

**JAD DEVELOPER – AEROSOL**

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

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

**1.1 Product identifier**

Product Name JAD DEVELOPER - AEROSOL

Unique Formula Identifier (UFI) WP00-X05C-Q00C-PUF8

**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**

Manufacturer

Company Identification Johnson and Allen Ltd

Address of Manufacturer 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

Only representative

Company Identification DIMART S.r.l.

Address Via A. Einstein  
13 Sedriano MI  
Italy

Postal code 20018

Telephone +390290310207

Fax +390290310208

**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**

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.

STOT SE 3 :May cause drowsiness or dizziness.

Carc. 2 :Suspected of causing cancer.

**2.2 Label elements**

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

Product Name JAD DEVELOPER - AEROSOL

Hazard Pictogram(s)



GHS08



GHS07

Signal Word(s) Warning

Hazard Statement(s) H229: Pressurised container: May burst if heated.

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.

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.

P261: Avoid breathing mist/vapours/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.

Unique Formula Identifier (UFI)

WP00-X05C-Q00C-PUF8

**2.3 Other hazards**

None.

**JAD DEVELOPER – AEROSOL**

**2.4 Additional Information**

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

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Product as supplied: Aerosol.

**3.1 Substances**

Not applicable.

**3.2 Mixtures**

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
Dichloromethane	75-09-2	200-838-9 / 01-2119480404-41-XXXX	70-90	Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE 3 H336 Carc. 2 H351	GHS08 GHS07
Carbon dioxide	124-38-9	204-696-9	1-10	Press. Gas (Comp.) H280	GHS04
Alcohols, C12-13, ethoxylated	66455-14-9	500-165-3	<1	Eye Irrit. 2 H319	GHS07

Contains no non-classified vPvB substances or substances with a Union workplace exposure limit.  
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** Take off contaminated clothing and wash it before reuse. Wash with plenty of water. 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** Unlikely route of exposure.

**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**

Pressurised container: May burst if heated.

**5.1 Extinguishing media**

Suitable Extinguishing media As appropriate for surrounding fire.  
Unsuitable extinguishing media None known.

**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, Hydrogen chloride, Carbon monoxide, Carbon dioxide.

**5.3 Advice for firefighters**

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.

**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**

Stop leak if safe to do so. Provide adequate ventilation. Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Ensure full personal protection (including respiratory protection) during removal of spillages.

**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**

Collect mechanically and dispose of according to Section 13. 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.

**JAD DEVELOPER – AEROSOL**

**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. 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. Avoid breathing mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands and exposed skin thoroughly after handling.

**7.2 Conditions for safe storage, including any incompatibilities**

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

Storage temperature

Do not expose to temperatures exceeding 50°C/ 122°F.

Storage life

Stable under normal conditions.

Incompatible materials

Strong oxidising agents, Alkalis, 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.	LTTEL (8 hr TWA ppm)	LTTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Dichloromethane	75-09-2	100	353	200	706	BMGV, Sk
Carbon dioxide	124-38-9	5000	9150	15000	27400	

Region United Kingdom  
Source UK Workplace Exposure Limits EH40/2005 (Fourth edition, published 2020)

Remark BMGV, Sk  
Notes Biological monitoring guidance values are listed in Table 2.  
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** Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Use with ventilation, local exhaust ventilation or breathing protection. A washing facility/water for eye and skin cleaning purposes should be present.

**8.2.2. Personal protection equipment**



Eye Protection

Wear eye protection with side protection (EN166).



Skin protection

Wear suitable protective clothing and gloves. Impervious gloves (EN 374). Breakthrough time of the glove material: refer to the information provided by the gloves' producer.



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.

**JAD DEVELOPER – AEROSOL****SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

Physical state	Aerosol
Colour	White.
Odour	Characteristic odour.
Melting point/freezing point	-94.9°C (Dichloromethane)
Boiling point or initial boiling point and boiling range	39.8°C (Dichloromethane)
Flammability	Non-flammable.
Lower and upper explosion limit	Not known.
Flash Point	Not applicable.
Auto-ignition temperature	624°C
Decomposition Temperature	Not known.
pH	Not known.
Kinematic Viscosity	Not known.
Solubility	Solubility (Water): Insoluble in water. Solubility (Other): Not known.
Partition coefficient n-octanol/water (log value)	1.25 (Dichloromethane)
Vapour pressure	584 hPa (352 mm Hg) @ 25°C (Dichloromethane)
Density and/or relative density	Density: 1.32 g/cm <sup>3</sup> @ 25°C (Dichloromethane)
Relative vapour density	Not known.
Particle characteristics	Not known.

**9.2 Other information**

Explosive properties Pressurised container: May burst if heated.

**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**

Keep away from heat and direct sunlight.

**10.5 Incompatible materials**

Strong oxidising agents, Alkalis, Zinc, Aluminium.

**10.6 Hazardous decomposition products**

No hazardous decomposition products known.

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Acute toxicity - Ingestion	Calculation method : Not classified. Low oral toxicity.
Acute toxicity - Skin Contact	Dichloromethane: LD50 (rat) >2000mg/kg Calculation method : Not classified. Low acute toxicity.
Acute toxicity - Inhalation	Dichloromethane: LD50 (rat) >2000mg/kg Calculation method : Not classified. Low acute toxicity. Effects and Symptoms: Headache, dizziness, nausea and vomiting. Causes shortness of breath.
Skin corrosion/irritation	Dichloromethane: LC50 (rat) 4hour(s) = 49000mg/m <sup>3</sup> 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 sensitizer.
Respiratory sensitization data	Calculation method : Not classified.
Germ cell mutagenicity	Calculation method : Not classified. There is no evidence of mutagenic potential.

**JAD DEVELOPER – AEROSOL**

Carcinogenicity	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	None anticipated.
Lactation	Not classified.
STOT - single exposure	May cause drowsiness or dizziness. Effects and Symptoms: Headache, dizziness, nausea and vomiting.
STOT - repeated exposure	None anticipated.
Aspiration hazard	Not classified.
<b>11.2 Information on other hazards</b>	None.

**SECTION 12: ECOLOGICAL INFORMATION**

<b>12.1 Toxicity</b>	
Toxicity - Aquatic invertebrates	Low toxicity to invertebrates.
Toxicity - Fish	Low toxicity to fish. Dichloromethane: LC50 (96 hour) = 193 mg/l
Toxicity - Algae	Low toxicity to algae.
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.
<b>12.2 Persistence and degradability</b>	
	The product is biodegradable. The product is unlikely to persist in the environment.
<b>12.3 Bioaccumulative potential</b>	
	The product has no potential for bioaccumulation. Dichloromethane: Bioconcentration factor (BCF): 2.0-5.4
<b>12.4 Mobility in soil</b>	
	The product is volatile and will partition into the atmosphere. The product has high mobility in soil.
<b>12.5 Results of PBT and vPvB assessment</b>	
	Not classified as PBT or vPvB.
<b>12.6 Endocrine disrupting properties</b>	
	None known.
<b>12.7 Other adverse effects</b>	
	Not known.

**SECTION 13: DISPOSAL CONSIDERATIONS**

<b>13.1 Waste treatment methods</b>	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.
<b>13.2 Additional Information</b>	Disposal should be in accordance with local, state or national legislation.

**SECTION 14: TRANSPORT INFORMATION**

<b>14.1 UN number or ID number</b>	
UN No.	1950
<b>14.2 UN proper shipping name</b>	
UN proper shipping name	AEROSOLS
<b>14.3 Transport hazard class(es)</b>	
ADR/RID	
ADR/RID Class	2
ADR Classification Code	5A
Special Provisions	190 327 344 625
Limited Quantities	1 L
Excepted Quantities	E0
Emergency Action Code	
Mixed Packing Instructions for Packages	P207 LP200
Special Packing Provisions for Packages	PP87 RR6 L2
Mixed Packing Instructions for Packages	MP9
Packing Instructions for Portable Tanks	
Special Provisions for Portable Tanks	
Tank Code for Tanks	
Special Provisions for Tanks	

**JAD DEVELOPER – AEROSOL**

Vehicle for Tank Carriage	
ADR Transport Category	3
Tunnel Restriction Code	E
Special Provisions for Carriage - Packages	V14
Special Provisions for Carriage - Bulk	
Special Provisions for Carriage - Loading, CV9 CV12 Unloading and Handling	
Special Provisions for Carriage - Operation	
ADR HIN	
IMDG	
IMDG Class	2
Special Provisions	190 327 344 625
Limited Quantities	1 L
Excepted Quantities	E0
Mixed Packing Instructions for Packages	P207 LP200
Special Packing Provisions for Packages	PP87 RR6 L2
Packing Instructions for Portable Tanks	
Special Provisions for Portable Tanks	
IMDG EMS	F-D, S-U
Stowage and Handling	SW1 SW22
Segregation	SG69
Marine Pollutant	
ICAO/IATA	
IATA Proper Shipping Name	AEROSOLS
Excepted Quantities	E0
Passenger and Cargo Aircraft Limited Quantities Packing Instructions	Y203
Passenger and Cargo Aircraft Limited Quantities Max net Qty	30Kg
Passenger and Cargo Aircraft Packing Instructions	203
Passenger and Cargo Aircraft Max net Qty	75Kg
Cargo Aircraft Packing Instructions	203
Cargo Aircraft Max net Qty	150Kg
Special Provisions	A98, A145, A167, A802
Emergency Response Guidebook (ERG) Code	2L
Labels	
Labels	2.2



**14.4 Packing group**

Packing group

**14.5 Environmental hazards**

Environmental hazards Not classified as a Marine Pollutant.

**14.6 Special precautions for user**

Special precautions for user Not known.

**14.7 Maritime transport in bulk according to IMO instruments**

No information available

**SECTION 15: REGULATORY INFORMATION**

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

European Regulations - Authorisations and/or Restrictions On Use	
Candidate List of Substances of Very High Concern for Authorisation	Not listed
REACH: ANNEX XIV list of substances subject to authorisation	Not listed
REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	Dichloromethane (75-09-2), Alcohols, C12-13, ethoxylated (66455-14-9)
Community Rolling Action Plan (CoRAP) Regulation (EU) N° 2019/1021 of the	Dichloromethane (75-09-2) Not listed

**JAD DEVELOPER – AEROSOL**

European Parliament and of the Council  
on persistent organic pollutants  
Regulation (EC) N° 1005/2009 on  
substances that deplete the ozone layer  
Regulation (EU) N° 649/2012 of the  
European Parliament and of the Council  
concerning the export and import of  
hazardous chemicals  
**National regulations**  
Other  
**15.2 Chemical Safety Assessment**

Not listed  
Not listed  
Not known.  
Not applicable.

**SECTION 16: OTHER INFORMATION**

The following sections contain revisions or new statements: 1, 2

**LEGEND**

Hazard Pictogram(s)



GHS08

GHS07

Hazard classification

GHS04: GHS: Gas cylinder  
Aerosol 3 : Aerosol, Category 3  
Press. Gas (Comp.) : Gases under pressure, Compressed gas  
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  
Carc. 2 : Carcinogenicity, Category 2

Hazard Statement(s)

H229: Pressurised container: May burst if heated.  
H280: Contains gas under pressure; may explode if heated.  
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.  
P202: Do not handle until all safety precautions have been read and understood.  
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.  
P261: Avoid breathing mist/vapours/spray.  
P264: Wash hands and exposed skin thoroughly after handling.  
P271: Use only outdoors or in a well-ventilated area.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352: IF ON SKIN: Wash with plenty of water.  
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308+P313: IF exposed or concerned: Get medical advice/attention.  
P312: Call a POISON CENTRE/doctor if you feel unwell.  
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.  
P403+P233: Store in a well-ventilated place. Keep container tightly closed.  
P405: Store locked up.  
P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.  
P501: Dispose of contents in accordance with local, state or national legislation.

Acronyms

ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
ADR : European Agreement concerning the International Carriage of Dangerous

## JAD DEVELOPER – AEROSOL

### Goods by Road

ATE : Acute Toxicity Estimate

CAS : Chemical Abstracts Service

CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

DNEL : Derived No Effect Level

EC : European Community

EINECS : European Inventory of Existing Commercial Chemical Substances

IATA : International Air Transport Association

IBC : Intermediate Bulk Container

ICAO : International Civil Aviation Organization

IMDG : International Maritime Dangerous Goods

LTEL : Long term exposure limit

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 Regulation (EC) No. 1272/2008 (CLP) data used to compile the SDS

### 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.