

JAD 2 DEVELOPER - AEROSOL

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 2 DEVELOPER - AEROSOL

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).
- Coating compound/Surface coating/ paint.

Uses Advised Against Not known.

1.3 Details of the supplier of the safety data sheet

Manufacturer Johnson and Allen Ltd
 Company Identification Neocol Works
 Address of Manufacturer 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
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 Postal code 20018
 Telephone +390290310207
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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 UK SI 2020/1567
 Aerosol 1 :Extremely flammable aerosol. Pressurised container: May burst if heated.
 Eye Irrit. 2 :Causes serious eye irritation.
 STOT SE 3 :May cause drowsiness or dizziness.

2.2 Label elements

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

Product Name JAD 2 DEVELOPER - AEROSOL

Hazard Pictogram(s)



GHS02

GHS07

Signal Word(s)

Hazard Statement(s)

Danger
 H222: Extremely flammable aerosol.
 H229: Pressurised container: May burst if heated.
 H319: Causes serious eye irritation.
 H336: May cause drowsiness or dizziness.

Precautionary Statement(s)

EUH066: Repeated exposure may cause skin dryness or cracking.
 P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P261: Avoid breathing mist/vapours/spray.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P312: Call a POISON CENTRE/doctor if you feel unwell.
 P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.

Additional Information

Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Keep out of the reach of children.

2.3 Other hazards

None known.

JAD 2 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. / Registration number(s)	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
Dimethyl ether	115-10-6	204-065-8	50-100	Flam. Gas 1A H220 Press. Gas (Comp.) H280	GHS02 GHS04
Acetone	67-64-1	200-662-2	25-50	Flam. Liq. 2 H225 Eye Irrit. 2 H319 STOT SE 3 H336 EUH066	GHS02 GHS07

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 skin with soap and water. If symptoms persist, obtain medical 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 serious eye irritation. May cause drowsiness or dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

Extremely flammable aerosol. Pressurised container: May burst if heated.

5.1 Extinguishing media

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

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: 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.

6.4 Reference to other sections

See Also Section 8, 13.

JAD 2 DEVELOPER - AEROSOL

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Provide adequate ventilation. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Avoid breathing mist/vapours/spray. Avoid contact with eyes. 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

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Stable under normal conditions. Strong oxidising agents.

Storage temperature
Storage life
Incompatible materials

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).
- Coating compound/ Surface coating/ paint.

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
Dimethyl ether	115-10-6	400	766	500	958	
Acetone	67-64-1	500	1210	1500	3620	

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

8.2 Exposure controls

8.2.1. Appropriate engineering controls Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Ensure adequate ventilation.

8.2.2. Personal protection equipment



Eye Protection Wear eye protection with side protection (EN166).



Skin protection Not normally required. Wear suitable gloves if prolonged skin contact is likely. Breakthrough time of the glove material: refer to the information provided by the gloves' producer.



Respiratory protection 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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Aerosol
Colour: Colourless.
Odour: Characteristic.
Odour threshold: Not established.
pH: Not applicable.
Melting point/freezing point: Not applicable.
Initial boiling point and boiling range: -24°C

JAD 2 DEVELOPER - AEROSOL

Flash Point	-42°C
Evaporation rate	Not known.
Flammability (solid, gas)	Extremely flammable aerosol.
Upper/lower flammability or explosive limits	2.6-18.6 Vol-%
Vapour pressure	5200 hPa @ 20°C
Vapour density	Not known.
Density (g/ml)	0.777 @ 20°C
Relative density	Not known.
Solubility(ies)	Solubility (Water): Immiscible with water. Solubility (Other): Not known.
Partition coefficient: n-octanol/water	Not applicable.
Auto-ignition temperature	The product is not self-igniting.
Decomposition Temperature (°C)	Not known.
Viscosity	3.5 cSt @ 40°C
Explosive properties	Contains gas under pressure; may explode if heated.
Oxidising properties	Not oxidising.
9.2 Other information	
Ignition temperature	235°C
Organic solvents	87.7%
Solid content	12.3%

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.
10.6 Hazardous decomposition products	No hazardous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION

Unlikely to cause harmful effects under normal conditions of handling and use.

11.1 Information on toxicological effects

Acute toxicity - Ingestion	Calculation method : Not classified. Low oral toxicity.
Acute toxicity - Skin Contact	Calculation method : Not classified. Low acute toxicity.
Acute toxicity - Inhalation	Calculation method : Not classified. Low acute toxicity.
Skin corrosion/irritation	Calculation method : Not classified. Non-irritant.
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. There is no evidence of mutagenic potential.
Carcinogenicity	Calculation method : Not classified. No evidence of carcinogenicity.
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.

JAD 2 DEVELOPER - AEROSOL

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Low toxicity to aquatic organisms.

12.2 Persistence and degradability

Part of the components are poorly biodegradable.
Dimethyl ether: 5% (28 days) (OECD 301 D)

12.3 Bioaccumulative potential

The product has low potential for bioaccumulation.

12.4 Mobility in soil

Immiscible with water. The product is predicted to have low mobility in soil. The product is volatile and will partition into the atmosphere.

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

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

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 5F

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 2

Tunnel Restriction Code D

Special Provisions for Carriage - Packages V14

Special Provisions for Carriage - Bulk

Special Provisions for Carriage - Loading, Unloading and Handling CV9 CV12

Special Provisions for Carriage - Operation

Special Provisions for Carriage - Operation S2

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

JAD 2 DEVELOPER - AEROSOL

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	A145, A167, A802
Emergency Response Guidebook (ERG) Code	10L
Labels	
Labels	2.1



14.4 Packing group

Packing group None.

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 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

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 XIV) list of substances subject to authorisation Not listed

UK REACH Restrictions List (Annex XVII) Acetone (67-64-1)

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 Regulations 2007 (SI 2007/3106) as amended Not listed

The Ozone-Depleting Substances and Fluorinated Greenhouse Gases (Amendment etc.) (EU Exit) Regulations 2019 (SI 2019/583) Not listed

The Prior Informed Consent (PIC) Regulations concerning the export and import of hazardous chemicals SI2008/2108 as amended Not listed

European Regulations - Authorisations and/or Restrictions On Use Community Rolling Action Plan (CoRAP) Not listed

15.2 Chemical Safety Assessment

United Kingdom Not applicable.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

1-16

JAD 2 DEVELOPER - AEROSOL

LEGEND

Hazard Pictogram(s)



GHS02



GHS07

Hazard classification

GHS04: GHS: Gas cylinder

Flam. Gas 1A : Flammable gas Category 1A

Aerosol 1 : Aerosol, Category 1

Flam. Liq. 2 : Flammable liquid, Category 2

Press. Gas (Comp.) : Gases under pressure, Compressed gas

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

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

Hazard Statement(s)

H220: Extremely flammable gas.

H222: Extremely flammable aerosol.

H225: Highly flammable liquid and vapour.

H229: Pressurised container: May burst if heated.

H280: Contains gas under pressure; may explode if heated.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

EUH066: Repeated exposure may cause skin dryness or cracking.

Precautionary Statement(s)

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211: Do not spray on an open flame or other ignition source.

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.

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.

P312: Call a POISON CENTRE/doctor if you feel unwell.

P337+P313: If eye irritation persists: Get medical advice/attention.

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 Goods by Road

ATE : Acute Toxicity Estimate

CAS : Chemical Abstracts Service

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

JAD 2 DEVELOPER - AEROSOL

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

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