

JAD DEVELOPER - 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	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. 0114 2738066 0114 2729842 info@johnsonandallen.co.uk
	Telephone	
	E-Mail (competent person)	
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	Regulation (EC) No. 1272/2008 (CLP)	Aerosol 3; Pressurised container: May burst if heated. Skin Irrit. 2; Causes skin irritation. Eye Irrit. 2; Causes serious eye irritation. Carc. 2; Suspected of causing cancer. STOT RE 2; May cause damage to organs through prolonged or repeated exposure: Liver. STOT SE 3; May cause respiratory irritation. May cause drowsiness or dizziness.
2.2 Label elements	Product Name	According to Regulation (EC) No. 1272/2008 (CLP) JAD DEVELOPER – AEROSOL.
	Hazard Pictogram	 
		GHS07 GHS08
	Signal word(s)	Warning.
	Hazard statement(s)	H229: Pressurised container: May burst if heated. H315: Causes skin irritation. H319: Causes serious eye irritation. H335: May cause respiratory irritation.

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Precautionary statement(s)

H336: May cause drowsiness or dizziness.
 H351: Suspected of causing cancer.
 H373: May cause damage to organs through prolonged or repeated exposure: Liver.
 P201: Obtain special instructions before use.
 P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P251: Do not pierce or burn, even after use.
 P260: Do not breathe vapour/spray.
 P271: Use only outdoors or in a well-ventilated area.
 P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.

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)	%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, STOT RE 2; H373, GHS07, Skin Irrit. 2; H315, Eye Irrit. 2; H319, STOT SE 3; H335, H336
Carbon dioxide	1-10	124-38-9	204-696-9	None assigned	GHS04, Press. Gas; H280
Powder Dispersion Agent	<1	66455-14-9	500-165-3	None assigned	GHS05, Eye Dam. 1; H318, GHS09, Aquatic Acute 1; H400

3.3 Additional Information

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

4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

Skin Contact

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

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

Unlikely route of exposure.

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| 4.2 Most important symptoms and effects, both acute and delayed | Inhalation: Headache, dizziness, nausea and vomiting. |
| 4.3 Indication of any immediate medical attention and special treatment needed | If exposed or concerned: Get medical advice/attention. |

5. SECTION 5: FIRE-FIGHTING MEASURES

Pressurised container: May burst if heated.

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| 5.1 Extinguishing Media | |
| Suitable Extinguishing Media | Foam, Carbon dioxide, Water fog or dry powder. |
| 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. Decomposes in a fire giving off toxic fumes: Phosgene, Hydrochloric acid, 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.

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| 6.1 Personal precautions, protective equipment and emergency procedures | Ensure adequate ventilation. Do not breathe vapour/spray. Avoid contact with skin and eyes. Avoid inhalation of high concentrations of vapours. 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 |

7. SECTION 7: HANDLING AND STORAGE

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| 7.1 Precautions for safe handling | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Provide adequate ventilation. Use only outdoors or in a well-ventilated area. Do not breathe vapour/spray. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. |
| 7.2 Conditions for safe storage, including any incompatibilities | Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Store locked up. |
| Storage Temperature | Ambient. Do not expose to temperatures exceeding 50°C/ 122°F. |
| 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	75-09-2	100	350	300	1060	WEL, BMGV, Sk
Carbon dioxide	124-38-9	5000	9150	15000	27400	WEL

WEL: Workplace Exposure Limit (UK HSE EH40)

Bmgv: Biological monitoring guidance value (UK HSE EH40)

Sk - Can be absorbed through skin.

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

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 AX 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	Not available.
pH	Not applicable.
Melting Point/Freezing Point	-97°C
Initial boiling point and boiling range	39.8°C

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Flash Point	Not available.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	1.32g/l @ 20°C
Solubility(ies)	Slightly soluble in: Water.
Partition coefficient: n-octanol/water	1.25 (Dichloromethane).
Auto-ignition temperature	624°C
Decomposition Temperature	Not available.
Viscosity	Not applicable.
Explosive properties	Pressurised container: May burst if heated.
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	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, Alkalis, Acids, Zinc, Aluminium.
10.6 Hazardous Decomposition Product(s)	No hazardous decomposition products known.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects	
11.1.1 Mixtures	
Acute toxicity	
Ingestion	Low oral toxicity. Dichloromethane: LD50 (rat) >2000mg/kg STOT SE 3; May cause drowsiness or dizziness. Low acute toxicity. Effects and Symptoms: Headache, dizziness, nausea and vomiting. Dichloromethane: LC50 (rat) 4hour(s) = 49000mg/m ³
Inhalation	
Skin Contact	Low acute toxicity. Dichloromethane: LD50 (rat) >2000mg/kg
Eye Contact	Low acute toxicity.
Irritation	Skin Irrit. 2; Causes skin irritation. Eye Irrit. 2; Causes serious eye irritation. STOT SE 3; May cause respiratory irritation.
Corrosivity	Not classified.
Sensitisation	It is not a skin sensitiser.
Repeated dose toxicity	STOT RE 2; May cause damage to organs through prolonged or repeated exposure: Liver.
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

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<p>Mutagenicity</p> <p>Toxicity for reproduction</p> <p>11.2 Other information</p>	<p>evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.</p> <p>There is no evidence of mutagenic potential.</p> <p>None anticipated.</p> <p>None.</p>
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12. SECTION 12: ECOLOGICAL INFORMATION

<p>12.1 Toxicity</p> <p>12.2 Persistence and degradability</p> <p>12.3 Bioaccumulative potential</p> <p>12.4 Mobility in soil</p> <p>12.5 Results of PBT and vPvB assessment</p> <p>12.6 Other adverse effects</p>	<p>Low toxicity to aquatic organisms.</p> <p>Dichloromethane: Fish: LC50 (96 hour) = 193mg/l Aquatic invertebrates: EC50 (48 hour) = 109mg/l</p> <p>The product is biodegradable. The product is unlikely to persist in the environment.</p> <p>The product has low potential for bioaccumulation. Bioconcentration factor (BCF) : 2 – 5.4</p> <p>The product is volatile and will partition into the atmosphere. The product has high mobility in soil.</p> <p>Not classified as PBT or vPvB.</p> <p>None.</p>
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13. SECTION 13: DISPOSAL CONSIDERATIONS

<p>13.1 Waste treatment methods</p> <p>13.2 Additional Information</p>	<p>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.</p> <p>Disposal should be in accordance with local, state or national legislation.</p>
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14. SECTION 14: TRANSPORT INFORMATION

<p>14.1 UN number</p> <p>14.2 UN Proper Shipping Name</p> <p>14.3 Transport hazard class(es)</p> <p>14.4 Packing Group</p> <p>14.5 Environmental hazards</p> <p>14.6 Special precautions for user</p> <p>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</p> <p>14.8 Additional Information</p> <p>14.8.1 ADR/RID</p> <p>14.8.2 IMDG</p> <p>14.8.3 ICAO/IATA</p>	<p>UN 1950</p> <p>Aerosols, Non-Flammable, containing substances in Division 6.1, Packing Group III</p> <p>2.2, (6.1)</p> <p>None.</p> <p>Not classified as a Marine Pollutant.</p> <p>None.</p> <p>Not applicable.</p> <p>Hazard label(s): 2.2 + 6.1 ADR Classification Code: 5T Tunnel Restriction Code: D</p> <p>Hazard label(s): 2.2 + 6.1 EmS: F-D, S-U</p> <p>Hazard label(s): 2.2 + 6.1 Cargo Aircraft Only: Packaging Instructions: 203, Maximum quantity: 150kg Passenger and Cargo Aircraft: Packaging Instructions: 203, Maximum quantity: 75kg Special provisions: A145, A167, A802</p>
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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	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	Listed: Dichloromethane (CAS No.: 75-09-2)
	REACH: ANNEX XIV List of substances subject to authorisation	All chemicals are not listed.
	Community Rolling Action Plan (CoRAP)	Listed: Dichloromethane (CAS No.: 75-09-2)
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: 14

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
OEL	Occupational Exposure Limits
BCF	Bioconcentration factor
Aerosol 3	Aerosol Category 3
Skin Irrit. 2	Skin corrosion/irritation Category 2
Eye Irrit. 2	Serious eye damage/irritation Category 2
Eye Dam. 1	Serious eye damage/irritation Category 1
STOT SE 3	Specific target organ toxicity — single exposure Category 3
STOT RE 2	Specific target organ toxicity — repeated exposure Category 2
Carc. 2	Carcinogenicity Category 2
Aquatic Acute 1	Hazardous to the aquatic environment Category 1
Press. Gas	Gases under pressure: Compressed gas

Hazard statement(s) and Precautionary statement(s)

H280	Contains gas under pressure; may explode if heated.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure: Liver.
H400	Very toxic to aquatic life.
P202	Do not handle until all safety precautions have been read and understood.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

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P312	Call a POISON CENTER/doctor if you feel unwell.
P405	Store locked up.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

Hazard pictogram(s)

GHS04



GHS08



GHS05



GHS09



GHS07



Disclaimers

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Annex to the extended Safety Data Sheet (eSDS)

Not applicable.