



SAFETY DATA SHEET

Regal 30

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name Regal 30

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

Identified uses Embalming Chemical

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier The MazWell Group Ltd.
Units 11/14-15 Ardglan Industrial Estate,
Whitchurch, Hampshire,
RG28 7BB, United Kingdom
+44 (0)1256-893883
+44 (0)1256-893868
enquiries@themazwellgroup.com

1.4. Emergency telephone number

Emergency telephone +44 (0)1256 893883 (Mon- Fri 9:00 am - 4:30 pm)

National emergency telephone number National Poisons Information Centre (NPIC):
+353 (0) 1 809 2166 (Public poisons information line - 8am - 10pm daily)
+353 (0) 1 809 2566 (Healthcare Professionals only)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 3 - H226

Health hazards Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 4 - H332 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Muta. 2 - H341 Carc. 1B - H350 Repr. 1B - H360FD STOT SE 2 - H371 STOT SE 3 - H335

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms



Signal word

Danger

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Hazard statements	<p>H226 Flammable liquid and vapour. H301+H311 Toxic if swallowed or in contact with skin. H332 Harmful if inhaled. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H341 Suspected of causing genetic defects. H350 May cause cancer. H360FD May damage fertility. May damage the unborn child. H371 May cause damage to organs . H335 May cause respiratory irritation.</p>
Precautionary statements	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 Do not breathe vapour/ spray. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. 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. P310 Immediately call a POISON CENTER/ doctor. P405 Store locked up. P501 Dispose of contents/ container in accordance with national regulations.</p>
Contains	Formaldehyde, Methanol, Disodium tetraborate decahydrate, Glutaral
Supplementary precautionary statements	<p>P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. 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. P261 Avoid breathing vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P284 [In case of inadequate ventilation] wear respiratory protection. P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell. P302+P352 IF ON SKIN: Wash with plenty of water. P308+P313 IF exposed or concerned: Get medical advice/ attention. P321 Specific treatment (see medical advice on this label). P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor. P362+P364 Take off contaminated clothing and wash it before reuse. P363 Wash contaminated clothing before reuse. P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P403+P235 Store in a well-ventilated place. Keep cool.</p>

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

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Formaldehyde		25 - <50%
CAS number: 50-00-0	EC number: 200-001-8	
Classification		
Acute Tox. 3 - H301		
Acute Tox. 3 - H311		
Acute Tox. 3 - H331		
Skin Corr. 1B - H314		
Eye Dam. 1 - H318		
Skin Sens. 1 - H317		
Muta. 2 - H341		
Carc. 1B - H350		
STOT SE 3 - H335		
Methanol		5 - <10%
CAS number: 67-56-1	EC number: 200-659-6	REACH registration number: 01-2119433307-44-XXXX
Classification		
Flam. Liq. 2 - H225		
Acute Tox. 3 - H301		
Acute Tox. 3 - H311		
Acute Tox. 3 - H331		
STOT SE 1 - H370		
2-Methylpentane-2,4-diol		2.5 - <3%
CAS number: 107-41-5	EC number: 203-489-0	
Classification		
Skin Irrit. 2 - H315		
Eye Irrit. 2 - H319		
Disodium tetraborate decahydrate		0.5 - <1%
CAS number: 1330-43-4	EC number: 215-540-4	
Classification		
Eye Irrit. 2 - H319		
Repr. 1B - H360FD		

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Glutaral	0.5 - <1%
CAS number: 111-30-8	EC number: 203-856-5
M factor (Acute) = 1	
Classification	
Acute Tox. 3 - H301	
Acute Tox. 2 - H330	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Resp. Sens. 1 - H334	
Skin Sens. 1A - H317	
STOT SE 3 - H335	
Aquatic Acute 1 - H400	
Aquatic Chronic 2 - H411	
Sodium hydroxide	<0.025%
CAS number: 1310-73-2	EC number: 215-185-5
Classification	
Met. Corr. 1 - H290	
Skin Corr. 1A - H314	
Eye Dam. 1 - H318	

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Get medical attention immediately.
Ingestion	Rinse nose and mouth with water. Do not induce vomiting unless under the direction of medical personnel. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention immediately.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes and get medical attention.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Suspected of causing genetic defects. May cause cancer. The product contains a sensitising substance.
Inhalation	Chemical burns. May cause respiratory irritation. Symptoms following overexposure may include the following: Headache. Nausea, vomiting.
Ingestion	Causes burns. May cause stomach pain or vomiting. Ingestion of large amounts may cause unconsciousness.

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Skin contact	Causes burns. May cause an allergic skin reaction.
Eye contact	Contact with concentrated chemical may very rapidly cause severe eye damage, possibly loss of sight.

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

Notes for the doctor	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Very toxic gases or vapours. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.

Hazardous combustion products Carbon dioxide (CO₂). Carbon monoxide (CO). Formic acid Hydrocarbons.

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions No action shall be taken without appropriate training or involving any personal risk. Wear protective clothing as described in Section 8 of this safety data sheet. If ventilation is inadequate, suitable respiratory protection must be worn. Avoid inhalation of vapours and contact with skin and eyes.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains and the aquatic environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all sources of ignition. Provide adequate ventilation. For personal protection, see Section 8. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Dispose of contents/container in accordance with national regulations.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Usage precautions Read and follow manufacturer's recommendations. Pregnant or breastfeeding women should not work with this product if there is any risk of exposure. Eye wash facilities and emergency shower must be available when handling this product. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Use suitable respiratory protection if ventilation is inadequate.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product. Take off immediately all contaminated clothing and wash it before reuse. Wash promptly if skin becomes contaminated.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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

Formaldehyde

Long-term exposure limit (8-hour TWA): WEL 2 ppm 2.5 mg/m³

Short-term exposure limit (15-minute): WEL 2 ppm 2.5 mg/m³

Methanol

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³

Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³

Sk

2-Methylpentane-2,4-diol

Long-term exposure limit (8-hour TWA): WEL 25 ppm 123 mg/m³

Short-term exposure limit (15-minute): WEL 25 ppm 123 mg/m³

Disodium tetraborate decahydrate

Long-term exposure limit (8-hour TWA): WEL 1 mg/m³

Glutaral

Long-term exposure limit (8-hour TWA): WEL 0.05 ppm 0.2 mg/m³

Short-term exposure limit (15-minute): WEL 0.05 ppm 0.2 mg/m³

Sen

Sodium hydroxide

Short-term exposure limit (15-minute): WEL 2 mg/m³

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through the skin.

Sen = Capable of causing occupational asthma.

Methanol (CAS: 67-56-1)

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DNEL

Workers - Inhalation; Long term systemic effects, local effects: 130 mg/m³
 Workers - Inhalation; Short term systemic effects, local effects: 130 mg/m³
 Workers - Dermal; Long term systemic effects: 20 mg/kg/day
 Workers - Dermal; Short term systemic effects: 20 mg/kg/day
 General population - Inhalation; Long term systemic effects, local effects: 26 mg/m³
 General population - Inhalation; Short term systemic effects, local effects: 26 mg/m³
 General population - Dermal; Long term systemic effects: 4 mg/kg/day
 General population - Dermal; Short term systemic effects: 4 mg/kg/day
 General population - Oral; Long term systemic effects: 4 mg/kg/day
 General population - Oral; Short term systemic effects: 4 mg/kg/day

PNEC

Fresh water; 20.8 mg/l
 Fresh water, Intermittent release; 1540 mg/l
 marine water; 2.08 mg/l
 STP; 100 mg/l
 Sediment (Freshwater); 77 mg/kg
 Sediment (Marinewater); 7.7 mg/kg
 Soil; 100 mg/kg

Sodium benzoate (CAS: 532-32-1)

DNEL

Workers - Inhalation; Long term systemic effects: 3 mg/m³
 Workers - Inhalation; Long term local effects: 0.1 mg/m³
 Workers - Dermal; Long term systemic effects: 62.5 mg/kg/day
 General population - Inhalation; Long term systemic effects: 1.5 mg/m³
 General population - Inhalation; Long term local effects: 0.06 mg/m³
 General population - Dermal; Long term systemic effects: 31.25 mg/kg/day
 General population - Oral; Long term systemic effects: 16.6 mg/kg/day

PNEC

Fresh water; 0.13 mg/l
 Fresh water, Intermittent release; 0.305 mg/l
 marine water; 0.013 mg/l
 STP; 10 mg/l
 Sediment (Freshwater); 1.76 mg/kg
 Sediment (Marinewater); 0.176 mg/kg
 Soil; 0.276 mg/kg

Linalool (CAS: 78-70-6)

DNEL

Workers - Inhalation; Long term systemic effects: 2.8 mg/m³
 Workers - Inhalation; Short term systemic effects: 16.5 mg/m³
 Workers - Dermal; Long term systemic effects: 2.5 mg/kg/day
 Workers - Dermal; Short term systemic effects: 5 mg/kg/day
 Workers - Dermal; Long term local effects: 3 mg/cm²
 Workers - Dermal; Short term local effects: 3 mg/cm²
 General population - Inhalation; Long term systemic effects: 0.7 mg/m³
 General population - Inhalation; Short term systemic effects: 4.1 mg/m³
 General population - Dermal; Long term systemic effects: 1.25 mg/kg/day
 General population - Dermal; Short term systemic effects: 2.5 mg/kg/day
 General population - Dermal; Long term local effects: 1.5 mg/cm²
 General population - Dermal; Short term local effects: 1.5 mg/cm²
 General population - Oral; Long term systemic effects: 0.2 mg/kg/day
 General population - Oral; Short term systemic effects: 1.2 mg/kg/day

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PNEC	Fresh water; 0.2 mg/l
	Fresh water, Intermittent release; 2 mg/l
	marine water; 0.02 mg/l
	STP; 10 mg/l
	Sediment (Freshwater); 2.22 mg/kg
	Sediment (Marinewater); 0.222 mg/kg
	Soil; 0.327 mg/kg

8.2. Exposure controls

Appropriate engineering controls	Provide adequate general and local exhaust ventilation. Use explosion-proof general and local exhaust ventilation.
Eye/face protection	Wear tight-fitting, chemical splash goggles or face shield. Personal protective equipment for eye and face protection should comply with European Standard EN166.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. To protect hands from chemicals, gloves should comply with European Standard EN374.
Other skin and body protection	Wear suitable protective clothing as protection against splashing or contamination.
Hygiene measures	Do not eat, drink or smoke when using this product. Eye wash facilities and emergency shower must be available when handling this product. Wash promptly if skin becomes contaminated.
Respiratory protection	Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked.
Environmental exposure controls	Keep container tightly sealed when not in use. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Orange. Pink.
Odour	Pungent. Slight. Perfume.
Odour threshold	Not available.
pH	pH (concentrated solution): 8-9
Melting point	Not available.
Initial boiling point and range	83-85°C/181-185°F
Flash point	53°C/128°F
Evaporation rate	<1 (butyl acetate = 1)
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 7% Upper flammable/explosive limit: 73%

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Vapour pressure	Not available.
Vapour density	>1
Relative density	1.08-1.09
Solubility(ies)	Soluble in water.
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not available.
Explosive properties	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Volatile organic compound This product contains a maximum VOC content of 96% .

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity See the other subsections of this section for further details.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions May polymerise. The following materials may react with the product: Strong oxidising agents.

10.4. Conditions to avoid

Conditions to avoid Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Strong alkalis. Strong mineral acids. Phenols, cresols. Urea.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Formic acid Hydrocarbons.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) Harmful if swallowed.

ATE oral (mg/kg) 266.52

Acute toxicity - dermal

Notes (dermal LD₅₀) Harmful in contact with skin.

ATE dermal (mg/kg) 813.59

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Harmful if inhaled.

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ATE inhalation (gases ppm) 2,522.5

ATE inhalation (vapours mg/l) 32.88

ATE inhalation (dusts/mists mg/l) 28.13

Skin corrosion/irritation

Skin corrosion/irritation Corrosive to skin.

Serious eye damage/irritation

Serious eye damage/irritation Corrosive to skin. Corrosivity to eyes is assumed.

Respiratory sensitisation

Respiratory sensitisation Sensitising.

Skin sensitisation

Skin sensitisation Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Suspected of causing genetic defects.

Carcinogenicity

Carcinogenicity May cause cancer.

Reproductive toxicity

Reproductive toxicity - fertility May damage fertility or the unborn child.

Specific target organ toxicity - single exposure

STOT - single exposure STOT SE 3 - H335

Target organs Respiratory system, lungs

Specific target organ toxicity - repeated exposure

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

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

Toxicological information on ingredients.

Formaldehyde

Acute toxicity - oral

Notes (oral LD₅₀) Toxic if swallowed.

ATE oral (mg/kg) 100.0

Acute toxicity - dermal

Notes (dermal LD₅₀) Toxic in contact with skin.

ATE dermal (mg/kg) 300.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Toxic if inhaled.

ATE inhalation (gases ppm) 700.0

Skin corrosion/irritation

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Animal data	Dose: 1 mL, 20 hours, Rabbit Erythema/eschar score: Moderate to severe erythema (3). Oedema score: Moderate oedema - raised approximately 1 mm (3). REACH dossier information. Corrosive to skin.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Corrosive to skin. Corrosivity to eyes is assumed. Causes serious eye damage.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Mouse: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	
Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Sensitising. REACH dossier information. Epidemiological studies have shown evidence of skin sensitisation.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	DNA damage and/or repair: Positive. REACH dossier information. Suspected of causing genetic defects.
Genotoxicity - in vivo	DNA-protein cross-links (DPC): Positive. REACH dossier information. Suspected of causing genetic defects.
<u>Carcinogenicity</u>	
Carcinogenicity	NOAEC 15 ppm, Inhalation, Mouse May cause cancer.
IARC carcinogenicity	IARC Group 1 Carcinogenic to humans.
NTP carcinogenicity	Known human carcinogen.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Developmental toxicity: - NOAEC: 10 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	STOT SE 3 - H335 May cause respiratory irritation.
Target organs	Respiratory system, lungs
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	LOAEL 82 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Aspiration hazard</u>	
Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.
<u>Methanol</u>	
<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	International Programme on Chemical Safety (IPCS) (1997) Environmental Health Criteria 196: Methanol. Geneva, World Health Organization. Toxic if swallowed.
ATE oral (mg/kg)	100.0
<u>Acute toxicity - dermal</u>	

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Notes (dermal LD₅₀)	Converted acute toxicity point estimate (cATpE) Toxic in contact with skin.
ATE dermal (mg/kg)	300.0
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	Converted acute toxicity point estimate (cATpE) Toxic if inhaled.
ATE inhalation (vapours mg/l)	3.0
<u>Skin corrosion/irritation</u>	
Animal data	Dose: 2.5cm x 2.5cm, 20 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema score: No oedema (0). Not irritating.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Dose: 0.05 ml, 24 hours, Rabbit Not irritating.
<u>Skin sensitisation</u>	
Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	STOT SE 1 - H370
Target organs	Eyes Central nervous system
<u>Disodium tetraborate decahydrate</u>	
<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	REACH dossier information.
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	LD ₅₀ >2000 mg/kg, Dermal, Rabbit REACH dossier information.
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	LC ₅₀ >2.04 mg/l, Inhalation, Rat REACH dossier information.
<u>Skin corrosion/irritation</u>	
Animal data	Dose: 0.5g, 24 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema score: No oedema (0). REACH dossier information.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Dose: 0.08 mL, 14 days, Rabbit REACH dossier information.
<u>Skin sensitisation</u>	
Skin sensitisation	Buehler test - Guinea pig: Not sensitising. REACH dossier information.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	DNA damage and/or repair: Negative. REACH dossier information.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information.
<u>Carcinogenicity</u>	
Carcinogenicity	NOAEL >5000 ppm, Oral, Mouse REACH dossier information.
<u>Reproductive toxicity</u>	

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Reproductive toxicity - fertility Three-generation study - NOEL 100 mg/kg/day, Oral, Rat F1 REACH dossier information. May damage fertility.

Reproductive toxicity - development Developmental toxicity: - NOEL: 55 mg/kg/day, Oral, Rat REACH dossier information. May damage the unborn child.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOEL 100 mg/kg/day, Oral, Rat REACH dossier information.

Glutaral

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 154.0

Species Rat

Notes (oral LD₅₀) REACH dossier information. Toxic if swallowed.

ATE oral (mg/kg) 154.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,001.0

Species Rabbit

Notes (dermal LD₅₀) REACH dossier information. Based on available data the classification criteria are not met.

ATE dermal (mg/kg) 2,001.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 0.28

Species Rat

Notes (inhalation LC₅₀) REACH dossier information. Toxic if inhaled.

ATE inhalation (dusts/mists mg/l) 0.28

Skin corrosion/irritation

Animal data Dose: 0.5 mL, 4 hours, Rabbit Erythema/eschar score: Well defined erythema (2). Oedema score: Moderate oedema - raised approximately 1 mm (3). REACH dossier information. Corrosive.

Serious eye damage/irritation

Serious eye damage/irritation Corrosive to skin. Corrosivity to eyes is assumed.

Respiratory sensitisation

Respiratory sensitisation Sensitising.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Sensitising. REACH dossier information. Epidemiological studies have shown evidence of skin sensitisation.

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Germ cell mutagenicity

Genotoxicity - in vitro Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity NOAEL 100 ppm, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Two-generation study - NOAEL 2000 ppm, Oral, Rat P REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity - development Maternal toxicity: - NOAEL: 50 ppm, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

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 NOAEL 50 ppm, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Toxicity The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

Ecological information on ingredients.

Formaldehyde

Toxicity Based on available data the classification criteria are not met.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 6.7 mg/l, Striped bass (*Morone saxatilis*)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 5.8 mg/l, *Daphnia pulex*

Acute toxicity - aquatic plants EC₅₀, 72 hours: 3.48 mg/l, *Scenedesmus subspicatus*

Methanol

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 15400 mg/l, *Lepomis macrochirus* (Bluegill)
EC₅₀, 96 hours: 12700 mg/l, *Lepomis macrochirus* (Bluegill)

Acute toxicity - aquatic invertebrates EC₅₀, 96 hours: 18260 mg/l, *Daphnia magna*

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Acute toxicity - aquatic plants EC₅₀, 96 hours: ~ 22000 mg/l, Pseudokirchneriella subcapitata

Acute toxicity - microorganisms IC₅₀, 3 hours: >1000 mg/l, Activated sludge

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOEC, 200 hours: 7900 mg/l, Oryzias latipes (Red killifish)
Weight of evidence.

Disodium tetraborate decahydrate

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 74 mg/l, Limanda limanda (common dab)

Acute toxicity - aquatic invertebrates LC₅₀, 96 hours: 147 mg/l, Legumia recta (Black sandshell mussel)

Acute toxicity - aquatic plants EC₅₀, 72 hours: 40.2 mg/l, Selenastrum capricornutum

Glutaral

Toxicity Aquatic Acute 1 - H400 Very toxic to aquatic life.

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC₅₀, 96 hours: 13 mg/l, Lepomis macrochirus (Bluegill)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 14.87 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 0.75 mg/l, Scenedesmus subspicatus

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Ecological information on ingredients.

Formaldehyde

Persistence and degradability The product is biodegradable.

Phototransformation Water - DT₅₀ : 1.7 days
Estimated value.

Methanol

Phototransformation Air - DT₅₀ : 17.2 days

Regal 30

Biodegradation	Water - Degradation (95%): 20 days
	Water - Degradation (91%): 15 days
	Water - Degradation (88%): 10 days
	Water - Degradation (76%): 5 days
	The substance is readily biodegradable.

Disodium tetraborate decahydrate

Persistence and degradability	The degradability of the product is not known.
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Glutaral

Persistence and degradability	The product is readily biodegradable.
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Phototransformation	Water - DT ₅₀ : 8.2 hours Estimated value.
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Biodegradation	Water - Degradation > 90%: 28 days
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12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

Ecological information on ingredients.

Formaldehyde

Bioaccumulative potential BCF: <1, *Litopenaeus stylirostris* (blue shrimp) : ,

Partition coefficient log Pow: 0.35

Methanol

Bioaccumulative potential BCF: 4.5, *Cyprinus carpio* (Common carp)

Partition coefficient log Pow: -0.77

Disodium tetraborate decahydrate

Bioaccumulative potential BCF: 0.7-1.4, *Crassostrea gigas* (Pacific oyster)

Partition coefficient log Pow: -1.53

Glutaral

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Pow: -0.36

12.4. Mobility in soil

Mobility The product is soluble in water.

Ecological information on ingredients.

Formaldehyde

Regal 30

Mobility	The product is soluble in water.
Adsorption/desorption coefficient	- log Koc: 1.202 @ °C Estimated value.
Henry's law constant	0.034 Pa m ³ /mol @ 25°C
Surface tension	69.9 mN/m @ 25°C

Methanol

Mobility	Mobile.
Adsorption/desorption coefficient	Soil - Koc: 0.13-0.61 @ 6°C
Henry's law constant	0.461 Pa m ³ /mol @ 25°C

Disodium tetraborate decahydrate

Mobility	Soluble in water.
Surface tension	71 mN/m @ 23°C

Glutaral

Mobility	The product is miscible with water and may spread in water systems.
Adsorption/desorption coefficient	Water - log Koc: 0.76-3.32 @ 25°C
Henry's law constant	0.011 Pa m ³ /mol @ 25°C Estimated value.
Surface tension	68 mN/m @ 20°C

12.5. Results of PBT and vPvB assessment

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

Ecological information on ingredients.

Formaldehyde

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Methanol

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Disodium tetraborate decahydrate

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Glutaral

Regal 30

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Empty containers must not be punctured or incinerated because of the risk of an explosion. The packaging must be empty (drop-free when inverted). Dispose of contents/container in accordance with national regulations.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	2924
UN No. (IMDG)	2924
UN No. (ICAO)	2924
UN No. (ADN)	2924

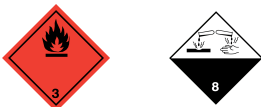
14.2. UN proper shipping name

Proper shipping name (ADR/RID)	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Contains Formaldehyde, Methanol)
Proper shipping name (IMDG)	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Contains Formaldehyde, Methanol)
Proper shipping name (ICAO)	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Contains Formaldehyde, Methanol)
Proper shipping name (ADN)	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Contains Formaldehyde, Methanol)

14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID subsidiary risk	8
ADR/RID classification code	FC
ADR/RID label	3
IMDG class	3
IMDG subsidiary risk	8
ICAO class/division	3
ICAO subsidiary risk	8
ADN class	3
ADN subsidiary risk	8

Transport labels



14.4. Packing group

ADR/RID packing group III

Regal 30

IMDG packing group	III
ICAO packing group	III
ADN packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS	F-E, S-C
ADR transport category	3
Emergency Action Code	•3W
Hazard Identification Number (ADR/RID)	38
Tunnel restriction code	(D/E)

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

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015.
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15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Classification abbreviations and acronyms	Flam. Liq. = Flammable liquid Acute Tox. = Acute toxicity Carc. = Carcinogenicity Eye Dam. = Serious eye damage Eye Irrit. = Eye irritation Muta. = Germ cell mutagenicity Skin Corr. = Skin corrosion Skin Irrit. = Skin irritation STOT RE = Specific target organ toxicity-repeated exposure STOT SE = Specific target organ toxicity-single exposure Skin Sens. = Skin sensitisation
Training advice	Only trained personnel should use this material.
Revision comments	Revised regulations.
Revision date	02/08/2021
Revision	5
Supersedes date	01/04/2021

Regal 30

SDS number	4445
Hazard statements in full	<p>H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H290 May be corrosive to metals. H301 Toxic if swallowed. H311 Toxic in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H330 Fatal if inhaled. H331 Toxic if inhaled. H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H341 Suspected of causing genetic defects. H350 May cause cancer. H360FD May damage fertility. May damage the unborn child. H370 Causes damage to organs . H371 May cause damage to organs . H400 Very toxic to aquatic life. H411 Toxic to aquatic life with long lasting effects.</p>

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.