



JAD 2 DEVELOPER – AEROSOL SAFETY DATA SHEET

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

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

| | |
|--|--|
| 1.1 Product identifier | |
| Product Name | JAD 2 DEVELOPER – AEROSOL. |
| 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) | <ul style="list-style-type: none">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 | 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 (competent person) | |
| 1.4 Emergency telephone number | |
| Emergency Phone No. | 0114 2738066. (UK office hours 08.30-17.00) |

2. SECTION 2: HAZARDS IDENTIFICATION

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| 2.1 Classification of the substance or mixture | |
| Regulation (EC) No. 1272/2008 (CLP) | 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 | |
| Product Name | According to Regulation (EC) No. 1272/2008 (CLP) JAD 2 DEVELOPER – AEROSOL. |
| Hazard Pictogram | |
| Signal word(s) | GHS02 GHS07 Danger. |
| Hazard statement(s) | H222: Extremely flammable aerosol. H229: Pressurised container: May burst if heated. H319: Causes serious eye irritation. H336: May cause drowsiness or dizziness. |



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Precautionary statement(s)

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P261: Avoid breathing vapours.
 P280: Wear protective gloves/eye protection/face protection.
 P312: Call a POISON CENTER or doctor/physician if you feel unwell.
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.
 Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep out of the reach of children.

Additional Information

2.3 Other hazards

Repeated exposure may cause skin dryness or cracking.

2.4 Additional Information

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

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Product as supplied: Aerosol.

3.1 Substances

Not applicable.

3.2 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) |
|-------------------------|--------|----------|-----------|------------------------|---|
| Dimethyl Ether | 50-100 | 115-10-6 | 204-065-8 | 01-2119472128-37-0000 | GHS02, Flam. Gas 1; H220, GHS04, Press. Gas; H280 |
| Acetone | 25-50 | 67-64-1 | 200-662-2 | 01-2119471330-49-0000 | GHS02, Flam. Liq. 2; H225, GHS07, Eye Irrit. 2; H319, STOT SE 3; H336, EUH066 |

3.3 Additional Information

For full text of H/P Statements 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

Wash skin with soap and water. If symptoms persist, obtain medical 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.



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|-----|---|---|
| | Ingestion | Wash out mouth with water. If symptoms persist, obtain medical attention. |
| 4.2 | Most important symptoms and effects, both acute and delayed | Eye Contact: Irritation, Pain. Skin Contact: Repeated exposure may cause skin dryness or cracking. |
| 4.3 | Indication of any immediate medical attention and special treatment needed | Inhalation: May cause drowsiness or dizziness. Unlikely to be required but if necessary treat symptomatically. |

5. SECTION 5: FIRE-FIGHTING MEASURES

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

| | | |
|-----|--|--|
| 5.1 | Extinguishing Media Suitable Extinguishing Media | Water spray, dry powder or carbon dioxide. In case of major fire and large quantities: Extinguish with waterspray or foam. |
| | 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. |
| 5.3 | Advice for fire-fighters | 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. |

6. 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 | Eliminate sources of ignition. Ensure adequate ventilation. Evacuate the area. Wear protective gloves/eye protection. |
| 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 | Absorb 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 and 13 |

7. SECTION 7: HANDLING AND STORAGE

| | | |
|-----|--------------------------------------|--|
| 7.1 | Precautions for safe handling | 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 a naked flame or any incandescent material. Use only non-sparking tools. Keep out of the reach of children. Use only outdoors or in a well-ventilated area. Avoid breathing vapours. Avoid contact with eyes. Avoid prolonged skin contact. Wear protective gloves/eye protection/face protection. Wash hands thoroughly after handling. |
|-----|--------------------------------------|--|



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- 7.2 Conditions for safe storage, including any incompatibilities**
- Storage Temperature: Store locked up. Keep container tightly closed. Protect from sunlight. Store in a well-ventilated place. Ambient. Do not expose to temperatures exceeding 50°C/ 122°F.
- Storage Life: Stable under normal conditions.
- Incompatible materials: None known.
- 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





8. 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/m³) | STEL (ppm) | STEL (mg/m³) | Note |
|----------------|----------|---------------------|-----------------------|------------|--------------|------|
| Dimethyl Ether | 115-10-6 | 400 | 766 | 500 | 958 | WEL |
| Acetone | 67-64-1 | 500 | 1210 | 1500 | 3620 | WEL |

WEL: Workplace Exposure Limit (UK HSE EH40)

- 8.1.2 Biological limit value** Not established.
- 8.1.3 PNECs and DNELs** Not established.
- 8.2 Exposure controls**
- 8.2.1 Appropriate engineering controls** Ensure adequate ventilation.
- 8.2.2 Personal protection equipment**
- Eye/face protection  Wear suitable eye/face protection.
- Skin protection (Hand protection/ Other)  Wear suitable gloves if prolonged skin contact is likely.
- Respiratory protection  In case of insufficient ventilation, wear suitable respiratory equipment. 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.



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9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|------------|--|---|
| 9.1 | Information on basic physical and chemical properties | |
| | Appearance | Aerosol. |
| | Colour | Colourless. |
| | Odour | Characteristic. |
| | Odour Threshold | Not determined. |
| | pH | Not determined. |
| | Melting Point/Freezing Point | Not applicable. |
| | Initial boiling point and boiling range | -24°C |
| | Flash point | -42°C |
| | Evaporation rate | Not applicable. |
| | Flammability (solid, gas) | Not applicable. |
| | Upper/lower flammability or explosive limits | 2.6 – 18.6 Vol-% |
| | Vapour pressure | 5200 hPa @ 20°C |
| | Vapour density | Not determined. |
| | Relative density | Not determined. |
| | Density | 0.777 g/cm ³ @ 20°C |
| | Solubility(ies) | Immiscible with water. |
| | Partition coefficient: n-octanol/water | Not determined. |
| | Auto-ignition temperature | Product is not selfigniting. |
| | Ignition temperature | 235°C |
| | Decomposition Temperature | Not determined. |
| | Kinematic Viscosity | Not determined. |
| | Explosive properties | Contains gas under pressure; may explode if heated. |
| | Oxidising properties | No information available. |
| 9.2 | Other information | |
| | Solvent content: Organic solvents | 87.7% |
| | Solid content | 12.3% |

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 | No hazardous reactions known if used for its intended purpose. |
| 10.4 | Conditions to avoid | Heat and direct sunlight. |
| 10.5 | Incompatible materials | None known. |
| 10.6 | Hazardous Decomposition Product(s) | No hazardous decomposition products known. |

11. SECTION 11: TOXICOLOGICAL INFORMATION

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

| | | |
|---------------|---|---|
| 11.1 | Information on toxicological effects | |
| 11.1.1 | Mixtures | |
| | Acute toxicity | |
| | Ingestion | Low oral toxicity. |
| | Inhalation | STOT SE 3; May cause drowsiness or dizziness. |
| | Irritation | Eye Irrit. 2; Causes serious eye irritation. |
| | | Repeated exposure may cause skin dryness or cracking. |
| | Corrosivity | Not classified. |
| | Sensitisation | Not expected to be a skin or respiratory sensitiser. |
| | Repeated dose toxicity | None anticipated. |
| | Carcinogenicity | No evidence of carcinogenicity. |
| | Mutagenicity | There is no evidence of mutagenic potential. |



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| | | |
|------|----------------------------------|-------------------|
| | Toxicity for reproduction | None anticipated. |
| | Aspiration hazard | None anticipated. |
| 11.2 | Other information | None. |

12. SECTION 12: ECOLOGICAL INFORMATION

| | | |
|------|---|---|
| 12.1 | Toxicity | Low toxicity to aquatic organisms. |
| 12.2 | Persistence and degradability | The product is biodegradable. |
| 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 | None. |

13. 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. Refer to manufacturer for information on recovery/recycling. Do NOT landfill. |
| 13.2 | Additional Information | Disposal should be in accordance with local, state or national legislation. |

14. SECTION 14: TRANSPORT INFORMATION

| | | |
|--------|--|---------------------------------------|
| 14.1 | UN number | UN 1950 |
| 14.2 | UN Proper Shipping Name | AEROSOLS. |
| | ADR/RID/IMDG | AEROSOLS, FLAMMABLE. |
| | ICAO/IATA | |
| 14.3 | Transport hazard class(es) | |
| | ADR/RID | 2 |
| | IMDG/ICAO/IATA | 2.1 |
| 14.4 | Packing Group | None. |
| 14.5 | Environmental hazards | Not classified as a Marine Pollutant. |
| 14.6 | Special precautions for user | Warning: Gas. |
| 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 Classification Code | 5F |
| 14.8.2 | IMDG Code | EmS: F-D, S-U |
| 14.8.3 | Tunnel Restriction Code | D |

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. |



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REACH: ANNEX XIV List of substances subject to authorisation All chemicals are not listed.

Community Rolling Action Plan (CoRAP) All chemicals are not listed.

15.1.2 National regulations

None known.

15.2 Chemical Safety Assessment

Not applicable.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 3, 8

LEGEND

| | |
|--------------|---|
| LTEL | Long Term Exposure Limit |
| STEL | Short Term Exposure Limit |
| DNEL | Derived No Effect Level |
| PNEC | Predicted No Effect Concentration |
| PBT | Persistent, Bioaccumulative and Toxic |
| vPvB | very Persistent and very Bioaccumulative |
| Aerosol 1 | Flammable aerosol Category 1 |
| Flam. Gas 1 | Flammable gas Category 1 |
| Flam. Liq. 2 | Flammable liquid Category 2 |
| Press. Gas | Gases under pressure |
| Eye Irrit. 2 | Serious eye damage/irritation Category 2 |
| STOT SE 3 | Specific target organ toxicity — single exposure Category 3 |

Hazard statement(s) and Precautionary statement(s)

| | |
|-------------|--|
| H220 | Extremely flammable gas. |
| H280 | Contains gas under pressure; may explode if heated. |
| H225 | Highly flammable liquid and vapour. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
| P211 | Do not spray on an open flame or other ignition source. |
| P251 | Pressurized container: Do not pierce or burn, even after use. |
| P264 | Wash hands thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P405 | Store locked up. |
| P304 + P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P337 + P313 | If eye irritation persists: Get medical advice/attention. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |

Hazard pictogram(s)

GHS02



GHS07



GHS04





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Disclaimers

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Annex to the extended Safety Data Sheet (eSDS)

Not applicable.