

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

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.

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

JAD DEVELOPER – AEROSOL

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, Alkalies, 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/m³) | STCL (ppm) | STCL (mg/m³) | Note |
|-----------------|----------|---------------------|-----------------------|------------|--------------|----------|
| Dichloromethane | 75-09-2 | 100 | 353 | 200 | 706 | BMGV, Sk |
| Carbon dioxide | 124-38-9 | 5000 | 9150 | 15000 | 27400 | |

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

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.

JAD DEVELOPER – AEROSOL

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. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Protective gloves should be replaced at first signs of wear.

Material: Fluorinated Rubber (Viton)

Break through time: > 480 min

Glove thickness: > 0.4 mm

Material: PVA

Break through time: > 480 min

Glove thickness: > 0.4 mm

Material: Butyl Rubber

Break through time: > 10 min

Glove thickness: > 0.4 mm



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 release large quantities into the surface water or into drains.

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. |

JAD DEVELOPER – AEROSOL

| | |
|---|---|
| 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 ³ @ 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, Alkalies, 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. Dichloromethane: LD50 (rat) >2000mg/kg |
| Acute toxicity - Skin Contact | Calculation method : Not classified. Low acute toxicity. Dichloromethane: LD50 (rat) >2000mg/kg |
| Acute toxicity - Inhalation | Calculation method : Not classified. Low acute toxicity. Effects and Symptoms: Headache, dizziness, nausea and vomiting. Causes shortness of breath. Dichloromethane: LC50 (rat) 4hour(s) = 49000mg/m ³ |
| 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. |

JAD DEVELOPER – AEROSOL

| | |
|--|---|
| Carcinogenicity | <p>There is no evidence of mutagenic potential.</p> <p>Suspected of causing cancer. No data.</p> <p>Dichloromethane:</p> <p>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.</p> |
| Reproductive toxicity | None anticipated. |
| Lactation | Not classified. |
| STOT - single exposure | <p>May cause drowsiness or dizziness.</p> <p>Effects and Symptoms: Headache, dizziness, nausea and vomiting.</p> |
| STOT - repeated exposure | None anticipated. |
| Aspiration hazard | Not classified. |
| 11.2 Information on other hazards | None. |

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

| | |
|------------------------------------|--|
| 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. |

12.2 Persistence and degradability

The product is biodegradable. The product is unlikely to persist in the environment.

12.3 Bioaccumulative potential

The product has no potential for bioaccumulation.

Dichloromethane: Bioconcentration factor (BCF): 2.0-5.4

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 Endocrine disrupting properties

None known.

12.7 Other adverse effects

Not known.

JAD DEVELOPER – AEROSOL

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.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number or ID number

UN No. 1950

14.2 UN proper shipping name

UN proper shipping name AEROSOLS

14.3 Transport hazard class(es)

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

Vehicle for Tank Carriage

ADR Transport Category 3

Tunnel Restriction Code E

Special Provisions for Carriage - V14

Packages

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

JAD DEVELOPER – AEROSOL

| | |
|---|-----------------------|
| 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 | Y203 |
| Quantities Packing Instructions | |
| Passenger and Cargo Aircraft Limited | 30Kg |
| Quantities Max net Qty | |
| Passenger and Cargo Aircraft Packing | 203 |
| Instructions | |
| Passenger and Cargo Aircraft Max net | 75Kg |
| Qty | |
| Cargo Aircraft Packing Instructions | 203 |
| Cargo Aircraft Max net Qty | 150Kg |
| Special Provisions | A98, A145, A167, A802 |
| Emergency Response Guidebook (ERG) | 2L |
| Code | |
| 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 Not listed

High Concern for Authorisation

REACH: ANNEX XIV list of substances Not listed

JAD DEVELOPER – AEROSOL

subject to authorisation

REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

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

Regulation (EU) N° 2019/1021 of the Not listed

European Parliament and of the Council on persistent organic pollutants

Regulation (EC) N° 1005/2009 on Not listed

substances that deplete the ozone layer

Regulation (EU) N° 649/2012 of the Not listed

European Parliament and of the Council

concerning the export and import of

hazardous chemicals

National regulations

Other Not known.

15.2 Chemical Safety Assessment

Not applicable.

SECTION 16: OTHER INFORMATION

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

LEGEND

Hazard Pictogram(s)



GHS08



GHS07

GHS04: GHS: Gas cylinder

Hazard classification

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.

JAD DEVELOPER – AEROSOL

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.

Acronyms

P501: Dispose of contents in accordance with local, state or national legislation.

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

ADR : European Agreement concerning the International Carriage of Dangerous 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

JAD DEVELOPER – AEROSOL

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.