

SAFETY DATA SHEET

Bycotest C10 Aerosol

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

1.1. Product identifier

Trade name: Bycotest C10 Aerosol

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

Relevant identified uses of the substance or mixture: Non-destructive testing

Uses advised against: This product is not recommended for any use other than the identified uses above.

1.3. Details of the supplier of the safety data sheet

Company and address: **Magnaflux® (A Division of ITW Ltd)**
Faraday Road, South Dorcan Industrial Estate
SN3 5HE Swindon, Wiltshire
United Kingdom
T +44 (0)1793 524566
<https://magnaflux.eu/en>

E-mail: support.eu@magnaflux.com

Revision: 14/12/2022

SDS Version: 2.0

1.4. Emergency telephone number

Emergency phone number: +44(0)203 394 9866

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Aerosol 1; H222, H229, Extremely flammable aerosol. Pressurised container: May burst if heated.
Eye Irrit. 2; H319, Causes serious eye irritation.
STOT SE 3; H336, May cause drowsiness or dizziness.

2.2. Label elements

Hazard pictogram(s):



Signal word: Danger

Hazard statement(s): Extremely flammable aerosol. Pressurised container: May burst if heated. (H222, H229)
Causes serious eye irritation. (H319)
May cause drowsiness or dizziness. (H336)

Safety statement(s):

General: -

▼ Prevention: Keep away from heat, hot surfaces, sparks, open flames and other

	<p>ignition sources. No smoking. (P210)</p> <p>Do not spray on an open flame or other ignition source. (P211)</p> <p>Do not pierce or burn, even after use. (P251)</p> <p>Avoid breathing spray. (P261)</p>
▼ <i>Response:</i>	Call a POISON CENTER/doctor if you feel unwell. (P312)
<i>Storage:</i>	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F. (P410+P412)
▼ <i>Disposal:</i>	-
<i>Hazardous substances:</i>	propan-2-ol
<i>Additional labelling:</i>	Not applicable.

2.3. Other hazards

<i>Additional warnings:</i>	<p>In the event of leaks, high concentrations of gases can quickly form. They can be toxic, asphyxiating, or explosive.</p> <p>This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.</p> <p>This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.</p>
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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
propan-2-ol	CAS No.: 67-63-0 EC No.: 200-661-7 UK-REACH: Index No.: 603-117-00-0	60-80%	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	
butane	CAS No.: 106-97-8 EC No.: 203-448-7 UK-REACH: Index No.: 601-004-01-8	10-15%	Flam. Gas 1A, H220 Press. Gas (Liq.) , H280	[11]
propane	CAS No.: 74-98-6 EC No.: 200-827-9 UK-REACH: Index No.: 601-003-00-5	5-10%	Flam. Gas 1A, H220 Press. Gas (Liq.) , H280	
isobutane	CAS No.: 75-28-5 EC No.: 200-857-2 UK-REACH: Index No.: 601-004-01-8	5-10%	Flam. Gas 1A, H220 Press. Gas (Liq.) , H280	[11]

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[11] The classification as a carcinogen / mutagen will not be taken into account as the substance contains less than 0,1 % w/w 1,3-butadiene (EINECS No 203-450-8) (CLP, Annex VI, note K).

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

<i>General information:</i>	In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.
<i>Inhalation:</i>	Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.
<i>Skin contact:</i>	Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.
<i>Eye contact:</i>	Upon irritation of the eye: Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 5 minutes and continue until irritation stops. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.
<i>Ingestion:</i>	Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material.
<i>Burns:</i>	Rinse with water until pain stops then continue to rinse for 30 minutes.

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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

If eye irritation persists: Get medical advice/attention.

Information to medics: Bring this safety data sheet or the label from this product.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous

decomposition compounds are produced. These are:
Carbon oxides (CO / CO₂)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

Hazchem Code: None

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.
Avoid inhalation of vapours from spilled material.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

6.3. Methods and material for containment and cleaning up

Use sand, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid static electricity.

Protect electrical equipment in accordance with current standards. To divert static electricity during transmission, containers must be grounded and connected by wire with the receiving containers. Do not use spark-forming tools.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Pressurized gas packs (spray cans, aerosol cans) must be stored behind a wire mesh, which allows gases to escape and holds back packs flying around.

<i>Recommended storage material:</i>	Always store in containers of the same material as the original container.
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<i>Storage temperature:</i>	10 - 30°C
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<i>Incompatible materials:</i>	Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.
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7.3. ▼ Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

propan-2-ol

Long term exposure limit (8 hours) (ppm): 400

Long term exposure limit (8 hours) (mg/m³): 999

Short term exposure limit (15 minutes) (ppm): 500

Short term exposure limit (15 minutes) (mg/m³): 1250

butane

Long term exposure limit (8 hours) (ppm): 600

Long term exposure limit (8 hours) (mg/m³): 1450

Short term exposure limit (15 minutes) (ppm): 750

Short term exposure limit (15 minutes) (mg/m³): 1810

Annotations:

Carc1 = Capable of causing cancer and/or heritable genetic damage if it contains more than 0.1% of buta-1,3-diene.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.

EH40/2005 Workplace exposure limits (Fourth Edition 2020).

DNEL

propan-2-ol

Duration	Route of exposure	DNEL
Long term – Systemic effects - General population	Dermal	319 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	888 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	89 mg/m ³
Long term – Systemic effects - Workers	Inhalation	500 mg/m ³
Long term – Systemic effects - General population	Oral	26 mg/kg bw/day

PNEC

propan-2-ol

Route of exposure	Duration of Exposure	PNEC
Freshwater		140.9 mg/L
Freshwater sediment		552 mg/kg
Intermittent release (freshwater)		140.9 mg/L
Marine water		140.9 mg/L
Marine water sediment		552 mg/kg
Predators		160 mg/kg
Sewage treatment plant		2.251 g/L
Soil		28 mg/kg

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations: Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios: There are no exposure scenarios implemented for this product.

Exposure limits: Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures:

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

Hygiene measures:

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure:


No specific requirements.

8.3. Individual protection measures, such as personal protective equipment


Generally:

Use only UKCA marked protective equipment.


Respiratory Equipment:

Work situation	Type	Class	Colour	Standards	
In case of inadequate ventilation	AX		Brown	EN14387	


Skin protection:

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn.	-	-	

Hand protection:

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Butyl	0,7	> 480	EN374-2, EN374-3, EN388, EN421	

Eye protection:

Type	Standards	
Safety glasses with side shields.	EN166	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:

Aerosol

Colour:

Colourless

Odour / Odour threshold:

Alcohol odor

pH:

Not applicable

Density (g/cm³):

0.79 (15 °C)

Kinematic viscosity:

1.8 mm²/s (40 °C)

Particle characteristics:

Not applicable

Phase changes

Melting point/Freezing point (°C): Not applicable

Softening point/range Does not apply to aerosols.

(waxes and pastes) (°C):

Boiling point (°C): 82

Vapour pressure: 4.4 kPa (20 °C)

Relative vapour density: No data available

Decomposition temperature (°C): No data available

Data on fire and explosion hazards

Flash point (°C): 12

Ignition (°C): 399

Auto flammability (°C): No data available

Lower and upper explosion limit (% v/v): 2 - 13

Solubility

Solubility in water: Soluble

n-octanol/water coefficient: 0.3

Solubility in fat (g/L): No data available

9.2. Other information

Note: The above properties are for the bulk product and not the aerosol.

Flash point of the aerosol propellant: -40 °C

Evaporation rate (*n*-butylacetate = 100): 400

Other physical and chemical parameters: No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Avoid static electricity.

Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 as retained and amended in UK law

Acute toxicity

Based on available data, the classification criteria are not met.

Product/substance	propan-2-ol
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	>5000 mg/kg
Other information	

Product/substance	propan-2-ol
Test method	
Species	Rabbit
Route of exposure	Dermal
Test	LD50
Result	>5000 mg/kg
Other information	

Product/substance	propan-2-ol
Test method	
Species	Rat
Route of exposure	Inhalation
Test	LC50 (6 hours)
Result	>10000 ppm
Other information	

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

May cause drowsiness or dizziness.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Product/substance	butane
Test method	
Species	Rat, male/female
Route of exposure	Inhalation
Target organ	
Duration	42 days
Test	NOAEL
Result	16000 ppm
Conclusion	
Other information	

Product/substance	isobutane
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Test method	
Species	Rat, male/female
Route of exposure	Inhalation
Target organ	
Duration	42 days
Test	NOAEL
Result	16000 ppm
Conclusion	
Other information	

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Endocrine disrupting properties

None known.

Other information

propan-2-ol has been classified by IARC as a group 3 carcinogen.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Based on available data, the classification criteria are not met.

Product/substance	propan-2-ol
Test method	
Species	Fish, <i>Leuciscus idus</i>
Compartment	
Duration	48 hours
Test	LC50
Result	>100 mg/L
Other information	

Product/substance	propan-2-ol
Test method	
Species	Daphnia, <i>Daphnia magna</i>
Compartment	
Duration	48 hours
Test	EC50
Result	>100 mg/L
Other information	

Product/substance	propan-2-ol
Test method	
Species	Algae, <i>Scenedesmus subspicatus</i>
Compartment	
Duration	72 hours
Test	EC50

Result	>100 mg/L
Other information	

Product/substance	butane
Test method	QSAR
Species	Fish
Compartment	
Duration	
Test	LC50
Result	147.54 mg/L
Other information	

Product/substance	propane
Test method	QSAR
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	147.54 mg/L
Other information	

Product/substance	propane
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	49.9 mg/L
Other information	

Product/substance	propane
Test method	
Species	Daphnia, Daphnia magna
Compartment	
Duration	48 hours
Test	EC50
Result	27.1 mg/L
Other information	

Product/substance	propane
Test method	
Species	Algae
Compartment	
Duration	72 hours
Test	EC50
Result	11.9 mg/L
Other information	

Product/substance	isobutane
Test method	QSAR
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	147.54 mg/L
Other information	

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Endocrine disrupting properties

None known.

12.7. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 3 - Flammable

HP 4 - Irritant (skin irritation and eye damage)

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

Not applicable.



Specific labelling


Not applicable.

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: TRANSPORT INFORMATION

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information
ADR	UN1950	AEROSOLS, flammable	Class: 2 Labels: 2.1 Classification code: 5F 	-	No	Limited quantities: 1 L Tunnel restriction code: (D) See below for additional information.
IMDG	UN1950	AEROSOLS, flammable	Class: 2 Labels: 2.1 Classification code: 5F 	-	No	Limited quantities: 1 L EmS: F-D S-U See below for additional information.
IATA	UN1950	AEROSOLS,	Class: 2	-	No	See below for

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information
		flammable	Labels: 2.1 Classification code: 5F 			additional information.

* Packing group

** Environmental hazards

Additional information

ADR / See Table A, Section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

Hazchem Code: None

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: REGULATORY INFORMATION

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

Restrictions for application: Restricted to professional users.
People under the age of 18 shall not be exposed to this product.
Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education: No specific requirements.

SEVESO - Categories / dangerous substances: P3a - FLAMMABLE AEROSOLS, Qualifying quantity (lower-tier): 150 tonnes (net) / (upper-tier): 500 tonnes (net)

Additional information: Not applicable.

Sources: The Health and Safety at Work etc. Act 1974 Regulations 2013.
The Aerosol Dispensers Regulations 2009 No. 2824, amended in 2014 (No. 1130) and in 2018 (No. 29).
Control of Major Accident Hazards (COMAH) Regulations 2015.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.
Regulation (EC) No 1907/2006 concerning the Registration,

Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: OTHER INFORMATION

Full text of H-phrases as mentioned in section 3

H220, Extremely flammable gas.

H225, Highly flammable liquid and vapour.

H280, Contains gas under pressure; may explode if heated.

H319, Causes serious eye irritation.

H336, May cause drowsiness or dizziness.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EWG = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SCL = A specific concentration limit

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TWA = Time weighted average

UN = United Nations

UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The classification of the mixture in regard to physical hazards has been based on experimental data.

▼ **The safety data sheet is validated by**

Magnaflux

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product.

Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en