



JAD DEVELOPER - BULK

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 – BULK.
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 use 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	
Fax	
E-mail	
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)	Carc. 2: Suspected of causing cancer. Skin Irrit. 2; Causes skin irritation. Eye Irrit. 2; Causes serious eye irritation. STOT SE 3; May cause respiratory irritation. May cause drowsiness or dizziness. STOT RE 2; May cause damage to organs through prolonged or repeated exposure: Liver.
2.1.2 Directive 67/548/EEC & Directive 1999/45/EC	Carc. Cat. 3: Limited evidence of a carcinogenic effect. Xi; Irritating to eyes. Irritating to skin. Irritating to respiratory system. Vapours may cause drowsiness and dizziness. Xn; Danger of serious damage to health by prolonged exposure.



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2.2 Label elements

2.2.1 Label elements

Product Name

Hazard Pictogram

Signal word(s)

Hazard statement(s)

Precautionary statement(s)

2.2.2 Label elements

Hazard Symbol

Risk Phrases

Safety Phrases

2.3 Other hazards

2.4 Additional Information

According to Regulation (EC) No. 1272/2008 (CLP).
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GHS07

GHS08

Warning.

H315: Causes skin irritation.

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.

P201: Obtain special instructions before use.

P260: Do not breathe vapour/spray.

P271: Use only outdoors or in a well-ventilated area.

P281: Use personal protective equipment as required.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P501: Dispose of contents/container to: Hazardous Waste, N.O.S.

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



Xn

Xi

R36: Irritating to eyes.

R37: Irritating to respiratory system.

R38: Irritating to skin.

R40: Limited evidence of a carcinogenic effect.

R48: Danger of serious damage to health by prolonged exposure.

R67: Vapours may cause drowsiness and dizziness.

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

None.

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



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3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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	>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
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	>90	75-09-2	200-838-9	None assigned	Carc. Cat. 3; R40, Xn; R48, Xi; R36, R37, R38, R67
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 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

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

IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: Drowsiness, Dizziness, Confusion, Unconsciousness.

Ingestion: Nausea, Abdominal pain, Sore throat.

4.3 Indication of any immediate medical attention and special treatment needed

If exposed or concerned: Get medical advice/attention.



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5. SECTION 5: FIRE-FIGHTING MEASURES

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| <p>5.1 Extinguishing Media
 Suitable Extinguishing Media
 Unsuitable Extinguishing Media</p> <p>5.2 Special hazards arising from the substance or mixture</p> <p>5.3 Advice for fire-fighters</p> | <p>Foam, Carbon dioxide, Water fog or dry powder.
 None known.</p> <p>Decomposes in a fire giving off toxic fumes: Carbon monoxide, Carbon dioxide, Nitrogen oxides.</p> <p>Fire fighters should wear complete protective clothing including self-contained breathing apparatus.</p> |
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6. SECTION 6: ACCIDENTAL RELEASE MEASURES

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| <p>6.1 Personal precautions, protective equipment and emergency procedures</p> <p>6.2 Environmental precautions</p> <p>6.3 Methods and material for containment and cleaning up</p> <p>6.4 Reference to other sections</p> <p>6.5 Additional information</p> | <p>Ensure adequate ventilation. Do not breathe vapour. Avoid contact with skin and eyes. Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Do not allow into any sewer on the ground, or into any body of water.</p> <p>Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a lidded container for disposal or recovery.</p> <p>See Section: 8 and 13</p> <p>None.</p> |
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7. SECTION 7: HANDLING AND STORAGE

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|---|---|
| <p>7.1 Precautions for safe handling</p> <p>7.2 Conditions for safe storage, including any incompatibilities
 Storage Temperature
 Storage Life
 Incompatible materials</p> <p>7.3 Specific end use(s)</p> | <p>Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Provide adequate ventilation. Use only outdoors or in a well-ventilated area. Do not breathe vapour. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Do not eat, drink or smoke during work.</p> <p>Store locked up. Store in a well-ventilated place. Keep container tightly closed.</p> <p>Ambient.
 Stable under normal conditions.
 Strong oxidising agents, Alkalis, Acids, Zinc, Aluminium.</p> <p>For use in the Dye Penetrant Inspection Process BS EN ISO 571-1:1997 (BS EN ISO 3452-2:2006 Sensitivity level 2 when use in conjunction with penetrant family products).</p> |
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8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters**
8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTCL (8 hr TWA ppm)	LTCL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Dichloromethane	75-09-2	100	350	300	1060	WEL, BMGV, Sk

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| <p>8.1.2 Biological limit value</p> <p>8.1.3 PNECs and DNELs</p> | <p>Not established.</p> <p>Not established.</p> |
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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 protective eyewear (goggles, face shield, or safety glasses).



Skin protection (Hand protection/ Other)

Wear suitable protective clothing and gloves. Wear impervious gloves (EN374).



Respiratory protection

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 allow into any sewer on the ground, or into any body of water.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Liquid.
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
Flash Point	Not available.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	348.78mm Hg @ 20°C
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 available.
Explosive properties	Not applicable.
Oxidising properties	Not applicable.

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	None anticipated.
10.5 Incompatible materials	Strong oxidising agents, Alkalis, Acids, Zinc, Aluminium.



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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	May cause drowsiness or dizziness. 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.
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 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.
Toxicity for reproduction	None anticipated.
11.2 Other information	None.

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.



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13. SECTION 13: DISPOSAL CONSIDERATIONS

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| 13.1 Waste treatment methods | Dispose of contents/container to: Hazardous Waste, N.O.S. Refer to manufacturer for information on recovery/recycling. |
| 13.2 Additional Information | Disposal should be in accordance with local, state or national legislation. |

14. SECTION 14: TRANSPORT INFORMATION

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| 14.1 UN number | UN1593 |
| 14.2 UN Proper Shipping Name | DICHLOROMETHANE. |
| 14.3 Transport hazard class(es) | 6.1 |
| 14.4 Packing Group | III |
| 14.5 Environmental hazards | Not classified as a Marine Pollutant. |
| 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/RID | Hazard label(s): 6.1
ADR Classification Code: T1
Special Provisions: 516
Tunnel Restriction Code: E
HI No.: 60
Veh. for tank: AT
Trans. cat: 2
Limited quantity: 5L
Excepted quantity: E1
Packaging Instructions: P001 IBC03 LP01 (Special Provisions: B8, Mixed Provisions: MP19)
UN Portable Tank Instructions: T7 (Special Provisions: TP2)
Tank code: L4BH (Special Provisions: TU15 TE19)
Special Provisions for Carriage:
Packages: V12, Bulk: Loading, etc: CV 13 CV28
Operations: S9 |
| 14.8.2 IMDG | Hazard label(s): 6.1
EmS: F-A, S-A
Limited quantity: 5L
Excepted quantity: E1
Packaging Instructions: P001 LP01
IBC Instructions: IBC03 (Special Provisions: B8)
Tank Instructions IMO: UN: T7 (Special Provisions: TP2) |
| 14.8.3 ICAO/IATA | Hazard label(s): 6.1
Excepted quantity: E1
Special Provisions: ERG: 6L
Cargo Aircraft Only: Packaging Instructions: 663,
Maximum quantity: 220L
Passenger and Cargo Aircraft: Packaging Instructions: 655,
Maximum quantity: 60L
Passenger and Cargo Limited Quantity: Packaging Instructions: Y642, Maximum quantity: 2L |



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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	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
STOT	Specific Target Organ Toxicity
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
WEL	Workplace Exposure Limit (UK HSE EH40)
BMGV	Bmgv: Biological monitoring guidance value (UK HSE EH40)
Sk	Sk - Can be absorbed through skin.
Skin Irrit. 2	Skin corrosion/irritation Category 2
Eye Irrit. 2	Serious eye damage/irritation Category 2
Carc. 2	Carcinogenicity Category 2
Eye Dam. 1	Eye damage category 1
STOT SE 3	Specific target organ toxicity — single exposure Category 3
STOT RE 2	Specific target organ toxicity — repeated exposure 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

R36	Irritating to eyes.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R40	Limited evidence of a carcinogenic effect.
R41	Risk of serious damage to eyes.
R48	Danger of serious damage to health by prolonged exposure.
R50	Very toxic to aquatic life.



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R67	Vapours may cause drowsiness and dizziness.
S2	Keep out of the reach of children.
S23	Do not breathe vapour.
S24/25	Toxic in contact with skin and if swallowed.
S36/37	Wear suitable protective clothing and gloves.

Hazard statement(s) and Precautionary statement(s)

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.
P260	Do not breathe vapour.
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.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P362	Take off contaminated clothing and wash before reuse.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

Hazard pictogram(s) and Hazard Symbol

GHS05		Xn	
GHS07		Xi	
GHS08			
GHS09			



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Annex to the extended Safety Data Sheet (eSDS)

No information available.