



JAC 2 - BULK

## SAFETY DATA SHEET

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 453/2010

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

#### 1.1 Product identifier

Product Name	JAC 2 - BULK.
CAS No.	None assigned.
EINECS No.	921-728-3
REACH Registration No.	01-2119471305-42-XXXX

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified use(s)	<ul style="list-style-type: none"><li>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).</li><li>Solvent.</li></ul>
Uses advised against	This product is not recommended for any industrial, professional or consumer use other than the Identified Uses above.

#### 1.3 Details of the supplier of the Safety Data Sheet

Company Identification	Johnson and Allen Ltd Neocol Works Smithfield Sheffield S3 7AR.
Telephone	0114 2738066
Fax	0114 2729842
E-Mail (competent person)	info@johnsonandallen.co.uk

#### 1.4 Emergency telephone number

Emergency Phone No.	0114 2738066. (UK office hours 08.30-17.00)
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### 2. SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

##### 2.1.1 Regulation (EC) No. 1272/2008 (CLP)

Flam. Liq. 2; Highly flammable liquid and vapour.  
Asp. Tox. 1; May be fatal if swallowed and enters airways.  
Skin Irrit. 2; Causes skin irritation.  
STOT SE 3; May cause drowsiness or dizziness.  
Aquatic Chronic 2; Toxic to aquatic life with long lasting effects.

##### 2.1.2 Directive 67/548/EEC & Directive 1999/45/EC

F; Highly flammable.  
Xn; Harmful: may cause lung damage if swallowed.  
Xi; Irritating to skin.  
N; Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Vapours may cause drowsiness and dizziness.



## JAC 2 - BULK

### 2.2 Label elements

#### 2.2.1 Label elements

Product Name  
Hazard Pictogram

According to Regulation (EC) No. 1272/2008 (CLP)  
JAC 2 - BULK.



GHS02

GHS07

GHS08



GHS09

Signal word(s)  
Hazard statement(s)

Danger.  
H225: Highly flammable liquid and vapour.  
H304: May be fatal if swallowed and enters airways.  
H315: Causes skin irritation.  
H336: May cause drowsiness or dizziness.  
H411: Toxic to aquatic life with long lasting effects.  
P210: Keep away from heat/sparks/open flames/hot surfaces.  
– No smoking.  
P273: Avoid release to the environment.  
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P331: Do NOT induce vomiting.  
P405: Store locked up.

Precautionary statement(s)

#### 2.2.2 Label elements

Product Name  
Hazard Symbol

According to Directive 67/548/EEC & Directive 1999/45/EC  
JAC 2 - BULK.



F

Xn

N

Risk Phrases

R11: Highly flammable.  
R38: Irritating to skin.  
R65: Harmful: may cause lung damage if swallowed.  
R67: Vapours may cause drowsiness and dizziness.  
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases

S16: Keep away from sources of ignition - No smoking.  
S23: Do not breathe vapour.  
S24: Avoid contact with skin.  
S33: Take precautionary measures against static discharges.  
S60: This material and its container must be disposed of as hazardous waste.  
S61: Avoid release to the environment. Refer to special instructions/Safety Data Sheets.



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- 2.3 Other hazards None.
- 2.4 Additional Information For full text of H/P phrases see section 16.

### 3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

EC Classification No. 1272/2008

Hazardous ingredient(s)	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard pictogram(s) and Hazard statement(s)
Hydrocarbons, C7-C9 isoalkanes	100	None assigned	921-728-3	01-2119471305-42-XXXX	GHS02, Flam. Liq. 2; H225, GHS07, Skin Irrit. 2; H315, STOT SE 3; H336, GHS08, Asp. Tox. 1; H304, GHS09, Aquatic Chronic 2; H411

EC Classification No. 67/548/EEC

Hazardous ingredient(s)	%W/W	CAS No.	EC No.	REACH Registration No.	EC Classification and Risk Phrases
Hydrocarbons, C7-C9 isoalkanes	100	None assigned	921-728-3	01-2119471305-42-XXXX	F; R11, Xn; R65, Xi; R38, N; R51/53, R67

- 3.2 Additional Information  
For full text of H/P phrases 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

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

Eye Contact

Flush eyes with water for at least 15 minutes while holding eyelids open. Get medical attention if eye irritation develops or persists.

Ingestion

IF SWALLOWED: Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

#### 4.2 Most important symptoms and effects, both acute and delayed

Inhalation: Headache, Dizziness, Drowsiness, Nausea.

Skin Contact: Pain, Redness, Swelling.

Aspiration into the lungs may cause chemical pneumonitis, which can be fatal.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.



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### 5. SECTION 5: FIRE-FIGHTING MEASURES

Highly flammable liquid and vapour.

- |  |  |
|--|--|
| <b>5.1 Extinguishing Media</b><br>Suitable Extinguishing Media<br>Unsuitable Extinguishing Media | In case of fire: Use CO <sub>2</sub> , dry chemical, or foam.<br>Water jet spray.  |
| <b>5.2 Special hazards arising from the substance or mixture</b>                                 | Hazardous decomposition product(s): Smoke, Oxides of carbon.   |
| <b>5.3 Advice for fire-fighters</b>  | The vapour is heavier than air and spreads along ground. In case of fire, stop leak if safe to do so. Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep containers cool by spraying with water if exposed to fire. |

### 6. SECTION 6: ACCIDENTAL RELEASE MEASURES

- |  |  |
|--|--|
| <b>6.1 Personal precautions, protective equipment and emergency procedures</b> | Ensure adequate ventilation. Eliminate sources of ignition. Stop leak if safe to do so. Avoid breathing vapours. Avoid contact with skin. Wear protective gloves/protective clothing/eye protection/face protection. |
| <b>6.2 Environmental precautions</b>   | Avoid release to the environment.  |
| <b>6.3 Methods and material for containment and cleaning up</b>                | Adsorb spillages onto sand, earth or any suitable adsorbent material. Collect spillage. Transfer to a lidded container for disposal or recovery.   |
| <b>6.4 Reference to other sections</b>   | See Also Section 8 and 13.   |

### 7. SECTION 7: HANDLING AND STORAGE

- |  |   |
|--|---|
| <b>7.1 Precautions for safe handling</b>   | Use only outdoors or in a well-ventilated area. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing vapours. Avoid prolonged skin contact. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. |
| <b>7.2 Conditions for safe storage, including any incompatibilities</b><br>Storage Temperature<br>Storage Life<br>Incompatible materials | Keep container tightly closed. Store locked up. Store in a well-ventilated place. Keep cool.<br>Ambient.<br>Stable under normal conditions.<br>Strong oxidising agents.   |
| <b>7.3 Specific end use(s)</b>   | <ul style="list-style-type: none"><li>• 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).</li><li>• Solvent.</li></ul>  |



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**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/m <sup>3</sup> )	STEL (ppm)	STEL (mg/m <sup>3</sup> )	Note
Hydrocarbons, C7-C9 isoalkanes	None assigned	-	-	-	-	Not established

**8.1.2 Biological limit value**

Not established.

**8.1.3 PNECs and DNELs**

DNEL	Oral	Inhalation	Dermal
Industry - Long Term – Local effects	-	-	-
Industry - Long Term - Systemic effects	-	-	-
Industry - Short term - Local effects	-	-	-
Industry - Short term - Systemic effects	-	-	-
Professional - Long Term - Local effects	-	2035mg/m <sup>3</sup>	773mg/kg/bw/day
Professional - Long Term – Systemic effects	-	-	-
Professional - Short term - Local effects	-	-	-
Professional - Short term - Systemic effects	-	-	-
Consumer - Long Term - Local effects	699mg/kg/bw/day	608mg/m <sup>3</sup>	699mg/kg/bw/day
Consumer - Long Term - Systemic effects	-	-	-
Consumer - Short term - Local effects	-	-	-
Consumer - Short term - Systemic effects	-	-	-

	PNEC
Aquatic Compartment - Fresh water	-
Aquatic Compartment - Sea water	-
Terrestrial Compartment	-
Atmospheric Compartment	-

**8.2 Exposure controls**

**8.2.1 Appropriate engineering controls**

Provide adequate ventilation.

**8.2.2 Personal protection equipment**

Eye/face protection



Wear protective eye glasses for protection against liquid splashes.

Skin protection (Hand protection/ Other)



Wear impervious gloves (EN374).

Respiratory protection



In case of insufficient ventilation, wear suitable respiratory equipment. A suitable mask with filter type A (EN14387 or EN405) may be appropriate.

Thermal hazards

Not applicable.

**8.2.3 Environmental Exposure Controls**

Avoid release to the environment.



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### 9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

Appearance	Clear, Liquid.
Colour	Colourless.
Odour	Isoparaffinic hydrocarbon.
Odour Threshold	Not available.
pH	Not available.
Melting Point/Freezing Point	Not available.
Initial boiling point and boiling range	90 - 150°C (194 - 302°F)
Flash point	<10°C (50°F)
Evaporation rate	1.6 (n-butyl acetate = 1)
Flammability (solid, gas)	Flam. Liq. 2; Highly flammable liquid and vapour.
Upper/lower flammability or explosive limits	0.7 – 6.3Vol-%
Vapour pressure	<10kPa (75mm Hg) @ 25°C
Vapour density	>1 @ 101kPa (Air = 1)
Relative density	0.651 – 0.751 @ 15°C
Density	650 - 750kg/m <sup>3</sup>
Solubility(ies)	Slightly soluble in: Water.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	>200°C (392°F)
Decomposition Temperature	Not available.
Kinematic Viscosity	Not available.
Viscosity	0.5 – 1.2cSt (0.5 – 1.2mm <sup>2</sup> /s) @ 20°C
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

#### 9.2 Other information

Pour point	<-20°C (-4°F)
Molecular weight	119
Hygroscopic	No.
Coefficient of thermal expansion	0.00118v/v/°C

### 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	Stable under normal conditions.
10.4 Conditions to avoid	Keep away from heat and sources of ignition.
10.5 Incompatible materials	Strong oxidising agents.
10.6 Hazardous Decomposition Product(s)	Smoke, Oxides of carbon.

### 11. SECTION 11: TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

##### 11.1.1 Substances

##### Acute toxicity

Ingestion	Low acute toxicity. LD50(rat) = 7100 - 7800mg/kg (OECD 401)
Inhalation	Low acute toxicity. LC50(rat) 4hour(s) > 21mg/l (OECD 403)
Skin Contact	Low acute toxicity. LD50 (rabbit) >2000mg/kg (OECD 402)
Eye Contact	Low acute toxicity.
<b>Skin corrosion/irritation</b>	Skin Irrit. 2; Causes skin irritation. Irritating to skin. (OECD 404)



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<p><b>Serious eye damage/irritation</b> <b>Respiratory or skin sensitization</b></p> <p><b>Germ cell mutagenicity</b> <b>Carcinogenicity</b> <b>Reproductive toxicity</b></p> <p><b>STOT - single exposure</b> <b>STOT - repeated exposure</b> <b>Aspiration hazard</b></p>	<p>Not classified.</p> <p>Not expected to be a respiratory sensitiser.</p> <p>It is not a skin sensitiser. (OECD 406)</p> <p>Negative. (OECD 471, 473, 476, 478)</p> <p>No evidence of carcinogenicity.</p> <p>Studies in animals have shown that exposures produce no teratogenic effects.</p> <p>NOAEL (Developmental Toxicity): 9000ppm (OECD 414)</p> <p>NOAEL (Reproductive toxicity): 9000ppm (OECD 416)</p> <p>STOT SE 3; May cause drowsiness or dizziness.</p> <p>None anticipated.</p> <p>Asp. Tox. 1: May be fatal if swallowed and enters airways.</p> <p>Aspiration into the lungs may cause chemical pneumonitis, which can be fatal.</p>	
11.2	Other information	None.

### 12. SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	Aquatic Chronic 2; Toxic to aquatic life with long lasting effects. Aquatic invertebrates: EC50 (Daphnia magna)(48 hour) = 0.4mg/l
12.2	Persistence and degradability	Biodegradable. Unlikely to persist. Inherent Biodegradation: 51.3% (28 days)(OECD301F)
12.3	Bioaccumulative potential	No information available.
12.4	Mobility in soil	Slightly soluble in: Water. The substance is predicted to have low mobility in soil. The substance 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	Dispose of contents/container to: Suitable incineration plant. 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.
	Waste code (Europe)	08 XX XX Note: Waste producers need to assess the actual process used when generating the waste and its contaminants in order to assign the proper waste disposal code(s).

### 14. SECTION 14: TRANSPORT INFORMATION

14.1	UN number	UN 3295
14.2	UN Proper Shipping Name	HYDROCARBONS, LIQUID, N.O.S.
14.3	Transport hazard class(es)	3
14.4	Packing Group	II
14.5	Environmental hazards	Environmentally hazardous substance (EHS).
	ADR/RID	Marine Pollutant (MP).
	IMDG	Not applicable.
	ICAO/IATA	None.
14.6	Special precautions for user	None.
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.



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### 14.8 Additional Information

ADR Classification Code	F1
ADR Label	3
Hazard Identification Number	33
Hazchem EAC	3YE
IMDG Code	EmS: F-E, S-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 Not listed.

REACH: ANNEX XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Not listed.

REACH: ANNEX XIV List of substances subject to authorisation Not listed.

Community Rolling Action Plan (CoRAP); Draft 29/02/2012 Not listed.

#### 15.1.2 National regulations

None known.

### 15.2 Chemical Safety Assessment

Not available.

## 16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

### LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
STOT	Specific Target Organ Toxicity
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
vPvB	very Persistent and very Bioaccumulative
OECD	Organization for Economic Cooperation and Development
NOAEL	No Observed Adverse Effect Level
Aquatic Chronic 2	Hazardous to the aquatic environment Category 2
Asp. Tox. 1	Aspiration hazard Category 1
Flam. Liq. 2	Flammable liquid Category 2
Skin Irrit. 2	skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity — single exposure Category 3
F	Highly flammable
N	Dangerous for the environment.
Xi	Irritant
Xn	Harmful

### Risk Phrases and Safety Phrases

R11	Highly flammable.
R38	Irritating to skin.
R65	Harmful: may cause lung damage if swallowed.
R67	Vapours may cause drowsiness and dizziness.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.













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S38	In case of insufficient ventilation, wear suitable respiratory equipment.
S43	In case of fire: Use CO2, dry chemical, or foam.
S57	Use appropriate container to avoid environmental contamination.
S62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
S3/9/14	Keep in a cool, well-ventilated place away from: Heat and direct sunlight.

### Hazard statement(s) and Precautionary statement(s)

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing vapours.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P362	Take off contaminated clothing and wash before reuse.
P391	Collect spillage.
P501	Dispose of contents/container to: Suitable incineration plant.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P370+P378	In case of fire: Use CO2, dry chemical, or foam.
P403+P235	Store in a well-ventilated place. Keep cool.

### Hazard pictogram(s) and Hazard Symbol

GHS02		F	
GHS07		Xi	
GHS08		Xn	
GHS09		N	



## JAC 2 - BULK

### **Disclaimers**

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### **Annex to the extended Safety Data Sheet (eSDS)**

No information available.