

SAFETY DATA SHEET
MPI INK**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1. Product identifier**

Product name MPI INK

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

Identified uses Non-destructive testing spray

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+;R12. R66.

Human health

Gas or vapour is harmful on prolonged exposure or in high concentrations. In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

Environment

This product does not contain substances which are harmful to aquatic organisms or which may cause long term effects to the aquatic environment

Physical and Chemical Hazards

Aerosol containers can explode when heated, due to excessive pressure build-up. The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

2.2. Label elements**Labelling**

Extremely flammable

Risk Phrases

R12 Extremely flammable.
R66 Repeated exposure may cause skin dryness or cracking.

Safety Phrases

A1 Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
A2 Do not spray on a naked flame or any incandescent material.
S2 Keep out of the reach of children.
S16 Keep away from sources of ignition - No smoking.
S23 Do not breathe vapour/spray.
S51 Use only in well-ventilated areas.

2.3. Other hazards

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

BUTANE		5-10%
CAS-No.: 106-97-8	EC No.: 203-448-7	Registration Number: Exempt under REACH
Classification (EC 1272/2008) Flam. Gas 1 - H220	Classification (67/548/EEC) F+;R12	
ISOBUTANE		1-5%
CAS-No.: 75-28-5	EC No.: 200-857-2	Registration Number: Exempt under REACH
Classification (EC 1272/2008) Flam. Gas 1 - H220	Classification (67/548/EEC) F+;R12	
PETROLEUM DISTILLATE		60-100%
CAS-No.: 64742-47-8	EC No.: 265-149-8	Registration Number: 01-2119484819-18
Classification (EC 1272/2008) EUH066 Asp. Tox. 1 - H304	Classification (67/548/EEC) Xn;R65. R66.	
PROPANE		10-30%
CAS-No.: 74-98-6	EC No.: 200-827-9	Registration Number: Exempt under REACH
Classification (EC 1272/2008) Flam. Gas 1 - H220	Classification (67/548/EEC) F+;R12	

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**

Move the exposed person to fresh air at once.

Inhalation

In case of inhalation of spray mist: Move person into fresh air and keep at rest. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.

Ingestion

Immediately rinse mouth and provide fresh air. Do not induce vomiting. Get medical attention.

Skin contact

Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above.

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.

4.2. Most important symptoms and effects, both acute and delayed**4.3. Indication of any immediate medical attention and special treatment needed**

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SECTION 5: FIREFIGHTING MEASURES**5.1. Extinguishing media****Extinguishing media**

Extinguish with foam, carbon dioxide, dry powder or water fog.

5.2. Special hazards arising from the substance or mixture**Unusual Fire & Explosion Hazards**

Extremely flammable. Forms explosive mixtures with air. May travel considerable distance to source of ignition and flash back. Aerosol cans may explode in a fire.

Specific hazards

Aerosol containers can explode when heated, due to excessive pressure build-up.

5.3. Advice for firefighters**Special Fire Fighting Procedures**

Water spray should be used to cool containers. Use water to keep fire exposed containers cool and disperse vapours. Warn firefighters that aerosols are involved.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation. In case of inadequate ventilation, use respiratory protection. Avoid inhalation of vapours and aerosol spray.

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses. Contain spillages with sand, earth or any suitable adsorbent material.

6.3. Methods and material for containment and cleaning up

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb spillage with non-combustible, absorbent material. Let evaporate. Keep out of confined spaces because of explosion risk.

6.4. Reference to other sections**SECTION 7: HANDLING AND STORAGE****7.1. Precautions for safe handling**

Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. Eliminate all sources of ignition. Do not spray on a naked flame or any incandescent material.

7.2. Conditions for safe storage, including any incompatibilities

Extremely flammable. Keep away from heat, sparks and open flame. Store at moderate temperatures in dry, well ventilated area. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

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
BUTANE	WEL	600 ppm		750 ppm		
ISOBUTANE	WEL	800 ppm		No std.		
PETROLEUM DISTILLATE	SUP		2000 mg/m ³			
PROPANE	SUP	ppm		ppm		

WEL = Workplace Exposure Limit.

Ingredient Comments

WEL = Workplace Exposure Limits

MPI INK**8.2. Exposure controls****Engineering measures**

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of spray.

Respiratory equipment

In case of inadequate ventilation use suitable respirator.

Hand protection

Due to the packaging form, aerosol, risk of skin contact is small. For prolonged or repeated skin contact use suitable protective gloves. 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 approved chemical safety goggles where eye exposure is reasonably probable.

Hygiene measures

Wash hands after handling. Wash promptly if skin becomes contaminated. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin.

Personal protection

When using do not smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Appearance	Aerosol.
Odour	Organic solvents.
Flash point (°C)	<-40 °C
Auto Ignition Temperature (°C)	410-580
Flammability Limit - Lower(%)	1.8
Flammability Limit - Upper(%)	9.5
Comments	Information given concerns the major ingredient.

9.2. Other information**SECTION 10: STABILITY AND REACTIVITY****10.1. Reactivity****10.2. Chemical stability**

Avoid Heat, sparks, flames.

10.3. Possibility of hazardous reactions**10.4. Conditions to avoid**

Avoid heat, flames and other sources of ignition. Avoid exposing aerosol containers to high temperatures or direct sunlight.

10.5. Incompatible materials**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****General information**

Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

Inhalation

In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Unconsciousness, possibly death.

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Skin contact

Skin irritation is not anticipated when used normally. Repeated exposure may cause skin dryness or cracking.

Eye contact

Spray and vapour in the eyes may cause irritation and smarting.

Health Warnings

Arrhythmia, (deviation from normal heart beat). In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Route of entry

Inhalation.

Target Organs

Central nervous system Respiratory system, lungs

Medical Symptoms

Arrhythmia, (deviation from normal heart beat). Narcotic effect. Vapours may cause drowsiness and dizziness. Skin irritation.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

No negative effects on the aquatic environment are known. The product is not expected to be toxic to aquatic organisms.

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

Do not puncture or incinerate even when empty.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Make sure containers are empty before discarding (explosion risk). Empty containers must not be burned because of explosion hazard.

SECTION 14: TRANSPORT INFORMATION

General

This product is packed in accordance with the Limited Quantity Provisions of CDGCPL2, ADR and IMDG. These provisions allow transport of aerosols of less than 1 litre packed in cartons of less than 30kg gross weight to be exempt from control providing that they are labelled in accordance with the requirements of these regulations to show that they are being transported as Limited Quantities. Aerosols not so packed and labelled must show the following.

14.1. UN number

UN No. (ADR/RID/ADN)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950

14.2. UN proper shipping name

Proper Shipping Name AEROSOLS

14.3. Transport hazard class(es)

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ADR/RID/ADN Class	Class 2.1: Flammable gases.
ADR Label No.	3
IMDG Class	2.1
ICAO Class/Division	2.1
Transport Labels	

**14.4. Packing group**

Not applicable.

14.5. Environmental hazards**14.6. Special precautions for user**

Hazard No. (ADR)	23 Flammable gas.
Tunnel Restriction Code	(D)

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. The Aerosol Dispensers Regulations 1977 & 1999

Approved Code Of Practice

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply. British Aerosol Manufacturers Code of Practice 7th. Edition 1999

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.	10633
Safety Data Sheet Status	Approved.
Date	18.03.2013
Risk Phrases In Full	
R12	Extremely flammable.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.

MPI INK**Hazard Statements In Full**

H222	Extremely flammable aerosol.
H220	Extremely flammable gas.
H304	May be fatal if swallowed and enters airways.
EUH066	Repeated exposure may cause skin dryness or cracking.

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.