestion

DO NOT induce vomiting if swallowed chemical is dissolved in petroleum-based material. Danger of aspiration and development of chemical pneumonia. Get medical attention immediately! Never give liquid to an unconscious person.

Skin contact

Immediately remove contaminated clothing. Rinse the skin immediately with lots of water. Use suitable lotion to moisturise skin. Get medical attention if any discomfort continues.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Continue to rinse for at least 15 minutes and get medical attention.

Metal Marking Ink

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

Use: Alcohol resistant foam. Carbon dioxide (CO₂). Dry chemicals. Water spray, fog or mist. Do not use water as an extinguisher.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards

Fire causes formation of toxic gases.

Specific hazards

When heated and in case of fire, harmful vapours/gases may be formed.

5.3. Advice for firefighters

Protective equipment for fire-fighters

Use air-supplied respirator during fire fighting. Wear full protective clothing.

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

Do not discharge onto the ground or into water courses.

6.3. Methods and material for containment and cleaning up

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

Read and follow manufacturer's recommendations. Avoid contact with skin and eyes. Keep away from heat, sparks and open flame. Eliminate all sources of ignition. Avoid inhalation of vapours.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Store away from: Acids. Alkalis. Oxidising material.

7.3. Specific end use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
ETHANOL	WEL	1000 ppm	1920 mg/m ³			
ETHYL ACETATE	WEL	200 ppm		400 ppm		
METHANOL	WEL	200 ppm(Sk)	266 mg/m ³ (Sk)	250 ppm(Sk)	333 mg/m ³ (Sk)	
PROPAN-2-OL	WEL	400 ppm	999 mg/m ³	500 ppm	1250 mg/m ³	

WEL = Workplace Exposure Limit.

Ingredient Comments

WEL = Workplace Exposure Limits

Metal Marking Ink

METHANOL (CAS: 67-56-1)

DNEL

Industry	Dermal	Short Term	Systemic Effects	40 mg/kg/day
Industry	Inhalation.	Short Term	Systemic Effects	260 mg/m3
Industry	Inhalation.	Short Term	Local Effects	260 mg/m3
Industry	Dermal	Long Term	Systemic Effects	40 mg/kg/day
Industry	Inhalation.	Long Term	Systemic Effects	260 mg/m3
Consumer	Inhalation.	Long Term	Local Effects	50 mg/m3
Consumer	Dermal	Short Term	Systemic Effects	8 mg/kg/day
Consumer	Inhalation.	Short Term	Systemic Effects	50 mg/m3
Consumer	Oral	Short Term	Systemic Effects	8 mg/kg/day

PNEC

Freshwater	154	mg/l
Marinewater	15.4	
Sediment	570.4	mg/kg
Soil	23.5	mg/kg
STP	100	mg/l
Intermittent release	1540	mg/kg

ETHANOL (CAS: 64-17-5)

Ingredient Comments

WEL = Workplace Exposure Limits

DNEL

Industry	Inhalation.	Short Term	1900	mg/m3
Industry	Dermal	Long Term	343	mg/kg/day
Industry	Inhalation.	Long Term	950	mg/m3
Consumer	Inhalation.	Short Term	950	mg/m3
Consumer	Dermal	Long Term	206	mg/kg/day
Consumer	Inhalation.	Long Term	114	mg/m3
Consumer	Oral	Long Term	87	mg/kg/day

PNEC

Freshwater	0.96	mg/l
Marinewater	0.79	mg/l
Sediment	3.6	mg/kg
Soil	0.62	mg/kg
STP	580	mg/l

8.2. Exposure controls

Protective equipment



Process conditions

Provide eyewash station.

Engineering measures

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided.

Hand protection

Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection

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

Hygiene measures

Wash promptly if skin becomes contaminated. Wash hands at the end of each work shift and before eating, smoking and using the toilet.

Personal protection

When using do not smoke

Skin protection

Wear apron or protective clothing in case of contact.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Metal Marking Ink

Appearance	Liquid
Colour	Various
Odour	Aromatic.
Solubility	Negligible solubility in water.
Initial boiling point and boiling range (°C)	79
Melting point (°C)	-86
Relative density	>1.0 20
Vapour density (air=1)	>1
Viscosity	100 - 200 cps @20c
Flash point (°C)	12 CC (Closed cup).

9.2. Other information

Volatile Organic Compound (VOC) 351 g/litre

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid contact with acids and oxidising substances.

10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances. Strong acids.

10.6. Hazardous decomposition products

In case of fire, toxic gases (CO, CO₂, NO_x) may be formed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation

High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting.

Ingestion

Gastrointestinal symptoms, including upset stomach. Irritating. May cause nausea, stomach pain and vomiting.

Skin contact

Irritating to skin. Prolonged or repeated exposure may cause severe irritation.

Eye contact

Irritating to eyes. Vapour or spray may cause temporary (reversible) eye damage.

Route of entry

Inhalation. Skin absorption. Ingestion. Skin and/or eye contact.

Target Organs

Respiratory system, lungs Eyes Skin

Medical Symptoms

Irritation of eyes and mucous membranes. High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting. Ingestion may cause: Nausea, vomiting.

SECTION 12: ECOLOGICAL INFORMATION

Metal Marking Ink

Ecotoxicity

The product contains substances which are toxic to aquatic organisms and which may cause long term adverse effects in the aquatic 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

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

General Packs of 5L and under are not regulated under the Limited Quantities Provisions.

14.1. UN number

UN No. (ADR/RID/ADN)	1230
UN No. (IMDG)	1230
UN No. (ICAO)	1230

14.2. UN proper shipping name

Proper Shipping Name Printing Ink

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.

Metal Marking Ink

14.6. Special precautions for user

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

Uk Regulatory References

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments. Chemicals (Hazard Information & Packaging) Regulations.

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Control of Substances Hazardous to Health.

Approved Code Of Practice

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes

Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

EU Legislation

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. System of specific information relating to Dangerous Preparations. 2001/58/EC.

National Regulations

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689.

15.2. Chemical Safety Assessment

SECTION 16: OTHER INFORMATION

SDS No. 12339
Safety Data Sheet Status Approved.
Date 10.05.2013

Risk Phrases In Full

R10 Flammable.
R11 Highly flammable
R36 Irritating to eyes.
R66 Repeated exposure may cause skin dryness or cracking.
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
R67 Vapours may cause drowsiness and dizziness.

Hazard Statements In Full

H370 Causes damage to organs <<Organs>>.
H319 Causes serious eye irritation.
H226 Flammable liquid and vapour.
H225 Highly flammable liquid and vapour.
H336 May cause drowsiness or dizziness.
EUH066 Repeated exposure may cause skin dryness or cracking.
H331 Toxic if inhaled.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.

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.