

## ECO 2

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 ECO 2

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

Identified Use(s) A removable, water based, contrast aid paint for use in the Magnetic Particle Inspection process (BS EN ISO 9934-2:2002).

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)

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

GB CLP Regulation, UK SI 2019/720 and Not classified as dangerous for supply/use.  
UK SI 2020/1567

#### 2.2 Label elements

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

Product Name ECO 2  
Hazard Pictogram(s) None.  
Signal Word(s) None.  
Hazard Statement(s) None.  
Precautionary Statement(s) None.

#### 2.3 Other hazards

None known.

#### 2.4 Additional Information

None.

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## 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)
2-butoxyethanol	111-76-2	203-905-0	1-3	Acute Tox. 4 H302 Skin Irrit. 2 H315 Eye Irrit. 2 H319 Acute Tox. 4 H332	GHS07
2-(2-butoxyethoxy)ethyl acetate	124-17-4	204-685-9	1-2	Not classified	None

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

## SECTION 4: FIRST AID MEASURES

## 4.1 Description of first aid measures

Inhalation	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, obtain medical attention.
Skin Contact	Gently wash with plenty of soap and water. If symptoms develop, obtain medical attention.
Eye Contact	Flush eyes with water for at least 15 minutes while holding eyelids open. If eye irritation persists, get medical advice/attention.
Ingestion	Wash out mouth with water and give 200-300 ml (half a pint) of water to drink. Get medical advice/attention if you feel unwell.

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

None anticipated.

## 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

## 5.1 Extinguishing media

Suitable Extinguishing media	Extinguish with carbon dioxide, dry chemical, foam or waterspray.
Unsuitable extinguishing media	Do not use water jet.

## 5.2 Special hazards arising from the substance or mixture

Decomposes in a fire giving off toxic fumes: Carbon monoxide, Carbon dioxide, Nitrogen oxides.

## 5.3 Advice for firefighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. 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. Wash hands thoroughly after handling.

## 6.2 Environmental precautions

Do not release large quantities into the surface water or into drains.

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**6.3 Methods and material for containment and cleaning up**

Clean preferably with detergent, do not use solvents. Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal.

**6.4 Reference to other sections**

See Also Section 8, 13.

**SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

For professional users only. Provide adequate ventilation. Avoid inhalation of high concentrations of vapours. Wash hands thoroughly after handling.

**7.2 Conditions for safe storage, including any incompatibilities**

Keep in a cool, well ventilated place.

Storage temperature

5 – 25°C

Storage life

Stable under normal conditions.

Incompatible materials

Strong oxidising agents, Acids, Alkaline.

**7.3 Specific end use(s)**

A removable, water based, contrast aid paint for use in the Magnetic Particle Inspection process (BS EN ISO 9934-2:2002).

**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
2-Butoxyethanol	111-76-2	25	123	50	246	Sk, BMGV

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

Remark: Sk  
Notes: 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
2-Butoxyethanol	111-76-2	Post shift	urine	butoxyacetic acid	240 mmol butoxyacetic acid/mol creatinine	

**8.2 Exposure controls**

8.2.1. Appropriate engineering controls Provide adequate ventilation.

8.2.2. Personal protection equipment



Eye Protection

Not normally required.

Wear protective eye glasses for protection against liquid splashes.



Skin protection

Wear suitable gloves if prolonged skin contact is likely.

Breakthrough time of the glove material: refer to the information provided by the gloves' producer.

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**Respiratory protection** Normally no personal respiratory protection is necessary.  
Wear suitable respiratory protective equipment if exposure to high levels of material are likely.



**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	Liquid. Colour : White.
Odour	Almost odourless.
Odour threshold	Not known.
pH	7 – 9
Melting point/freezing point	Not known.
Initial boiling point and boiling range	100°C
Flash Point	Not known.
Evaporation rate	Not known.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not known.
Vapour pressure	Not known.
Vapour density	Not known.
Density (g/ml)	Not known.
Relative density	Not known.
Solubility(ies)	Solubility (Water) : Miscible. Solubility (Other) : Not known.
Partition coefficient: n-octanol/water	Not known.
Auto-ignition temperature	Not known.
Decomposition Temperature (°C)	Not known.
Viscosity	0.05 – 0.2 Pa•s (ICI C & P/BS3900)
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

**9.2 Other information**

Volatile organic compound	50 g/l
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**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.

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### 10.4 Conditions to avoid

Heat and direct sunlight.

### 10.5 Incompatible materials

Strong oxidising agents, Acids, Alkaline.

### 10.6 Hazardous decomposition products

No hazardous decomposition products known.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Acute toxicity - Ingestion

Calculation method : Not classified.

Low oral toxicity.

Calculation method : Calculated acute toxicity estimate (ATE) - 40000

Acute toxicity - Skin Contact

Calculation method : Not classified.

Low acute toxicity.

Acute toxicity - Inhalation

Calculation method : Not classified.

Low acute toxicity.

Calculation method : Calculated acute toxicity estimate (ATE) - 366.67

Skin corrosion/irritation

Calculation method : Not classified.

Non-irritant.

Serious eye damage/irritation

Calculation method : Not classified.

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 : Not classified.

STOT - repeated exposure

Calculation method : Not classified.

Aspiration hazard

Calculation method : Not classified.

### 11.2 Other information

Not known.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

Low toxicity to aquatic organisms.

### 12.2 Persistence and degradability

No information available.

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

Miscible with water. The product is predicted to have high mobility in soil.

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### 12.5 Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

### 12.6 Other adverse effects

None known.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Dispose of wastes in an approved waste disposal facility. Disposal should be in accordance with local, state or national legislation.

### 13.2 Additional Information

EU Waste Codes: 01 11, 08 01 12, 08 01 15, 08 01 16

## SECTION 14: TRANSPORT INFORMATION

**Not classified as hazardous for transport.**

### 14.1 UN number

Not applicable

### 14.2 UN proper shipping name

Not applicable

### 14.3 Transport hazard class(es)

Not applicable

### 14.4 Packing group

Not applicable

### 14.5 Environmental hazards

Not classified as a Marine Pollutant.

### 14.6 Special precautions for user

Not known

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not known

## 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) 2-butoxyethanol (111-76-2)  
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

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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.
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**SECTION 16: OTHER INFORMATION**

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

**LEGEND**

Hazard Pictogram(s)	GHS07: GHS: Exclamation mark
Hazard classification	Acute Tox. 4 : Acute toxicity, Category 4 Skin Irrit. 2 : Skin corrosion/irritation, Category 2 Eye Irrit. 2 : Serious eye damage/irritation, Category 2
Hazard Statement(s)	H302: Harmful if swallowed. H315: Causes skin irritation. H319: Causes serious eye irritation. H332: Harmful if inhaled.
Acronyms	ATE : Acute Toxicity Estimate CAS : Chemical Abstracts Service DNEL : Derived No Effect Level EC : European Community EINECS : European Inventory of Existing Commercial Chemical Substances LTEL : Long term exposure limit PBT : Persistent, Bioaccumulative and Toxic PNEC : Predicted No Effect Concentration REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals STEL : Short term exposure limit STOT : Specific Target Organ Toxicity vPvB : very Persistent and very Bioaccumulative

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

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