

# JAWEL PAINTS LTD

## SAFETY DATA SHEET CDA

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name CDA

Product number S659

Internal identification SWS

Synonyms; trade names Completely Denatured Alcohol

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

Identified uses Screenwash

Uses advised against Use only for intended applications.

#### 1.3. Details of the supplier of the safety data sheet

Supplier Jawel Paints West Midlands Ltd

Units 313 -317

Heath Street

B66 2QY

Tel 0121 558 6191

#### 1.4. Emergency telephone number

Emergency telephone 0844 5605341 (24 Hours) (in use from 13/01/13)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (EC 1272/2008)

Physical hazards Flam. Liq. 2 - H225

Health hazards Not Classified

Environmental hazards Not Classified

#### 2.2. Label elements

##### Pictogram



Signal word Danger

Hazard statements H225 Highly flammable liquid and vapour.

**CDA**

**Precautionary statements** P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P403+P235 Store in a well-ventilated place. Keep cool.

**Supplementary precautionary statements** P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof electrical equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

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 or shower.

P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.

P501 Dispose of contents/ container in accordance with national regulations.

**2.3. Other hazards**

This product does not contain any substances classified as PBT or vPvB.

**SECTION 3: Composition/information on ingredients**

**3.2. Mixtures**

<p><b>Ethanol</b> <span style="float: right;"><b>55-90%</b></span></p> <p>CAS number: 64-17-5                      EC number: 200-578-6</p> <hr/> <p><b>Classification</b></p> <p>Flam. Liq. 2 - H225</p>
<p><b>Propan-2-ol</b> <span style="float: right;"><b>&lt;5%</b></span></p> <p>CAS number: 67-63-0                      EC number: 200-661-7                      REACH registration number: 01- 2119457558-25-XXXX</p> <hr/> <p><b>Classification</b></p> <p>Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336</p>
<p><b>Butanone</b> <span style="float: right;"><b>&lt;5%</b></span></p> <p>CAS number: 78-93-3                      EC number: 201-159-0                      REACH registration number: 01- 2119457290-43-XXXX</p> <hr/> <p><b>Classification</b></p> <p>Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336</p>
<p><b>Bitrex</b> <span style="float: right;"><b>&lt;0.5%</b></span></p> <p>CAS number: 3734-33-6</p> <hr/> <p><b>Classification</b></p> <p>Not Classified</p>

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

## CDA

**SECTION 4: First aid measures****4.1. Description of first aid measures**

<b>Inhalation</b>	Move affected person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. If breathing stops, provide artificial respiration.
<b>Ingestion</b>	Do not induce vomiting. If swallowed, wash out mouth with water, provided person is conscious. Seek immediate medical assistance.
<b>Skin contact</b>	Rinse immediately with plenty of water. Remove contaminated clothing.
<b>Eye contact</b>	Important! Immediately rinse with water for at least 15 minutes. Remove any contact lenses and open eyelids wide apart. Seek medical advice.
<b>Protection of first aiders</b>	First aid personnel should wear appropriate protective equipment during any rescue.

**4.2. Most important symptoms and effects, both acute and delayed**

<b>Inhalation</b>	There may be irritation of the throat with a feeling of tightness in the chest. May cause an asthma-like shortness of breath.
<b>Ingestion</b>	Overexposure may cause the following adverse effects: Unconsciousness. Nausea, vomiting.
<b>Skin contact</b>	There may be irritation and redness at the site of contact. An itchy rash may occur at the site of contact.
<b>Eye contact</b>	There may be pain and redness.

**4.3. Indication of any immediate medical attention and special treatment needed**

<b>Notes for the doctor</b>	If exposed or concerned get medical advice/attention.
<b>Specific treatments</b>	Eye bathing equipment should be available on the premises.

**SECTION 5: Firefighting measures****5.1. Extinguishing media**

<b>Suitable extinguishing media</b>	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.

**5.2. Special hazards arising from the substance or mixture**

<b>Specific hazards</b>	Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.
<b>Hazardous combustion products</b>	Carbon dioxide (CO <sub>2</sub> ). Carbon monoxide (CO).

**5.3. Advice for firefighters**

<b>Protective actions during firefighting</b>	Wear self-contained breathing apparatus and protective clothing to prevent contact with eyes and skin.
<b>Special protective equipment for firefighters</b>	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

<b>Personal precautions</b>	Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate.
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## CDA

**For non-emergency personnel** Follow instructions given by emergency personnel.

**For emergency responders** Refer to this MSDS.

### 6.2. Environmental precautions

**Environmental precautions** Do not discharge into drains or watercourses or onto the ground. Contain the spillage using bunding. Avoid release to the environment. Alert the neighbourhood to the presence of fumes or gas.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Evacuate Area Absorb spillage with sand or other inert absorbent. Use non-sparking tools Flush contaminated area with plenty of water.

### 6.4. Reference to other sections

**Reference to other sections** See Section 1 for emergency contact information. For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Advice on general occupational hygiene** Take off contaminated clothing and wash it before re-use.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in a cool and well-ventilated place. Do not store near heat sources or expose to high temperatures. Store away from the following materials: Oxidising materials. Acids.

**Storage class** Flammable liquid storage.

### 7.3. Specific end use(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m<sup>3</sup>

#### Ethanol

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL

#### Propan-2-ol

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m<sup>3</sup>

#### Butanone

Long-term exposure limit (8-hour TWA): WEL 200 ppm(Sk) 600 mg/m<sup>3</sup>(Sk)

Short-term exposure limit (15-minute): WEL 300 ppm(Sk) 899 mg/m<sup>3</sup>(Sk) WEL = Workplace Exposure Limit

**DNEL** No data available.

**PNEC** No data available.

**CDA**

**Ethanol (CAS: 64-17-5)**

**DNEL** No data available.

**PNEC** No data available.

**Butanone (CAS: 78-93-3)**

**DNEL** No data available.

**PNEC** No data available.

**Propan-2-ol (CAS: 67-63-0)**

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**DNEL** No data available.

**PNEC** No data available.

**8.2. Exposure controls**

**Protective equipment**



**Appropriate engineering controls**

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients. Ensure that eye wash stations and showers are close to the workstation

**Eye/face protection**

The following protection should be worn: Chemical splash goggles. Wear tight-fitting, chemical splash goggles or face shield.

**Hand protection**

It is recommended that gloves are made of the following material: Polyvinyl chloride (PVC). Rubber (natural, latex).

**Other skin and body protection**

Wear appropriate clothing to prevent any possibility of skin contact. Overall or lab coat

**Hygiene measures**

Wash promptly with soap and water if skin becomes contaminated.

**Respiratory protection**

Wear a full facepiece respirator fitted with the following cartridge: Organic vapour filter.

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**SECTION 9: Physical and Chemical Properties**

**9.1. Information on basic physical and chemical properties**

<b>Appearance</b>	Clear liquid.
<b>Colour</b>	Purple.
<b>Odour</b>	Alcoholic.
<b>Odour threshold</b>	Data lacking.
<b>pH</b>	Data lacking.
<b>Melting point</b>	Data lacking.
<b>Initial boiling point and range</b>	Data lacking.
<b>Flash point</b>	Data lacking.
<b>Evaporation rate</b>	Data lacking.
<b>Evaporation factor</b>	Data lacking.

<b>Flammability (solid, gas)</b>	Data lacking.
<b>Upper/lower flammability or explosive limits</b>	Data lacking.
<b>Other flammability</b>	Data lacking.
<b>Vapour pressure</b>	Data lacking.
<b>Vapour density</b>	Data lacking.
<b>Relative density</b>	0.805 @ 20°C
<b>Bulk density</b>	Data lacking.
<b>Solubility(ies)</b>	Data lacking.
<b>Partition coefficient</b>	Data lacking.
<b>Auto-ignition temperature</b>	Data lacking.
<b>Decomposition Temperature</b>	Data lacking.
<b>Viscosity</b>	Data lacking.
<b>Explosive properties</b>	Not considered to be explosive.
<b>Explosive under the influence of a flame</b>	Not considered to be explosive.
<b>Oxidising properties</b>	There are no chemical groups present in the product that are associated with oxidising properties.

**9.2. Other information**

<b>Other information</b>	None.
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**SECTION 10: Stability and reactivity****10.1. Reactivity**

<b>Reactivity</b>	Stable under recommended transport or storage conditions.
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**10.2. Chemical stability**

<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
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**10.3. Possibility of hazardous reactions**

<b>Possibility of hazardous reactions</b>	Will not polymerise.
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**10.4. Conditions to avoid**

<b>Conditions to avoid</b>	Keep away from heat, sparks and open flame.
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**10.5. Incompatible materials**

<b>Materials to avoid</b>	Strong oxidising agents. Alkali metals. Amines. acid chlorides. peroxides. acid anhydrides.
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**10.6. Hazardous decomposition products**

<b>Hazardous decomposition products</b>	Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ).
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**SECTION 11: Toxicological information****11.1. Information on toxicological effects**

<b>Other health effects</b>	There is no evidence that the product can cause cancer.
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**Acute toxicity - oral**

**Notes (oral LD<sub>50</sub>)** Based on available data the classification criteria are not met.

**Acute toxicity - dermal**

**Notes (dermal LD<sub>50</sub>)** Based on available data the classification criteria are not met.

**Acute toxicity - inhalation**

**Notes (inhalation LC<sub>50</sub>)** Based on available data the classification criteria are not met.

**Skin corrosion/irritation**

**Skin corrosion/irritation** Based on available data the classification criteria are not met.

**Serious eye damage/irritation**

**Serious eye damage/irritation** Based on available data the classification criteria are not met.

**Respiratory sensitisation**

**Respiratory sensitisation** Based on available data the classification criteria are not met.

**Skin sensitisation**

**Skin sensitisation** Based on available data the classification criteria are not met.

**Germ cell mutagenicity**

**Genotoxicity - in vitro** Based on available data the classification criteria are not met.

**Genotoxicity - in vivo** Based on available data the classification criteria are not met.

**Carcinogenicity**

**Carcinogenicity** Based on available data the classification criteria are not met.

**Reproductive toxicity**

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

**Reproductive toxicity -** No evidence of reproductive toxicity in animal studies.

**development****Specific target organ toxicity - single exposure**

**STOT - single exposure** Based on available data the classification criteria are not met.

**Specific target organ toxicity - repeated exposure**

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

**Aspiration hazard**

**Aspiration hazard** Not anticipated to present an aspiration hazard, based on chemical structure.

**Inhalation** No adverse effects known.

**Ingestion** No adverse effects known.

**Skin contact** No adverse effects known.

**Eye contact** No adverse effects known.

**Acute and chronic health** Only large quantities are likely to have adverse effects on human health.

**hazards**

**Route of exposure** Inhalation Skin and/or eye contact Ingestion

**Target organs** Not relevant.

**Medical symptoms** No specific symptoms noted, but this chemical may still have adverse health impact, either in general or on certain individuals.

**Toxicological information on ingredients.**

**Ethanol**

**Other health effects** IARC Int. Agency for Cancer Research.

**Acute toxicity - oral**

**Notes (oral LD<sub>50</sub>)** Based on available data the classification criteria are not met.

**Acute toxicity - dermal**

**Notes (dermal LD<sub>50</sub>)** Based on available data the classification criteria are not met.

**Acute toxicity - inhalation**

**Notes (inhalation LC<sub>50</sub>)** Based on available data the classification criteria are not met.

**Skin corrosion/irritation**

**Skin corrosion/irritation** Not irritating.

**Serious eye damage/irritation**

**Serious eye damage/irritation** Not irritating to eyes

**Respiratory sensitisation**

**Respiratory sensitisation**

**Respiratory sensitisation** Not sensitising.

**Skin sensitisation**

**Skin sensitisation** Not sensitising.

**Germ cell mutagenicity**

This substance has no evidence of mutagenic properties.

**Genotoxicity - in vitro Genotoxicity - in vivo Carcinogenicity**

This substance has no evidence of mutagenic properties.

**Carcinogenicity** There is no evidence that the product can cause cancer.  
**Reproductive toxicity**

**Reproductive toxicity - fertility** This substance has no evidence of toxicity to reproduction.

**Reproductive toxicity - development** No evidence of reproductive toxicity in animal studies.

**Specific target organ toxicity - single exposure**

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

**Specific target organ toxicity - repeated exposure**

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

**Aspiration hazard**

**Aspiration hazard** Not anticipated to present an aspiration hazard, based on chemical structure.

**Inhalation** There may be irritation of the throat with a feeling of tightness in the chest.



**CDA**

<b>Ingestion</b>	May cause liver and/or renal damage.
<b>Skin contact</b>	Skin irritation should not occur when used as recommended.
<b>Eye contact</b>	There may be pain and redness.
<b>Acute and chronic health hazards</b>	Gas or vapour is harmful on prolonged exposure or in high concentrations. Symptoms following overexposure may include the following: Irritation of eyes and mucous membranes. Narcotic effect. A single exposure may cause the following adverse effects: Central nervous system depression. Repeated exposure may cause chronic eye irritation. High concentrations may cause severe lung damage. Defatting, drying and cracking of skin. Swallowing concentrated chemical may cause severe internal injury. Unconsciousness. Death.
<b>Route of exposure</b>	Inhalation Ingestion. Skin and/or eye contact
<b>Target organs</b>	Central nervous system Eyes Gastro-intestinal tract Liver Respiratory system, lungs Skin
<b>Medical symptoms</b>	Irritation of eyes and mucous membranes. Dilated pupils. Rhinitis (inflammation of the nasal mucous membranes). Upper respiratory irritation. General respiratory distress, unproductive cough. May cause suffocation. Nausea, vomiting. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Headache. Behavioural changes. Hypotension (low blood pressure). Dizziness. Confusion, agitation and/or excitation.
<b>Medical considerations</b>	Convulsions. Central nervous system depression.

**Propan-2-ol**

<b>Other health effects</b>	There is no evidence that the product can cause cancer.
<b>Acute toxicity - oral</b>	
<b>Notes (oral LD<sub>50</sub>)</b>	Based on available data the classification criteria are not met.
<b>Acute toxicity - dermal</b>	
<b>Notes (dermal LD<sub>50</sub>)</b>	Based on available data the classification criteria are not met.
<b>Acute toxicity - inhalation</b>	
<b>Notes (inhalation LC<sub>50</sub>)</b>	Based on available data the classification criteria are not met.
<b>Skin corrosion/irritation</b>	
<b>Skin corrosion/irritation</b>	Not irritating.
<b>Serious eye damage/irritation</b>	
<b>Serious eye damage/irritation</b>	Causes serious eye irritation.
<b>Respiratory sensitisation</b>	
<b>Respiratory sensitisation</b>	Not sensitising.
<b>Skin sensitisation</b>	
<b>Skin sensitisation</b>	Not sensitising.
<b>Germ cell mutagenicity</b>	
<b>Genotoxicity - in vitro</b>	This substance has no evidence of mutagenic properties.
<b>Genotoxicity - in vivo</b>	This substance has no evidence of mutagenic properties.

**CDA**

**Carcinogenicity**

**Carcinogenicity** There is no evidence that the product can cause cancer.

**Reproductive toxicity**

**Reproductive toxicity - fertility** This substance has no evidence of toxicity to reproduction.

**Reproductive toxicity - development** No evidence of reproductive toxicity in animal studies.

**Specific target organ toxicity - single exposure** \_\_\_\_\_

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

**Specific target organ toxicity - repeated exposure** \_\_\_\_\_

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

**Aspiration hazard** \_\_\_\_\_

**Aspiration hazard** Not anticipated to present an aspiration hazard, based on chemical structure.  
**Inhalation** Vapours in high concentrations are anaesthetic. Symptoms following overexposure

may include the following: Headache. Fatigue. Dizziness. Central nervous system depression.

**Ingestion** Swallowing concentrated chemical may cause severe internal injury.

**Skin contact** Contains components which may penetrate the skin. Prolonged contact may cause redness, irritation and dry skin.

**Eye contact** Irritation of eyes and mucous membranes.

**Acute and chronic health hazards** Gas or vapour is harmful on prolonged exposure or in high concentrations.

Symptoms following overexposure may include the following: Irritation of eyes and mucous membranes. Narcotic effect. A single exposure may cause the following adverse effects: Central nervous system depression. Swallowing concentrated chemical may cause severe internal injury. Unconsciousness. Death.

**Route of exposure** Inhalation Ingestion. Skin and/or eye contact

**Target organs** Central nervous system Eyes Respiratory system, lungs Skin

**Medical symptoms** Irritation of eyes and mucous membranes. Dilated pupils. Rhinitis (inflammation of the nasal mucous membranes). Upper respiratory irritation. General respiratory distress, unproductive cough. May cause suffocation. Skin irritation. Nausea, vomiting. Unconsciousness, possibly death. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Behavioural changes. Hypotension (low blood pressure). Dizziness.

**Medical considerations** Convulsions. Central nervous system depression.

**Butanone**

**Other health effects** There is no evidence that the product can cause cancer.

**Acute toxicity - oral**

**Notes (oral LD<sub>50</sub>)** \_\_\_\_\_  
 Based on available data the classification criteria are not met.

**Acute toxicity - dermal**

**CDA**

**Notes (dermal LD<sub>50</sub>)** Based on available data the classification criteria are not met.

**Acute toxicity - inhalation**

**Notes (inhalation LC<sub>50</sub>)** Based on available data the classification criteria are not met.

**Skin corrosion/irritation**

**Skin corrosion/irritation** Not irritating.

**Serious eye damage/irritation**

**Serious eye damage/irritation** Causes serious eye irritation.

**Respiratory sensitisation**

**Respiratory sensitisation** Not sensitising.

**Skin sensitisation**

**Skin sensitisation** Not sensitising.

**Germ cell mutagenicity****Genotoxicity - in vitro Genotoxicity - in vivo Carcinogenicity**

This substance has no evidence of mutagenic properties.

This substance has no evidence of mutagenic properties.

**Carcinogenicity** There is no evidence that the product can cause cancer.

**Reproductive toxicity**

**Reproductive toxicity - fertility** This substance has no evidence of toxicity to reproduction.

**Reproductive toxicity - development** No evidence of reproductive toxicity in animal studies.

**Specific target organ toxicity - single exposure**

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

**Specific target organ toxicity - repeated exposure**

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

**Aspiration hazard**

**Aspiration hazard** Not anticipated to present an aspiration hazard, based on chemical structure.

**General information**

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

**Inhalation** Vapour from this product may be hazardous by inhalation.

**Ingestion** May cause severe internal injury.

**Skin contact** Product has a defatting effect on skin. May cause allergic contact eczema.

**Eye contact** May cause severe eye irritation.

**CDA**

<b>Acute and chronic health</b>	Gas or vapour is harmful on prolonged exposure or in high concentrations.
<b>hazards</b>	Symptoms following overexposure may include the following: Irritation of eyes and mucous membranes. Narcotic effect. A single exposure may cause the following adverse effects: Central nervous system depression. Vapour from this product may be hazardous by inhalation. Repeated exposure may cause chronic eye irritation. Defatting, drying and cracking of skin. Swallowing concentrated chemical may cause severe internal injury. Central and/or peripheral nervous system damage. Prolonged or repeated exposure may cause the following adverse effects: Serious damage to the lining of nose, throat and lungs. Prolonged or repeated exposure to vapours in high concentrations may cause the following adverse effects: Sore throat. Irritation of nose, throat and airway.
<b>Route of exposure</b>	Inhalation Ingestion. Skin absorption Skin and/or eye contact
<b>Target organs</b>	Central nervous system Eyes Gastro-intestinal tract Respiratory system, lungs Skin
<b>Medical symptoms</b>	Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Headache. Fatigue. Nausea, vomiting. Unconsciousness.
<b>Medical considerations</b>	Chronic respiratory and obstructive airway diseases. Pre-existing eye problems. Skin disorders and allergies.
<b>General information</b>	This material is used as a denaturent due to the extremely unpleasant taste that it imparts to other compounds (eg ethanol).
<b>Ingestion</b>	May cause severe internal injury.

**SECTION 12: Ecological Information**

**Ecotoxicity** Not regarded as dangerous for the environment.

**Ecological information on ingredients.****Ethanol**

**Ecotoxicity** The product is not expected to be hazardous to the environment.

**Propan-2-ol**

**Ecotoxicity** Not regarded as dangerous for the environment.

**Butanone**

**Ecotoxicity** The product is not expected to be hazardous to the environment.

**12.1.****Toxicity**

**Toxicity** The product is not believed to present a hazard due to its physical nature.

**Acute aquatic toxicity**

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: >100 mg/l, Fish

**Ecological information on ingredients.****Ethanol**

**CDA**

**Toxicity** Not considered toxic to fish.

**Acute aquatic toxicity**

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: >100 mg/l, Fish

**Propan-2-ol**

**Toxicity** Low

**Acute aquatic toxicity**

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: >100 mg/l, Fish

**Butanone**

**Toxicity** Low

**Acute aquatic toxicity**

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: >100 mg/l, Fish

**Bitrex**

**Toxicity** Very toxic to aquatic organisms.

**12.2. Persistence and degradability**

**Persistence and degradability** No data available.  
**Ecological information on ingredients.**

**Ethanol**

**Persistence and degradability** No data available.

**Propan-2-ol**

**Persistence and degradability** No data available.

**Butanone**

**Persistence and degradability** No data available.

**12.3. Bioaccumulative potential**

**Bioaccumulative potential** Data lacking.

**Partition coefficient** Data lacking.

**Ecological information on ingredients.**

**Ethanol**

**Bioaccumulative potential** The product is not bioaccumulating.

**Partition coefficient** Data lacking.

**Propan-2-ol**

**CDA**

**Bioaccumulative potential** Data lacking.

**Partition coefficient** Data lacking.

**Butanone** \_\_\_\_\_

**Bioaccumulative potential** Data lacking.

**Partition coefficient** Data lacking.

**Bitrex** \_\_\_\_\_

**Bioaccumulative potential** May accumulate in soil and water systems.

**12.4. Mobility in soil**

**Mobility** Highly mobile due to infinite water solubility.

**Ecological information on ingredients.**

\_\_\_\_\_  
**Ethanol**

**Mobility** Highly mobile due to infinite water solubility.

**Propan-2-ol**

**Mobility** Highly volatile.

\_\_\_\_\_  
**Butanone**

**Mobility** Mobile.

**12.5. Results of PBT and vPvB assessment**

**Results of PBT and vPvB** This product does not contain any substances classified as PBT or vPvB. **assessment**

**Ecological information on ingredients.**

**Ethanol** \_\_\_\_\_

**Results of PBT and vPvB assessment**

This product does not contain any substances classified as PBT or vPvB.

**Propan-2-ol** \_\_\_\_\_

**Results of PBT and vPvB assessment**

This product does not contain any substances classified as PBT or vPvB.

**Butanone** \_\_\_\_\_

**Results of PBT and vPvB** This product does not contain any substances classified as PBT or vPvB. **assessment**

**12.6. Other adverse effects**



**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**General information** If this product becomes waste it is to be treated as hazardous waste. Any other constituents

or contaminants in the waste stream must be taken into account when classifying the waste. In the EU, the European Waste Catalogue Code to be assigned is dependant on the processes giving rise to the waste. In the absence of any such processes having taken place EWC 140603\* (other solvents and solvent mixtures) may be used. Hazardous waste must be suitably contained, stored, packaged and transported, see section 7 and 4 for such details. In the UK only waste carriers registered with the Environment Agency may transport waste.

**Disposal methods** Waste and residues must be disposed of in accordance with national regulatory requirements.

## SECTION 14: Transport information

### 14.1. UN number

UN No. (ADR/RID)	1993
UN No. (IMDG)	1993
UN No. (ICAO)	1993
UN No. (ADN)	1993

### 14.2. UN proper shipping name

<b>Proper shipping name</b> (ADR/RID)	FLAMMABLE LIQUID, N.O.S.
<b>Proper shipping name (IMDG)</b>	FLAMMABLE LIQUID, N.O.S.
<b>Proper shipping name (ICAO)</b>	FLAMMABLE LIQUID, N.O.S.
<b>Proper shipping name (ADN)</b>	FLAMMABLE LIQUID, N.O.S.

### 14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID classification code	F1
ADR/RID label	3
IMDG class	3
ICAO class/division	3
ADN class	3

### Transport labels



### 14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ADN packing group	II
ICAO packing group	II

### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant  
No.

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**14.6. Special precautions for user**

<b>EmS</b>	F-E, S-E
<b>ADR transport category</b>	2
<b>Emergency Action Code</b>	+3YE
<b>Hazard Identification Number (ADR/RID)</b>	33
<b>Tunnel restriction code</b>	(D/E)

**14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code**

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**National regulations** Classification, Packaging and Labelling Regulations 1984.  
Highly Flammable Liquid Regulations 1972.  
Health and Safety at Work etc. Act 1974 (as amended).  
The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).

**15.2. Chemical safety assessment**

No chemical safety assessment has been carried out.

**SECTION 16: Other information**

**Abbreviations and acronyms** CLP: Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

**used in the safety data sheet** ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

DNEL: Derived No Effect Level.

PNEC: Predicted No Effect Concentration.

vPvB: Very Persistent and Very Bioaccumulative.

**General information** Please ensure that this Safety Data Sheet is passed onto the relevant person(s) in your company, who are capable of acting on the information given.

**Key literature references and sources for data** Croner's :Substances Hazardous to the Environment.2005. www.msdsolutions.com Sigma

Aldrich msds Dangerous Properties of Industrial Chemicals, 6.edition, N.Sax, 1984. OSHA Air

Contaminants - Permissible Exposure Limits (Title 29). Hazardous Materials, Emergency Response Guidebook, DOT-P 5800.3, 1984. NIOSH/OSHA Pocket Guide to Chemical Hazards, 1978. Chemical Hazards of the Workplace, Proctor & Hughes, Lippincott, 1978 Threshold Limit Values and Biological Exposure Indices for 1985-86. Chemical Safety Data Guide. Bureau of National Affairs, 1985. NFPA49. Hazardous Chemical Data, 1975. The Merck Index, 11. edition, 1989. Handbook of Toxic and Hazardous Chemicals and Carcinogens, Sittig, 1985. Material Safety Data Sheet, Misc. manufacturers. Sigma-Aldrich Library of Chemical Safety Data. Edition 2, 1988. The Condensed Chemical Dictionary, Hawley, 11th. edition, 1987. NIOSH/OSHA Occupational Health Guidelines for Chemical Hazards, 1981. Suspect Chemicals Sourcebook, Roytech Publications, 1985. The Firefighter's Handbook of Hazardous Materials, Maltese Ent. 1984. Emergency Handling of Hazardous Materials in Surface Transportation, 1981. Rapid Guide to Hazardous Chemicals in the Workplace, NI Sax, 1986. IPCS via ILO

**Revision comments** GHS update



**CDA**

**Issued by** Nicola Dobson, Technical Services Supervisor

**Revision date** 11/07/2018

**Revision** 3

**Supersedes date** 23/08/2017

**SDS number** 20942

**SDS status** Approved.

**Hazard statements in full** H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.

**Signature** N Dobson

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.