



JAD DEVELOPER - 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	JAD DEVELOPER – 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).
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. 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)	Gases under pressure: Compressed gas; Contains gas under pressure; may explode if heated. Carc. 2; Suspected of causing cancer.
2.1.2 Directive 67/548/EEC & Directive 1999/45/EC	Carc. Cat. 3; Limited evidence of a carcinogenic effect.
2.2 Label elements	
2.2.1 Label elements	According to Regulation (EC) No. 1272/2008 (CLP)
Product Name	JAD DEVELOPER – AEROSOL.
Hazard Pictogram	 
Signal word(s)	GHS04 GHS08
Hazard statement(s)	Warning. H280: Contains gas under pressure; may explode if heated. H351: Suspected of causing cancer.
Precautionary statement(s)	P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P281: Use personal protective equipment as required. P308 + P313: If exposed or concerned: Get medical



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2.2.2 Label elements Hazard Symbol

advice/attention.

P410 + P403: Protect from sunlight. Store in a well-ventilated place.

P405: Store locked up.

According to Directive 67/548/EEC & Directive 1999/45/EC



Xn

Risk Phrases

R40: Limited evidence of a carcinogenic effect.

Safety Phrases

S2, S23, S24/25, S36/37.

2.3 Other hazards

High atmospheric concentrations may lead to adverse effects on the central nervous system and anaesthetic effects, including drowsiness, giddiness, headache, nausea and unconsciousness.

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)
Dichloromethane	70-90	75-09-2	200-838-9	None assigned	GHS08, Carc. 2; H351.
Carbon dioxide	1-10	00124-38-9	204-696-9	None assigned	None.
Powder Dispersion Agent	<1	66455-14-9	500-165-3	None assigned	GHS05, Eye Dam. 1; H318, GHS09, Aquatic Acute 1; H400.

EC Classification No. 67/548/EEC

Hazardous ingredient(s)	%W/W	CAS No.	EC No.	REACH Registration No.	EC Classification and Risk Phrases
Dichloromethane	70-90	75-09-2	200-838-9	None assigned	Carc. Cat. 3; R40.
Carbon dioxide	1-10	00124-38-9	204-696-9	None assigned	None.
Powder Dispersion Agent	<1	66455-14-9	500-165-3	None assigned	Xi; R41, N; R50.

3.2 Additional Information

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

4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, obtain medical attention.



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Skin Contact	Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If symptoms persist, obtain medical attention.
Eye Contact	Flush eyes with water for at least 15 minutes while holding eyelids open. If symptoms persist, obtain medical attention.
Ingestion	Unlikely route of exposure.
4.2 Most important symptoms and effects, both acute and delayed	Inhalation: Headache, dizziness, nausea and vomiting.
4.3 Indication of immediate medical attention and special treatment needed	If exposed or concerned: Get medical advice/attention.

5. SECTION 5: FIRE-FIGHTING MEASURES

Contains gas under pressure; may explode if heated.

5.1 Extinguishing Media	Foam, Carbon dioxide, Water fog or dry powder.
Suitable Extinguishing Media	Water jet spray.
Unsuitable Extinguishing Media	
5.2 Special hazards arising from the substance or mixture	Heating may cause pressure rise with risk of bursting. Decomposes in a fire giving off toxic fumes: Carbon monoxide, Carbon dioxide, Nitrogen oxides.
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	Ensure adequate ventilation. Avoid breathing vapours. Avoid contact with skin and eyes. Wear protective gloves/protective clothing/eye protection/face protection.
6.2 Environmental precautions	Do not release large quantities into the surface water or into drains.
6.3 Methods and material for containment and cleaning up	Adsorb spillages onto sand, earth or any suitable adsorbent material. 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.
6.5 Additional Information	None.

7. SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Provide adequate ventilation. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Do not eat, drink or smoke during work.
7.2 Conditions for safe storage, including any incompatibilities	Store locked up. Protect from sunlight. Store in a well-ventilated place.
Storage Temperature	Ambient.
Storage Life	Stable under normal conditions.
Incompatible materials	Strong oxidising agents, Acids, Alkalis, Zinc, Aluminium.



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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).

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:
Dichloromethane	72-09-2	100	350	300	1060	WEL, BMGV, Sk.

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

Use personal protective equipment as required.

Eye/face protection

Wear suitable eye/face protection.



Skin protection (Hand protection/ Other)

Wear suitable protective clothing and gloves. Impervious gloves (EN 374).



Respiratory protection

Wear a suitable respirator if the ventilation is not sufficient to keep the solvent vapour concentration below the occupational limit values. A suitable mask with filter type A (EN141 or EN405) may be appropriate.



Thermal hazards

Not applicable.

8.2.3 Environmental Exposure Controls

Do not release large quantities into the surface water or into drains.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	White.
Odour	Characteristic odour.
Odour Threshold (ppm)	Not available.
pH (Value)	Not applicable.
Melting Point (°C)	-97°C.
Boiling Point (°C)	39.8°C.
Flash Point (°C)	Not available.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non-flammable.
Explosive limit ranges	Contains gas under pressure; may explode if heated.
Vapour Pressure (mm Hg)	Not available.
Vapour Density (Air=1)	Not available.
Specific Gravity	1.32g/l @ 20°C.
Solubility (Water)	Slightly soluble.



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Solubility (Other)	Not available.
Partition Coefficient (n-Octanol/water)	1.25 (Dichloromethane).
Auto Ignition Temperature (°C)	624°C
Decomposition Temperature (°C)	Not available.
Viscosity (mPa.s)	Not applicable.
Explosive properties	Not available.
Oxidising properties	Not available.
9.2 Other information	None.

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, Alkalis, Acids, Zinc, Aluminium.
10.6 Hazardous Decomposition Product(s)	Phosgene, Hydrochloric acid, Carbon monoxide, Carbon dioxide, Nitrogen oxides.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects	
11.1.1 Mixtures	
Acute toxicity	
Ingestion	Low oral toxicity. Dichloromethane: LD50 (oral, rat) mg/kg: 2100.
Inhalation	Low acute toxicity. Effects and Symptoms: Headache, dizziness, nausea and vomiting. Dichloromethane: LC50 (inhalation, rat) mg/l/4h: 158000.
Skin Contact	Low acute toxicity. Dichloromethane: LD50 (skin, rat) mg/kg: >2000.
Eye Contact	Low acute toxicity.
Skin corrosion/irritation	Not classified.
Serious eye damage/irritation	Not classified.
Respiratory or skin sensitization	It is not a skin sensitizer.
Repeated dose toxicity	High atmospheric concentrations may lead to adverse effects on the central nervous system and anaesthetic effects, including drowsiness, giddiness, headache, nausea and unconsciousness.
Carcinogenicity	Carc. 2; Suspected of causing cancer. Dichloromethane: A3: Confirmed Animal Carcinogen with Unknown Relevance to Humans: The agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histological type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiological studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.
Mutagenicity	There is no evidence of mutagenic potential.
Reproductive toxicity	None anticipated.
Aspiration hazard	Not classified.
11.2 Other information	None.



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12. SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	Low toxicity to aquatic organisms. Dichloromethane: LC50 (Fish) (96 hour) = 220000µg/l. EC50 (Daphnia magna) (48 hour) = 1682mg/l. EC50 (Algae) (96 hour) = >660mg/l.
12.2	Persistence and degradability	The product is poorly biodegradable. The product is unlikely to persist in the environment.
12.3	Bioaccumulative potential	The product has no potential for bioaccumulation. Bioconcentration factor (BCF) : 2.3.
12.4	Mobility in soil	The product is volatile and will partition into the atmosphere. The product has high mobility in soil.
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 1950.
14.2	Proper Shipping Name	AEROSOLS.
14.3	Transport hazard class(es)	2.
14.4	Packing Group	None.
14.5	Environmental hazards	No information available.
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	ADR Classification Code: 5A. EmS: F-S, S-U.

15. SECTION 15: REGULATORY INFORMATION

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture substance or mixture	
15.1.1	EU regulations	
	Authorisations and/or restrictions on use	None known.
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
STOT	Specific Target Organ Toxicity



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DNEL	Derived No Effect Level
PNEL	Predicted No Effect Concentration
PBT	PBT: Persistent, Bioaccumulative and Toxic
vPvB	vPvB: very Persistent and very Bioaccumulative
OEL	Occupational Exposure Limits
WEL	Workplace Exposure Limit (UK HSE EH40)
BMGV	Bmgv: Biological monitoring guidance value (UK HSE EH40)
Sk	Sk - Can be absorbed through skin.
Eye Dam. 1	Serious eye damage/irritation Category 1
Carc. 2	Carcinogenicity Category 2
Aquatic Acute 1	Hazardous to the aquatic environment Category 1
Carc. Cat. 3	Category 3 Carcinogen
Xi	Irritant
Xn	Harmful
N	Dangerous for the environment.

Risk Phrases and Safety Phrases

R40	Limited evidence of a carcinogenic effect.
R41	Risk of serious damage to eyes.
R50	Very toxic to aquatic organisms.
S2	Keep out of the reach of children.
S23	Do not breathe vapour.
S24/25	Avoid contact with skin and eyes.
S36/37	Wear suitable protective clothing and gloves.

Hazard statement(s) and Precautionary statement(s)

H280	Contains gas under pressure; may explode if heated.
H318	Causes serious eye damage.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.

Hazard pictogram(s) and Hazard Symbol

GHS04



Xn



GHS05



GHS08



GHS09



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



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Annex to the extended Safety Data Sheet (eSDS)

No information available.