JAC 3 - BULK

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	JAC 3 - BULK

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

Identified Use(s)	Quick drying cleaner and de-greaser. Suitable 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

Company Identification	Johnson and Allen Ltd
Address of Supplier	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

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	Flam. Liq. 2 :Highly flammable liquid and vapour. 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: JAC 3 - BULK

Hazard Pictogram(s):

GHS02

GHS07

Signal Word(s)	Danger
Hazard Statement(s)	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.
Precautionary Statement(s)	P240: Ground and bond container and receiving equipment. P241: Use explosion-proof electrical/ventilating/lighting/equipment. P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with 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. P403+P235: Store in a well-ventilated place. Keep cool.

2.3 Other hazards

None known.

2.4 Additional Information

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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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)
Acetone	67-64-1	200-662-2	60-100	Flam. Liq. 2 H225 Eye Irrit. 2 H319 STOT SE 3 H336 EUH066	GHS02 GHS07

Butanone	78-93-3	201-159-0	1-5	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. Repeated exposure may cause skin dryness or cracking.

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

Highly flammable liquid and vapour.

5.1 Extinguishing media

Suitable Extinguishing media: Use water spray, foam, dry powder or CO_2 to extinguish.

Unsuitable extinguishing media: Water jet spray.

5.2 Special hazards arising from the substance or mixture

Highly flammable liquid and vapour. Decomposes in a fire giving off toxic fumes: Carbon dioxide, Nitrogen oxides. Vapours or fumes: Can form explosive mixture with air.

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

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Eliminate all ignition sources if safe to do so. Avoid breathing vapours. Avoid contact with eyes. Wear protective gloves/eye protection. Wash hands thoroughly after handling.

6.2 Environmental precautions

Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.

6.3 Methods and material for containment and cleaning up

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. Wash the spillage area with water.

6.4 Reference to other sections

See Also Section 8, 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

The vapour is heavier than air and spreads along ground. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use non-sparking tools. Take action to prevent static discharges. Provide adequate ventilation. Use only outdoors or in a well-ventilated area. Avoid breathing vapours. 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 cool. Keep container tightly closed. Store locked up.

Storage temperature: < 25°C

Special storage conditions: The storage of this product is subject to the requirements of the Highly Flammable and Liquid Petroleum Gases Regulations.

Storage life: Stable under normal conditions.

Incompatible materials: Oxidizing agents, Strongly acidic, Strongly alkaline.

7.3 Specific end use(s)

Quick drying cleaner and de-greaser. Suitable 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.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Acetone	67-64-1	500	1210	1500	3620	
Butan-2-one (methyl ethyl ketone)	78-93-3	200	600	300	899	Sk, BMGV

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

Remark	Notes
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.
BMGV	Biological monitoring guidance values are listed in Table 2.

Biological Exposure Indices						
Substances	CAS Number	Sampling	Tissues	Control parameters	Biological monitoring guidance value	Comments
Butan-2-one	78-93-3	Post shift	urine	butan-2-one	70 µmol butan-2-one/L	

8.2 Exposure controls

8.2.1. Appropriate engineering controls: Provide adequate ventilation, including appropriate local extraction, to ensure that the occupational exposure limit is not exceeded. 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: 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: 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: Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Liquid. Colour: Colourless.
Odour	Characteristic.
Odour threshold	Not established.
pH	Not known.
Melting point/freezing point	-95.4°C (Acetone)
Initial boiling point and boiling range	56.2°C
Flash Point	< -18°C
Evaporation rate	Not known.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not known.

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Vapour pressure	233 hPa @ 20°C (Acetone)
Vapour density	Not known.
Density (g/ml)	Not known.
Relative density	0.78-0.81
Solubility(ies)	Solubility (Water): Soluble in water. Solubility (Other): Not known.
Partition coefficient: n-octanol/water	Not known.
Auto-ignition temperature	465°C @ 1013 hPa (Acetone)
Decomposition Temperature (°C)	Not known.
Viscosity	Not known.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2 Other information

Volatile Organic Compound Content	792 g/l

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

The vapour is heavier than air and spreads along ground.
Vapours or fumes: Can form explosive mixture with air.

10.4 Conditions to avoid

Avoid friction, sparks, or other means of ignition.

10.5 Incompatible materials

Oxidizing agents, Strongly acidic, Strongly alkaline.

10.6 Hazardous decomposition products

Carbon dioxide, Nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity - Ingestion	Calculation method : Not classified. Low oral toxicity. Acetone: LD50 (rat) = 5800 mg/kg
Acute toxicity - Skin Contact	Calculation method : Not classified. Low acute toxicity. Acetone: LC50 (rat) > 7400 mg/kg
Acute toxicity - Inhalation	Calculation method : Not classified. Low acute toxicity. Acetone: LD50 (rabbit) (4 hours) = 76000 mg/m³
Skin corrosion/irritation	Calculation method : Not classified. Repeated exposure may cause skin dryness or cracking.
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

ECHA Endocrine disruptor assessment list: 78-93-3 (Reason not given)

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Low toxicity to aquatic organisms.

12.2 Persistence and degradability

The product is readily biodegradable. Unlikely to persist.

12.3 Bioaccumulative potential

The product has no potential for bioaccumulation.

JAC 3 - BULK

12.4 Mobility in soil

Soluble in water. The product is predicted to have high mobility in soil. The product is volatile and will partition into the atmosphere. The vapour is heavier than air and spreads along ground.

12.5 Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

12.6 Other adverse effects

ECHA Endocrine disruptor assessment list: 78-93-3 (Reason not given)

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of contents/container to: Licensed recycler. Refer to manufacturer or supplier for information on recovery or recycling. Do NOT landfill.

13.2 Additional Information

Disposal should be in accordance with local, state or national legislation. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

UN No.	1263

14.2 UN proper shipping name

UN proper shipping name	PAINT (vapour pressure at 50 °C not more than 110 kPa)

14.3 Transport hazard class(es)

ADR/RID	
ADR/RID Class	3
ADR Classification Code	F1
Special Provisions	163, 367, 640D, 650
Limited Quantities	5 L
Excepted Quantities	E2
Emergency Action Code	•3YE
Mixed Packing Instructions for Packages	P001 IBC02 R001
Special Packing Provisions for Packages	PP1
Mixed Packing Instructions for Packages	MP19
Packing Instructions for Portable Tanks	T4
Special Provisions for Portable Tanks	TP1 TP8 TP28
Tank Code for Tanks	LGBF
Special Provisions for Tanks	
Vehicle for Tank Carriage	FL
ADR Transport Category	2
Tunnel Restriction Code	D/E
Special Provisions for Carriage - Packages	
Special Provisions for Carriage - Bulk	
Special Provisions for Carriage - Loading, Unloading and Handling	
Special Provisions for Carriage - Operation	S2 S20
ADR HIN	33
IMDG	
IMDG Class	3
Special Provisions	163, 367, 640D, 650
Limited Quantities	5 L
Excepted Quantities	E2
Mixed Packing Instructions for Packages	P001 IBC02 R001
Special Packing Provisions for Packages	PP1
Packing Instructions for Portable Tanks	T4
Special Provisions for Portable Tanks	TP1 TP8 TP28
IMDG EMS	F-E, S-E
Stowage and Handling	Category B
Segregation	
Marine Pollutant	
ICAO/IATA	
IATA Proper Shipping Name	PAINT (vapour pressure at 50 °C not more than 110 kPa)
Excepted Quantities	E2
Passenger and Cargo Aircraft Limited Quantities Packing Instructions	Y341
Passenger and Cargo Aircraft Limited Quantities Max net Qty	1L

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Passenger and Cargo Aircraft Packing Instructions	353
Passenger and Cargo Aircraft Max net Qty	5L
Cargo Aircraft Packing Instructions	364
Cargo Aircraft Max net Qty	60L
Special Provisions	A3, A72, A192
Emergency Response Guidebook (ERG) Code	3L
Labels	
Labels	3

14.4 Packing group

Packing group	II

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 of Very High Concern for Authorisation	Not listed
UK REACH Authorisation List (Annex XIV) list of substances subject to authorisation	Not listed
UK REACH Restrictions List (Annex XVII) Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	Acetone (67-64-1), butanone (78-93-3)
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)	Butanone (78-93-3)

15.2 Chemical Safety Assessment

United Kingdom	Not applicable.

SECTION 16: OTHER INFORMATION

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

LEGEND

Hazard Pictogram(s)

GHS02

GHS07

Hazard classification

Flam. Liq. 2 : Flammable liquid, Category 2
Eye Irrit. 2 : Serious eye damage/irritation, Category 2

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	STOT SE 3 : Specific target organ toxicity — single exposure, Category 3
Hazard Statement(s)	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.
Precautionary Statement(s)	P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233: Keep container tightly closed. P240: Ground and bond container and receiving equipment. P241: Use explosion-proof electrical/ventilating/lighting/equipment. P242: Use non-sparking tools. P243: Take action to prevent static discharges. P261: Avoid breathing vapours. 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. P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with 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. P312: Call a POISON CENTRE/doctor if you feel unwell. P337+P313: If eye irritation persists: Get medical advice/attention. P370+P378: In case of fire: Use water spray, foam, dry powder or CO_2 to extinguish. P403+P233: Store in a well-ventilated place. Keep container tightly closed. P403+P235: Store in a well-ventilated place. Keep cool. P405: Store locked up. P501: Dispose of contents/container to: Licensed recycler.
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
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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