

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

Product name Developer

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) Xi;R36. F+;R12. R67.

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 contains substances which are very toxic or toxic to aquatic organisms and may cause long term effects to the aquatic environment (see sections 2 and 12)

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



Irritant

Risk Phrases

R12	Extremely flammable.
R36	Irritating to eyes.
R67	Vapours may cause drowsiness and dizziness.

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.
S25	Avoid contact with eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S51	Use only in well-ventilated areas.

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2.3. Other hazards**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2. Mixtures**

ACETONE		10-30%
CAS-No.: 67-64-1	EC No.: 200-662-2	Registration Number: 01-2119471330-49
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	
BUTANE		10-30%
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		5-10%
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	
Nonyl Phenol Ethoxylate		< 1
CAS-No.: 9016-45-9	EC No.: 500-024-6	Registration Number: 01-2119946371-39
Classification (EC 1272/2008) Acute Tox. 4 - H302 Eye Dam. 1 - H318 Aquatic Chronic 2 - H411	Classification (67/548/EEC) Xn;R22. Xi;R41. N;R51/53.	
PROPAN-2-OL		30-60%
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	
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	

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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

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

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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
ACETONE	WEL	500 ppm	1210 mg/m ³	1500 ppm	3620 mg/m ³	
BUTANE	WEL	600 ppm		750 ppm		
ISOBUTANE	WEL	800 ppm		No std.		
PROPAN-2-OL	WEL	400 ppm	999 mg/m ³	500 ppm	1250 mg/m ³	
PROPANE	SUP	ppm		ppm		

WEL = Workplace Exposure Limit.

Ingredient Comments

WEL = Workplace Exposure Limits

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. Use suitable protective gloves if risk of skin contact. Gloves of nitrile rubber, PVA or Viton are recommended. 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 hands at the end of each work shift and before eating, smoking and using the toilet. Use appropriate hand lotion to prevent defatting and cracking 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.

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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.

Skin contact

Irritating to skin.

Eye contact

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

Health Warnings

Arrhythmia, (deviation from normal heart beat). Irritating to skin. 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

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

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

This product has not been tested but contains ingredients which are toxic or very toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment. During normal use the volatility of the components and the packaging form, pressurised container, make entry into the aquatic environment unlikely, however, do not empty or discharge into drains or watercourses. Ensure container is empty before disposal to prevent contents entering watercourses.

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

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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)

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

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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.	10634
Safety Data Sheet Status	Approved.
Date	18.03.2013
Risk Phrases In Full	
R12	Extremely flammable.
R22	Harmful if swallowed.
R11	Highly flammable
R36	Irritating to eyes.
R66	Repeated exposure may cause skin dryness or cracking.
R41	Risk of serious damage to eyes.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67	Vapours may cause drowsiness and dizziness.
Hazard Statements In Full	
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H222	Extremely flammable aerosol.
H220	Extremely flammable gas.
H302	Harmful if swallowed.
H225	Highly flammable liquid and vapour.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.
H411	Toxic to aquatic life with long lasting effects.

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.