

JAD DEVELOPER - BULK

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758 and SI 2020/1577

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

1.1 Product identifier

Product Name JAD DEVELOPER - BULK

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 Not known.

1.3 Details of the supplier of the safety data sheet

Company Identification Johnson and Allen Ltd
Address of Supplier Neocol Works
Smithfield
Sheffield
Postal code S3 7AR
Telephone 0114 2738066
Fax 0114 2729842
E-mail info@johnsonandallen.co.uk
Office hours 08:30 - 17:00

1.4 Emergency telephone number

Company 0114 2738066 (UK office hours 08.30-17.00)
NHS Direct +44 111

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GB CLP Regulation, UK SI 2019/720 and Skin Irrit. 2 :Causes skin irritation.
UK SI 2020/1567 Eye Irrit. 2 :Causes serious eye irritation.
STOT SE 3 :May cause drowsiness or dizziness.
Carc. 2 :Suspected of causing cancer.

2.2 Label elements

According to GB CLP Regulations, UK SI 2019/720 and UK SI 2020/1567

Product Name JAD DEVELOPER - BULK

Hazard Pictogram(s)



GHS08



GHS07

Signal Word(s) Warning

Hazard Statement(s)
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
H351: Suspected of causing cancer.

Precautionary Statement(s) P201: Obtain special instructions before use.

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P261: Avoid breathing vapours.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P312: Call a POISON CENTRE/doctor if you feel unwell.
P501: Dispose of this container to hazardous or special waste collection point.

2.3 Other hazards

None known.

2.4 Additional Information

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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / Registration number(s)	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
Dichloromethane	75-09-2	200-838-9	>90	Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE 3 H336 Carc. 2 H351	GHS08 GHS07
Alcohols, C12-13, ethoxylates, 1-2.5 EO	66455-14-9	500-165-3	<1	Eye Dam. 1 H318 Aquatic Acute 1 H400	GHS05 GHS09

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

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 CENTRE/doctor if you feel unwell.

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

Eye Contact 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 Wash out mouth with water. If symptoms persist, obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of causing cancer.

4.3 Indication of any immediate medical attention and special treatment needed

IF exposed or concerned: Get medical advice/attention.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

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Suitable Extinguishing media Extinguish with carbon dioxide, dry chemical, foam or waterspray.

Unsuitable extinguishing media None known.

5.2 Special hazards arising from the substance or mixture

Decomposes in a fire giving off toxic fumes: Phosgene, Hydrogen chloride, Carbon monoxide, Carbon dioxide.

5.3 Advice for firefighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

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

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.

6.4 Reference to other sections

See Also Section 8, 13.

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. Use only outdoors or in a well-ventilated area. Avoid breathing vapours. Avoid contact with skin and eyes. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke during work.

7.2 Conditions for safe storage, including any incompatibilities

Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Storage temperature

Ambient.

Storage life

Stable under normal conditions.

Incompatible materials

Strong oxidising agents, Alkalis, Acids, Zinc, Aluminium.

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).

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)	STCL (ppm)	STCL (mg/m ³)	Note
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Dichloromethane	75-09-2	100	353	200	706	BMGV, Sk
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Region	Source
United Kingdom	UK Workplace Exposure Limits EH40/2005 (Fourth edition, published 2020)
Remark	Notes
BMGV	Biological monitoring guidance values are listed in Table 2.
Sk	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.

Biological Exposure Indices						
Substances	CAS Number	Sampling	Tissues	Control parameters	Biological monitoring guidance value	Comments
Dichloromethane	75-09-2	Post shift	end-tidal breath	carbon monoxide	30 ppm	

8.2 Exposure controls

8.2.1. Appropriate engineering controls Provide adequate ventilation.

8.2.2. Personal protection equipment



Eye Protection

Wear eye protection with side protection (EN166).



Skin protection

Wear protective clothing and gloves: Impervious gloves.
Recommended: Viton rubber (fluoro rubber), Polyvinyl alcohol (PVA), Butyl rubber.
Thickness of coating: 0.4 mm
Break through time:
Viton rubber (fluoro rubber), Polyvinyl alcohol (PVA): > 480 minutes
Butyl rubber: > 10 minutes



Respiratory protection

Wear a suitable respirator to keep the solvent vapour concentration below the occupational limit values. A suitable mask with filter type AX is 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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Liquid. Colour: White.
Odour	Characteristic.
Odour threshold	Not established.
pH	Not known.
Melting point/freezing point	-97°C
Initial boiling point and boiling range	39.8°C
Flash Point	Not known.

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Evaporation rate	Not known.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not known.
Vapour pressure	348.78 mm Hg @ 20°C
Vapour density	Not known.
Density (g/ml)	Not known.
Relative density	1.32 g/l @ 20°C
Solubility(ies)	Solubility (Water): Slightly soluble. Solubility (Other): Not known.
Partition coefficient: n-octanol/water	1.25 (Dichloromethane)
Auto-ignition temperature	624°C
Decomposition Temperature (°C)	Not known.
Viscosity	Not known.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
9.2 Other information	None.

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 products

No hazardous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity - Ingestion	Calculation method : Not classified. Low oral toxicity. Dichloromethane: LD50 (rat) = 2100 mg/kg
Acute toxicity - Skin Contact	Calculation method : Not classified. Low acute toxicity. Dichloromethane: LD50 (rat) > 2000 mg/kg
Acute toxicity - Inhalation	Calculation method : Not classified.

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	Low acute toxicity.
	Dichloromethane: LC50 (rat) (4 hours) = 158000 mg/l
Skin corrosion/irritation	Calculation method : Causes skin irritation. No data.
Serious eye damage/irritation	Calculation method : Causes serious eye irritation. No data.
Skin sensitization data	Calculation method : Not classified.
	It is not a skin sensitiser.
Respiratory sensitization data	Calculation method : Not classified.
Germ cell mutagenicity	Calculation method : Not classified.
Carcinogenicity	Calculation method : Suspected of causing cancer. No data.
	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.
Reproductive toxicity	Calculation method : Not classified.
	No evidence of reproductive effects.
Lactation	Calculation method : Not classified.
STOT - single exposure	Calculation method : May cause drowsiness or dizziness. No data.
STOT - repeated exposure	Calculation method : Not classified.
Aspiration hazard	Calculation method : Not classified.
11.2 Other information	Not known.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity - Aquatic invertebrates	Low toxicity to invertebrates.
	Dichloromethane: EC50 (Daphnia magna) (48 hour) = 1682 mg/l
Toxicity - Fish	Low toxicity to fish.
	Dichloromethane: LC50 (96 hour) = 220 mg/l
Toxicity - Algae	Low toxicity to algae.
	Dichloromethane: EC50 (96 hour) > 660 mg/l
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.

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

Slightly soluble. The product is predicted to have high mobility in soil. The product is volatile and will partition into the atmosphere.

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12.5 Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

12.6 Other adverse effects

Not known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of this container to hazardous or special waste collection point. Refer to manufacturer or supplier for information on recovery or recycling. Do NOT landfill.

13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

UN No. 1593

14.2 UN proper shipping name

UN proper shipping name DICHLOROMETHANE

14.3 Transport hazard class(es)

ADR/RID

ADR/RID Class 6.1

ADR Classification Code T1

Special Provisions 516

Limited Quantities 5 L

Excepted Quantities E1

Emergency Action Code 2Z

Mixed Packing Instructions for Packages P001 IBC03 LP01 R001

Special Packing Provisions for Packages B8

Mixed Packing Instructions for Packages MP19

Packing Instructions for Portable Tanks T7

Special Provisions for Portable Tanks TP2

Tank Code for Tanks L4BH

Special Provisions for Tanks TU15 TE19

Vehicle for Tank Carriage AT

ADR Transport Category 2

Tunnel Restriction Code E

Special Provisions for Carriage - V12

Packages

Special Provisions for Carriage - Bulk

Special Provisions for Carriage - Loading, CV13 CV28

Unloading and Handling

Special Provisions for Carriage - S9

Operation

ADR HIN 60

IMDG

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IMDG Class	6.1
Special Provisions	516
Limited Quantities	5 L
Excepted Quantities	E1
Mixed Packing Instructions for Packages	P001 IBC03 LP01 R001
Special Packing Provisions for Packages	B8
Packing Instructions for Portable Tanks	T7
Special Provisions for Portable Tanks	TP2
IMDG EMS	F-A, S-A
Stowage and Handling	Category A
Segregation	SGG10
Marine Pollutant	
ICAO/IATA	
IATA Proper Shipping Name	DICHLOROMETHANE
Excepted Quantities	E1
Passenger and Cargo Aircraft Limited	Y642
Quantities Packing Instructions	
Passenger and Cargo Aircraft Limited	2L
Quantities Max net Qty	
Passenger and Cargo Aircraft Packing	655
Instructions	
Passenger and Cargo Aircraft Max net	60L
Qty	
Cargo Aircraft Packing Instructions	663
Cargo Aircraft Max net Qty	220L
Special Provisions	
Emergency Response Guidebook (ERG)	6L
Code	
Labels	
Labels	6.1



14.4 Packing group

Packing group	III
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14.5 Environmental hazards

Environmental hazards	Not classified as a Marine Pollutant.
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14.6 Special precautions for user

Special precautions for user	Not known.
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14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

No information available

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

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United Kingdom Regulations - Authorisations and/or Restrictions On Use

UK REACH Candidate List of Substances Not listed

of Very High Concern for Authorisation

UK REACH Authorisation List (Annex Not listed

XIV) list of substances subject to

authorisation

UK REACH Restrictions List (Annex XVII) Dichloromethane (75-09-2), Alcohols, C12-13, ethoxylates, 1-2.5 EO (66455-14-9)

Restrictions on the manufacture, placing

on the market and use of certain

dangerous substances, mixtures and

articles

UK REACH Rolling Action Plan (RAP) Not listed

The Persistent Organic Pollutants Not listed

Regulations 2007 (SI 2007/3106) as

amended

The Ozone-Depleting Substances and Not listed

Fluorinated Greenhouse Gases

(Amendment etc.) (EU Exit) Regulations

2019 (SI 2019/583)

The Prior Informed Consent (PIC) Not listed

Regulations concerning the export and

import of hazardous chemicals

SI2008/2108 as amended

European Regulations - Authorisations and/or Restrictions On Use

Community Rolling Action Plan (CoRAP) Dichloromethane (75-09-2)

15.2 Chemical Safety Assessment

United Kingdom Not applicable.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

1-16

LEGEND

Hazard Pictogram(s)



GHS08



GHS07

GHS05: GHS: Corrosion

GHS09: GHS: Environment

Hazard classification

Skin Irrit. 2 : Skin corrosion/irritation, Category 2

Eye Irrit. 2 : Serious eye damage/irritation, Category 2

STOT SE 3 : Specific target organ toxicity — single exposure, Category 3

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Hazard Statement(s)	<p>Carc. 2 : Carcinogenicity, Category 2</p> <p>Aquatic Acute 1 : Hazardous to the aquatic environment, Acute, Category 1</p> <p>H315: Causes skin irritation.</p> <p>H319: Causes serious eye irritation.</p> <p>H336: May cause drowsiness or dizziness.</p> <p>H351: Suspected of causing cancer.</p> <p>H400: Very toxic to aquatic life.</p>
Precautionary Statement(s)	<p>P201: Obtain special instructions before use.</p> <p>P202: Do not handle until all safety precautions have been read and understood.</p> <p>P261: Avoid breathing vapours.</p> <p>P264: Wash hands and exposed skin thoroughly after handling.</p> <p>P271: Use only outdoors or in a well-ventilated area.</p> <p>P280: Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P302+P352: IF ON SKIN: Wash with plenty of water.</p> <p>P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P308+P313: IF exposed or concerned: Get medical advice/attention.</p> <p>P312: Call a POISON CENTRE/doctor if you feel unwell.</p> <p>P332+P313: If skin irritation occurs: Get medical advice/attention.</p> <p>P337+P313: If eye irritation persists: Get medical advice/attention.</p> <p>P362+P364: Take off contaminated clothing and wash it before reuse.</p> <p>P403+P233: Store in a well-ventilated place. Keep container tightly closed.</p> <p>P405: Store locked up.</p> <p>P501: Dispose of this container to hazardous or special waste collection point.</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>ATE : Acute Toxicity Estimate</p> <p>CAS : Chemical Abstracts Service</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>

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PBT : Persistent, Bioaccumulative and Toxic

PNEC : Predicted No Effect Concentration

REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals

RID : Regulations concerning the International Carriage of Dangerous Goods by Rail

STEL : Short term exposure limit

STOT : Specific Target Organ Toxicity

UN : United Nations

vPvB : very Persistent and very Bioaccumulative

Key literature references and sources for GB CLP Regulation, UK SI 2019/720 and UK SI 2020/1567 data used to compile the SDS

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