

JAC 2 – AEROSOL

SAFETY DATA SHEET

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

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

1.1 Product identifier	Product Name	JAC 2 – AEROSOL.
	CAS No.	Mixture.
	EINECS No.	Mixture.
	REACH Registration No.	None assigned.
1.2 Relevant identified uses of the substance or mixture and uses advised against	Identified use(s)	<ul style="list-style-type: none"> • For use in the Dye Penetrant Inspection Process BS EN ISO 571-1:1997 (BS EN ISO 3452-2 Sensitivity level 2 when used in conjunction with penetrant family products). • Coating compound/ Surface coating/ paint.
	Uses advised against	None known.
1.3 Details of the supplier of the Safety Data Sheet	Company Identification	Johnson and Allen Ltd Neocol Works Smithfield Sheffield S3 7AR.
	Telephone	0114 2738066
	Fax	0114 2729842
	E-Mail (competent person)	info@johnsonandallen.co.uk
1.4 Emergency telephone number	Company	0114 2738066 (UK office hours 08.30-17.00)

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	Regulation (EC) No. 1272/2008 (CLP)	Aerosol 1; Extremely flammable aerosol. Pressurised container: May burst if heated. Asp. Tox. 1; May be fatal if swallowed and enters airways. STOT SE 3; May cause drowsiness or dizziness. Aquatic Chronic 2; Toxic to aquatic life with long lasting effects.
2.2 Label elements	Product Name	According to Regulation (EC) No. 1272/2008 (CLP)
	Hazard Pictogram	JAC 2 – AEROSOL.



GHS02

GHS07

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	GHS08 GHS09
Signal word(s)	Danger.
Hazard statement(s)	H222: Extremely flammable aerosol. H229: Pressurised container: May burst if heated. H304: May be fatal if swallowed and enters airways. H336: May cause drowsiness or dizziness. H411: Toxic to aquatic life with long lasting effects.
Precautionary statement(s)	P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273: Avoid release to the environment. P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P331: Do NOT induce vomiting. P405: Store locked up. P501: Dispose of contents in accordance with local, state or national legislation.
Additional Information	Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep out of the reach of children.
2.3 Other hazards	None.
2.4 Additional Information	For full text of H/P Statements see section 16.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Product as supplied: Aerosol.

3.1 Substances

Not applicable.

3.2 Mixtures

EC Classification No. 1272/2008

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
Dimethyl ether	115-10-6	204-065-8 / 01-2119472128-37-XXXX	50-100	Flam. Gas 1 H220 Press. Gas H280	GHS02 GHS04
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics.	None assigned	920-750-0 / 01-2119473851-33-XXXX	25-50	Flam. Liq. 2 H225 Asp. Tox. 1 H304 STOT SE 3 H336 Aquatic Chronic 2 H411	GHS02 GHS08 GHS07 GHS09

3.3 Additional Information

For full text of H/P Statements see section 16.

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4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures	
Inhalation	Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
Skin Contact	Wash skin with soap and water. If symptoms persist, obtain medical attention.
Eye Contact	Flush eyes with water for at least 15 minutes while holding eyelids open. Get medical attention if eye irritation develops or persists.
Ingestion	Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.
4.2 Most important symptoms and effects, both acute and delayed	Aspiration into the lungs may cause chemical pneumonitis, which can be fatal. May cause drowsiness or dizziness.
4.3 Indication of any immediate medical attention and special treatment needed	Unlikely to be required but if necessary treat symptomatically.

5. SECTION 5: FIRE-FIGHTING MEASURES

Extremely flammable aerosol. Pressurised container: May burst if heated.

5.1 Extinguishing Media	
Suitable Extinguishing Media	Extinguish preferably with foam, carbon dioxide or dry chemical.
Unsuitable Extinguishing Media	Water jet spray.
5.2 Special hazards arising from the substance or mixture	Heating may cause pressure rise with risk of bursting. Hazardous decomposition product(s): Smoke, Oxides of carbon.
5.3 Advice for fire-fighters	Fire fighters should wear complete protective clothing including self-contained breathing apparatus. If it is safe to do so, containers should be removed from fire area because they are likely to rupture under fire conditions. Keep containers cool by spraying with water if exposed to fire.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

The product is an aerosol. It is unlikely to present spillage or leakage hazard. In case of rupture, released content should be contained as any other solvent spill.

6.1 Personal precautions, protective equipment and emergency procedures	Eliminate sources of ignition. Ensure adequate ventilation. Avoid breathing mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection.
6.2 Environmental precautions	Avoid release to the environment.
6.3 Methods and material for containment and cleaning up	Collect mechanically and dispose of according to Section 13. Adsorb spillages onto sand, earth or any suitable adsorbent material. Collect spillage. Transfer to a lidded container for disposal or recovery. Containers must not be punctured or destroyed by burning, even when empty.
6.4 Reference to other sections	See Also Section 8 and 13.

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7. SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Keep out of the reach of children. Use only outdoors or in a well-ventilated area. Avoid breathing mist/vapours/spray. Wear protective gloves/eye protection/face protection. Wash hands thoroughly after handling.
- 7.2 Conditions for safe storage, including any incompatibilities**
 Storage Temperature Store locked up. Store in a well-ventilated place. Keep container tightly closed.
 Storage Life Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.
 Incompatible materials Stable under normal conditions.
 Strong oxidising agents.
- 7.3 Specific end use(s)**
- For use in the Dye Penetrant Inspection Process BS EN ISO 571-1:1997 (BS EN ISO 3452-2 Sensitivity level 2 when used in conjunction with penetrant family products).
 - Coating compound/ Surface coating/ paint.

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Dimethyl ether	115-10-6	400	766	500	958	
Dimethyl ether	115-10-6	1000	1920			IOELV

Region	Source
EU	EU Occupational Exposure Limits
United Kingdom	UK Workplace Exposure Limits EH40/2005 (Third edition, published 2018)

Remark	Notes
IOELV	Indicative Occupational Exposure Limit Values.

8.1.2 Biological limit value

Not established.

8.1.3 PNECs and DNELs

Not established.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Provide adequate ventilation.

8.2.2 Personal protection equipment

Eye/face protection



Not normally required. Wear protective eyewear (goggles, face shield, or safety glasses).

Skin protection (Hand protection/ Other)



Wear suitable gloves if prolonged skin contact is likely. Wear impervious gloves (EN374). Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

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Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Protective gloves should be replaced at first signs of wear.

Material: Nitrile rubber
Break through time: > 480 min
Glove thickness: > 0.38 mm
Protective index: Class 6

Respiratory protection



In case of insufficient ventilation, wear suitable respiratory equipment. A suitable mask with filter type AX may be appropriate.

Thermal hazards

Not applicable.

8.2.3 Environmental Exposure Controls

Avoid release to the environment.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Clear Colourless.
Odour	Characteristic.
Odour Threshold	Not available.
pH	Not applicable.
Melting Point/Freezing Point	Not applicable.
Initial boiling point and boiling range	-24°C
Flash point	-42°C
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	0.9 – 18.6Vol-%
Vapour pressure	5200hPa @ 20°C
Vapour density	Not available.
Relative density	Not available.
Density	0.687g/cm ³ @ 20°C
Solubility(ies)	Immiscible with water.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	The product is not self-igniting.
Ignition temperature	>220°C
Decomposition Temperature	Not available.
Kinematic Viscosity	Not available.
Explosive properties	Pressurised container: May burst if heated.
Oxidising properties	Not oxidising.

9.2 Other information

Organic solvents 59.7%

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	No hazardous reactions known if used for its intended purpose.
10.4 Conditions to avoid	Heat and direct sunlight.
10.5 Incompatible materials	Strong oxidising agents.
10.6 Hazardous Decomposition Product(s)	No hazardous decomposition products known.

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11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Information on toxicological effects	
	Acute toxicity	Low acute toxicity.
	Skin corrosion/irritation	Non-irritant.
	Serious eye damage/irritation	Not classified.
	Skin sensitization data	It is not a skin sensitiser.
	Carcinogenicity	No evidence of carcinogenicity.
	Germ cell mutagenicity	There is no evidence of mutagenic potential.
	Reproductive toxicity	None anticipated.
	Lactation	Not classified.
	STOT - single exposure	May cause drowsiness or dizziness. No data.
	STOT - repeated exposure	None anticipated.
	Aspiration hazard	May be fatal if swallowed and enters airways. No data. Aspiration into the lungs may cause chemical pneumonitis, which can be fatal.
11.2	Other information	None.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	Toxic to aquatic life with long lasting effects. No data.
12.2	Persistence and degradability	Part of the components are poorly biodegradable. Dimethyl ether: 5% (28days) (OECD 301D)
12.3	Bioaccumulative potential	No information available.
12.4	Mobility in soil	Immiscible with water. The product is predicted to have low mobility in soil. The product is volatile and will partition into the atmosphere.
12.5	Results of PBT and vPvB assessment	Not classified as PBT or vPvB.
12.6	Other adverse effects	None.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Recycle only completely emptied packaging. Containers must not be punctured or destroyed by burning, even when empty. Non-emptied aerosol: Dispose of wastes in an approved waste disposal facility.
13.2	Additional Information	Disposal should be in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

14.1	UN number	
	UN No.	1950
14.2	UN proper shipping name	
	UN proper shipping name	AEROSOLS
14.3	Transport hazard class(es)	
	ADR/RID	
	ADR/RID Class	2
	ADR Classification Code	5F
	Special Provisions	190 327 344 625
	Limited Quantities	1 L
	Excepted Quantities	E0
	Mixed Packing Instructions for Packages	P207 LP200

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Special Packing Provisions for Packages	PP87 RR6 L2
Mixed Packing Instructions for Packages	MP9
ADR Transport Category	2
Tunnel Restriction Code	D
Special Provisions for Carriage - Packages	V14
Special Provisions for Carriage - Loading, Unloading and Handling	CV9 CV12
Special Provisions for Carriage - Operation	S2
IMDG	
IMDG Class	2
Special Provisions	190 327 344 625
Limited Quantities	1 L
Excepted Quantities	E0
Mixed Packing Instructions for Packages	P207 LP200
Special Packing Provisions for Packages	PP87 RR6 L2
IMDG EMS	F-D, S-U
Stowage and Handling	SW1 SW22
Segregation	SG69
ICAO/IATA	
IATA Proper Shipping Name	AEROSOLS
Excepted Quantities	E0
Passenger and Cargo Aircraft Limited Quantities Packing Instructions	Y203
Passenger and Cargo Aircraft Limited Quantities Max net Qty	30Kg
Passenger and Cargo Aircraft Packing Instructions	203
Passenger and Cargo Aircraft Max net Qty	75Kg
Cargo Aircraft Packing Instructions	203
Cargo Aircraft Max net Qty	150Kg
Special Provisions	A145, A167, A802
Emergency Response Guidebook (ERG) Code	10L
Labels	2.1



14.4 Packing group

Packing group

14.5 Environmental hazards

Environmental hazards

Classified as a Marine Pollutant.

14.6 Special precautions for user

Special precautions for user

Not known.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

No information available

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15. SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	
15.1.1 EU regulations	
Authorisations and/or restrictions on use	
Candidate List of Substances of Very High Concern for Authorisation	Not listed
REACH: ANNEX XIV list of substances subject to authorisation	Not listed
REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	Listed: Dimethyl ether (CAS No.: 115-10-6), Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics. (EC No.: 920-750-0)
Community Rolling Action Plan (CoRAP)	Not listed
Regulation (EC) N° 850/2004 of the European Parliament and of the Council on persistent organic pollutants	Not listed
Regulation (EC) N° 1005/2009 on substances that deplete the ozone layer	Not listed
Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals	Not listed
15.1.2 National regulations	None known.
15.2 Chemical Safety Assessment	Not applicable.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 8

LEGEND

Hazard Pictogram(s)



GHS02



GHS08



GHS07



GHS09

GHS04: GHS: gas cylinder

Hazard classification

Aquatic Chronic 2 : Hazardous to the aquatic environment, Chronic, Category 2
 Asp. Tox. 1 : Aspiration hazard, Category 1
 Flam. Gas 1 : Flammable gas, Category 1
 Flam. Liq. 2 : Flammable liquid, Category 2
 Press. Gas : Gases under pressure
 STOT SE 3_H336 : Specific target organ toxicity — single exposure, Category 3

Hazard Statement(s)

H220: Extremely flammable gas.
 H222: Extremely flammable aerosol.
 H225: Highly flammable liquid and vapour.
 H229: Pressurised container: May burst if heated.
 H280: Contains gas under pressure; may explode if heated.
 H304: May be fatal if swallowed and enters airways.
 H336: May cause drowsiness or dizziness.
 H411: Toxic to aquatic life with long lasting effects.

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Precautionary Statement(s)	<p>P211: Do not spray on an open flame or other ignition source.</p> <p>P251: Pressurised container - Do not pierce or burn, even after use.</p> <p>P261: Avoid breathing mist/vapours/spray.</p> <p>P271: Use only outdoors or in a well-ventilated area.</p> <p>P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P312: Call a POISON CENTER/doctor if you feel unwell.</p> <p>P391: Collect spillage.</p> <p>P403+P233: Store in a well-ventilated place. Keep container tightly closed.</p> <p>P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.</p> <p>P501: Dispose of contents in accordance with local, state or national legislation.</p>
Acronyms	<p>ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways</p> <p>ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road</p> <p>CAS : Chemical Abstracts Service</p> <p>CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</p> <p>DNEL : Derived No Effect Level</p> <p>EC : European Community</p> <p>EINECS : European Inventory of Existing Commercial Chemical Substances</p> <p>IATA : International Air Transport Association</p> <p>IBC : Intermediate Bulk Container</p> <p>ICAO : International Civil Aviation Organization</p> <p>IMDG : International Maritime Dangerous Goods</p> <p>LTEL : Long term exposure limit</p> <p>PBT : Persistent, Bioaccumulative and Toxic</p> <p>PNEC : Predicted No Effect Concentration</p> <p>REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals</p> <p>RID : Regulations concerning the International Carriage of Dangerous Goods by Rail</p> <p>STEL : Short term exposure limit</p> <p>STOT : Specific Target Organ Toxicity</p> <p>UN : United Nations</p> <p>vPvB : very Persistent and very Bioaccumulative</p>

Disclaimers

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Annex to the extended Safety Data Sheet (eSDS)

Not applicable.