



JAC 2 – AEROSOL

SAFETY DATA SHEET

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 453/2010

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)
 - For use in the Dye Penetrant Inspection Process BS EN ISO 571-1:1997 (BS EN ISO 3452-2:2006 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**
Emergency Phone No. 0114 2738066. (UK office hours 08.30-17.00)

2. SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture**
- 2.1.1 Regulation (EC) No. 1272/2008 (CLP)**
Flam. Aerosol 1; Extremely flammable aerosol.
Gases under pressure; Liquefied gas; Contains gas under pressure; may explode if heated.
Asp. Tox. 1; May be fatal if swallowed and enters airways.
Skin Irrit. 2; Causes skin irritation.
STOT SE 3; May cause drowsiness or dizziness.
Aquatic Chronic 2; Toxic to aquatic life with long lasting effects.
- 2.1.2 Directive 67/548/EEC & Directive 1999/45/EC**
F+; Extremely flammable.
Xn; Harmful: may cause lung damage if swallowed.
Xi; Irritating to skin.
N; Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Vapours may cause drowsiness and dizziness.



JAC 2 – AEROSOL

2.2 Label elements

2.2.1 Label elements

Product Name
Hazard Pictogram

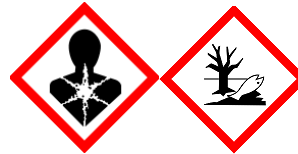
According to Regulation (EC) No. 1272/2008 (CLP)
JAC 2 – AEROSOL.



GHS02

GHS04

GHS07



GHS08

GHS09

Signal word(s)
Hazard statement(s)

Danger.
H222: Extremely flammable aerosol.
H280: Contains gas under pressure; may explode if heated.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H336: May cause drowsiness or dizziness.
H411: Toxic to aquatic life with long lasting effects.
P210: Keep away from heat/sparks/open flames/hot surfaces.
– No smoking.
P273: Avoid release to the environment.
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P331: Do NOT induce vomiting.
P405: Store locked up.
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 a naked flame or any incandescent material. Keep out of the reach of children.

Precautionary statement(s)

Additional Information

2.2.2 Label elements

Product Name
Hazard Symbol

According to Directive 67/548/EEC & Directive 1999/45/EC
JAC 2 – AEROSOL.



F+

Xn

N

Risk Phrases

R12: Extremely flammable.
R38: Irritating to skin.
R65: Harmful: may cause lung damage if swallowed.
R67: Vapours may cause drowsiness and dizziness.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.



JAC 2 – AEROSOL

Safety Phrases

S16: Keep away from sources of ignition - No smoking.
 S23: Do not breathe vapour/spray.
 S24: Avoid contact with skin.
 S43: In case of fire, use: Water spray, foam, dry powder or CO₂.
 S60: This material and its container must be disposed of as hazardous waste.
 S61: Avoid release to the environment. Refer to special instructions/Safety Data Sheets.

Additional Information

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 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 phrases see section 16.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Product as supplied: Aerosol.

3.1 Mixtures

EC Classification No. 1272/2008

Hazardous ingredient(s)	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard pictogram(s) and Hazard statement(s)
Dimethyl ether	50 - 100	115-10-6	204-065-8	None assigned	GHS02, Flam. Gas 1; H220, GHS04, Press. Gas: Liquefied gas; H280
Hydrocarbons, C7-C9 isoalkanes	20 - 50	None assigned	921-728-3	01-2119471305-42-XXXX	GHS02, Flam. Liq. 2; H225, GHS07, Skin Irrit. 2; H315, STOT SE 3; H336, GHS08, Asp. Tox. 1; H304, GHS09, Aquatic Chronic 2; H411

EC Classification No. 67/548/EEC

Hazardous ingredient(s)	%W/W	CAS No.	EC No.	REACH Registration No.	EC Classification and Risk Phrases
Dimethyl ether	50 - 100	115-10-6	204-065-8	None assigned	F+; R12
Hydrocarbons, C7-C9 isoalkanes	20 - 50	None assigned	921-728-3	01-2119471305-42-XXXX	F; R11, Xn; R65, Xi; R38, N; R51/53, R67

3.2 Additional Information

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



JAC 2 – AEROSOL

4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin Contact

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/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

IF SWALLOWED: Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

4.2 Most important symptoms and effects, both acute and delayed

Aspiration into the lungs may cause chemical pneumonitis, which can be fatal.

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. Contains gas under pressure; may explode if heated.

5.1 Extinguishing Media

Suitable Extinguishing Media

Water spray, foam, dry powder or CO₂.

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 vapours. Avoid contact with skin. 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

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.



JAC 2 – AEROSOL

7. SECTION 7: HANDLING AND STORAGE




- 7.1 Precautions for safe handling** Keep away from heat/sparks/open flames/hot surfaces. – 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 a naked flame or any incandescent material. Use only non-sparking tools. Keep out of the reach of children. Use only outdoors or in a well-ventilated area. Avoid breathing vapours. Avoid prolonged skin contact. Wear protective gloves/eye protection/face protection. Wash hands thoroughly after handling.
- 7.2 Conditions for safe storage, including any incompatibilities** Store locked up. Keep container tightly closed. Protect from sunlight. Store in a well-ventilated place. Ambient. Do not expose to temperatures exceeding 50°C/ 122°F. 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 3452-2:2006 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	WEL

WEL: Workplace Exposure Limit (UK HSE EH40)

- 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.
- Respiratory protection  In case of insufficient ventilation, wear suitable respiratory equipment. A suitable mask with filter type A (EN14387 or EN405) may be appropriate.



JAC 2 – AEROSOL

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	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)	Extremely flammable aerosol.
Upper/lower flammability or explosive limits	3.0 – 18.6Vol-%
Vapour pressure	5200hPa @ 20°C
Vapour density	Not available.
Relative density	Not available.
Density	0.691g/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	235°C
Decomposition Temperature	Not available.
Kinematic Viscosity	Not available.
Explosive properties	Contains gas under pressure; may explode if heated.
Oxidising properties	No information available.
9.2 Other information	
Organic solvents	59.9%

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	Stable under normal conditions.
10.4 Conditions to avoid	Heat and direct sunlight.
10.5 Incompatible materials	Strong oxidising agents.
10.6 Hazardous Decomposition Product(s)	Smoke, Oxides of carbon.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects	
11.1.1 Mixtures	
Acute toxicity	
Ingestion	Low oral toxicity.
Inhalation	STOT SE 3; May cause drowsiness or dizziness.
Irritation	
Skin	Skin Irrit. 2; Causes skin irritation.
Corrosivity	Not classified.
Sensitisation	Not expected to be a skin or respiratory sensitiser.
Repeated dose toxicity	None anticipated.
Carcinogenicity	No evidence of carcinogenicity.
Mutagenicity	There is no evidence of mutagenic potential.
Toxicity for reproduction	None anticipated.



JAC 2 – AEROSOL

Aspiration hazard	Asp. Tox. 1; May be fatal if swallowed and enters airways. 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	Aquatic Chronic 2; Toxic to aquatic life with long lasting effects.
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. Refer to manufacturer for information on recovery/recycling. Do NOT landfill.
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 1950
14.2 UN Proper Shipping Name	AEROSOLS.
ADR/RID / IMDG	AEROSOLS, FLAMMABLE.
ICAO/IATA	
14.3 Transport hazard class(es)	2
ADR/RID	2.1
IMDG / ICAO/IATA	None.
14.4 Packing Group	
14.5 Environmental hazards	Environmentally hazardous substance (EHS).
ADR/RID	Marine Pollutant (MP).
IMDG	Not applicable.
ICAO/IATA	None.
14.6 Special precautions for user	None.
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
14.8 Additional Information	
14.8.1 ADR Classification Code	5F
14.8.2 IMDG Code	EmS: F-D, S-U



JAC 2 – AEROSOL

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	All chemicals are not listed.
	REACH: ANNEX XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	All chemicals are not listed.
	REACH: ANNEX XIV List of substances subject to authorisation	All chemicals are not listed.
	Community Rolling Action Plan (CoRAP); Draft 29/02/2012	All chemicals are not listed.
15.1.2	National regulations	None known.
15.2	Chemical Safety Assessment	Not available.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
vPvB	very Persistent and very Bioaccumulative
OECD	Organization for Economic Cooperation and Development
Aquatic Chronic 2	Hazardous to the aquatic environment Category 2
Asp. Tox. 1	Aspiration hazard Category 1
Flam. Aerosol 1	Flammable aerosol Category 1
Flam. Gas 1	Flammable gas Category 1
Flam. Liq. 2	Flammable liquid Category 2
Skin Irrit. 2	skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity — single exposure Category 3
F+	Extremely flammable
F	Highly flammable
N	Dangerous for the environment.
Xi	Irritant
Xn	Harmful

Risk Phrases and Safety Phrases

R11	Highly flammable.
R12	Extremely flammable.
R38	Irritating to skin.
R65	Harmful: may cause lung damage if swallowed.
R67	Vapours may cause drowsiness and dizziness.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S38	In case of insufficient ventilation, wear suitable respiratory equipment.
S3/9/14	Keep in a cool, well-ventilated place away from: Heat and direct sunlight.













JAC 2 – AEROSOL

Hazard statement(s) and Precautionary statement(s)

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
P261	Avoid breathing vapours.
P264	Wash hands thoroughly after handling.
P211	Do not spray on an open flame or other ignition source.
P251	Pressurized container: Do not pierce or burn, even after use.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P362	Take off contaminated clothing and wash before reuse.
P391	Collect spillage.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.

Hazard pictogram(s) and Hazard Symbol

GHS02		F+	
GHS04		F	
GHS07		Xi	
GHS08		Xn	
GHS09		N	



JAC 2 – AEROSOL

Disclaimers

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose.

Johnson and Allen Ltd gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law.

Johnson and Allen Ltd accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.

Annex to the extended Safety Data Sheet (eSDS)

No information available.