

## SAFETY DATA SHEET

Safety Data Sheet according to (EC) No. 1907/2006.

**SECTION 1: Identification of the substance/mixture and of the company/ undertaking****1.1. Product identifier:**

REAGENT Y100

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

Aqueous preparation for research and analysis. Restricted to professional users.

**1.3. Details of the supplier of the safety data sheet:**

ChemoMetec A/S

Gydevang 43

Phone: (+45) - 48 13 10 20

DK - 3450 Alleroed

Fax: (+45) - 48 13 10 21

Denmark

e-mail: [contact@chemometec.com](mailto:contact@chemometec.com)Responsible person for the safety data sheet (e-mail): [contact@chemometec.com](mailto:contact@chemometec.com)**1.4. Emergency telephone number:**

NHS (England or Wales): Dial 111 or 0845 4647 NHS 24 (Scotland): Dial 111

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture:**

Environmentally dangerous liquid.

CLP (1272/2008): Aquatic Chronic 2;H411

**2.2. Label elements:**

H411: Toxic to aquatic life with long lasting effects.

P273: Avoid release to the environment.

**2.3. Other hazards:** None known.

PBT/vPvB: No ingredients are PBT/vPvB, according to the criteria in REACH Annex XIII.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures:**

% w/w	Substance name	CAS-no.	EC-no.	Index-no.	REACH reg.no.	Classification
<1	Cetylpyridinium chloride, monohydrate	6004-24-6	204-593-9*	-	-	Acute Tox. 3;H301 Acute Tox. 2;H330 Eye Irrit. 2;H319 STOT SE 3;H335 Skin Irrit. 2;H315 Aquatic Acute 1;H400 (M=10) Aquatic Chronic 1;H410 (M=10)
<0.5	Octylphenol Ethoxylate (Triton X-100)	9002-93-1	Polymer	-	-	Acute Tox. 4;H302 Eye Dam.1;H318 Aquatic Chronic 2;H411

\* EC-no (EINECS) corresponds to the CAS-no for the anhydrous compound.

Wording of hazard statements - see section 16.

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**SECTION 4: First-aid measures**

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**4.1. Description of first aid measures:**

Inhalation: Move the affected person to fresh air. Keep at rest. If needed: Get medical attention.

Skin contact: Remove contaminated clothing and wash skin with water and mild soap. If irritation persists: Seek medical advice.

Eye contact: Flush with water or physiological salt water for at least 5 minutes, holding eyelids open; remember to remove contact lenses, if any. If irritation persists: Seek medical advice.

Ingestion: Rinse mouth and drink plenty of water. In case of discomfort: Seek medical advice.

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

May cause slight irritation of skin, eyes, lungs and gastrointestinal tract.

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

Show this safety data sheet to a physician or emergency ward.

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**SECTION 5: Fire-fighting measures**

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**5.1. Extinguishing media:**

Not flammable.

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

Not relevant. The product is not combustible.

**5.3. Advice for firefighters:**

When extinguishing surrounding fires use breathing apparatus with an independent source of air.

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**SECTION 6: Accidental release measures**

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**6.1. Personal precautions, protective equipment and emergency procedures:**

Use personal protective equipment - see section 8.

**6.2. Environmental precautions:**

Do not empty into drains – see section 12. Inform appropriate authorities in accordance with local regulations.

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

Take up with wet paper. Clean with water. Further handling of spillage - see section 13.

**6.4. Reference to other sections:**

See references above.

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**SECTION 7: Handling and storage**

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**7.1. Precautions for safe handling:**

Provide adequate ventilation. Avoid contact with skin, eyes and clothing. After work, wash hands with water and mild soap. Required

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

Store cool and dry in a tightly closed original container.

**7.3. Specific end use(s):**

See section 1.

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**SECTION 8: Exposure controls/Personal protection**

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**8.1. Control parameters:**

Occupational exposure limits (EH40/2005 with later amendments): None

DNEL/PNEC: No CSR.

**8.2. Exposure controls:**

Appropriate engineering controls: None particular.

Personal protective equipment:

Inhalation: Respiratory equipment is normally not required

Skin: Wear protective gloves of nitrile or butyl rubber (EN374). Breakthrough time: Approximately 3 hours.

Eyes: Wear safety goggles (EN166) when risk of eye contact.

Environmental exposure controls: None particular.

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## SECTION 9: Physical and chemical properties

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

Appearance:	Colourless liquid
Odour:	Odourless
Odour threshold:	No available data
pH:	6.9 – 7.1
Melting point / freezing point (°C):	~ 0
Initial boiling point and boiling range (°C):	~ 100
Decomposition temperature (°C):	No available data
Flash point (°C):	No available data
Evaporation rate:	No available data
Flammability (solid, gas):	No available data
Upper/lower flammability or explosive limits (vol.-%):	No available data
Vapour pressure (mbar, 25°C):	No available data
Vapour density (air=1):	No available data
Relative density (g/ml):	~ 1.0
Solubility:	Completely soluble in water
Partition coefficient: n-octanol/water, Log K <sub>ow</sub> :	No available data
Auto-ignition temperature (°C):	No available data
Viscosity:	No available data
Explosive properties:	Not relevant
Oxidising properties:	Not relevant
<b>9.2. Other information:</b>	None relevant

## SECTION 10: Stability and reactivity

### 10.1. Reactivity:

No available data.

### 10.2. Chemical stability:

Stable under the recommended storage conditions - see section 7.

### 10.3. Possibility of hazardous reactions:

None known.

### 10.4. Conditions to avoid:

Excessive heating.

### 10.5. Incompatible materials:

None known.

### 10.6. Hazardous decomposition products:

When heated to high temperatures (decomposition) toxic gasses are formed.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects:

Hazard class	Data	Test	Data source
Acute toxicity:			
Inhalation	LC <sub>50</sub> (rat) = 0.09 mg/l, dust (Cetylpyridinium chloride)	No info	RTECS
Dermal	No available data.	-	-
Oral	LD <sub>50</sub> (rat) = 200 mg/kg (Cetylpyridinium chloride) LD <sub>50</sub> (oral, rat) = 1800 mg/kg (Octylphenol ethoxylate)	No info OECD 401	Litt. RTECS
Corrosion/irritation:	Severe irritation, eye and skin, rodents (Cetylpyridinium chloride) Moderate irritation, 10 µl/24H, eye, rabbit (Octylphenol ethoxylate)	Several Draize	Litt. RTECS
Sensitization:	No skin sensitization, guinea pig (Cetylpyridinium chloride)	No info	Litt.
CMR:	No carcinogenicity nor mutagenicity. TD <sub>Lo</sub> (rat) = 5,7 mg/kg (2W after mating): "Effects on newborn" (Octylphenol ethoxylate)	No info No info	Litt. RTECS

Information on likely routes of exposure: Skin, lungs and gastrointestinal tract.

Symptoms:

Inhalation: Vapours may cause slight irritation to the airways. Dust causes strong irritation with coughing and shortness of breath.

Skin: May cause slight irritation by prolonged contact with skin.

Eyes: May cause slight irritation with redness.

Ingestion: May cause irritation of the gastrointestinal tract, nausea, vomiting and headache.

Chronic effects: Long term or repeated skin contact may degrease and cause red, dry, cracked and thickened skin.

## SECTION 12: Ecological information

### 12.1. Toxicity:

Cetylpyridinium chloride is very toxic and octylphenol ethoxylate is toxic to the aquatic environment.

Aquatic	Data	Test (Media)	Data source
Fish	LC <sub>50</sub> (Cyprinus carpio, 96h) = 0.011 mg/l (Cetylpyridinium chloride)	No info.	ECB
	LC <sub>50</sub> (Pimephales promelas, 96h) = 4.5 mg/l (Octylphenol ethoxylate)	No info.	EPA Ecotox
Daphnia	LC <sub>50</sub> (Daphnia magna, 48h) = 11.2 mg/l (Octylphenol ethoxylate)	No info.	EPA Ecotox
Algae	No available data.	-	-

### 12.2. Persistence and degradability:

Cetylpyridinium chloride: 25% degraded in 28 d. (OECD 301D) - Not readily degradable.

Biological degradation of Octylphenol ethoxylate may form Octylphenol, which is toxic and not readily degradable.

### 12.3. Bioaccumulative potential:

Cetylpyridinium chloride: Log K<sub>ow</sub> = 1.71 – possible bioaccumulation.

Octylphenol ethoxylate: Log K<sub>ow</sub> = 4.86 – possible significant bioaccumulation.

### 12.4. Mobility in soil:

Octylphenol ethoxylate: K<sub>oc</sub> = 800-1800. Low mobility in soil is expected.

### 12.5. Results of PBT and vPvB assessment:

No ingredients are PBT/vPvB, according to the criteria in REACH Annex XIII.

### 12.6. Other adverse effects:

Octylphenol ethoxylate is included on the Danish Environmental Agency list of undesirable substances, because of the oestrogenic effect of its degradation compounds.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods:

The mixture is to be considered as hazardous waste. Disposal should be according to local, state or national legislation. Dispose of through authority facilities or pass to chemical disposal company.

### EWC-code:

16 05 08 (mixture itself)

15 02 02 (Paper towel, inert material etc. contaminated with the mixture)

## SECTION 14: Transport information

IATA: Special provision A197 exempts product shipped in quantities of ≤ 5 L or 5 kg per package to regulation other than specific packaging provisions.

14.1. UN-no.: 3082

14.2. UN proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cetylpyridinium chloride)

14.3. Transport hazard class(es): 9

14.4. Packing group: III

14.5. Environmental hazards: Yes

14.6. Special precautions for user: No

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code: Not relevant.

## SECTION 15: Regulatory information

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

Octylphenol ethoxylate is listed in COM (1999) 706 (EU): Community Strategy for Endocrine Disrupters a range of substances suspected of interfering with the hormone systems of humans and wildlife

Octylphenol ethoxylate (4-Nonylphenol, branched and linear, ethoxylated) is included in REACH Annex XIV, substances subject to authorisation, However, R & D substances are exempted from this authorization.

### 15.2. Chemical Safety Assessment:

No CSR.

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**SECTION 16: Other information**

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**Hazard statements mentioned in section 3:**

H301: Toxic if swallowed.

H302: Harmful if swallowed.

H330: Fatal if inhaled.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

H411: Toxic to aquatic life with long lasting effects.

**Abbreviations:**

CMR = Carcinogenicity, mutagenicity and reproductive toxicity.

CSR = Chemical Safety Report

DNEL = Derived No-Effect Level

PBT = Persistent, Bioaccumulative, Toxic

PNEC = Predicted No-Effect Concentration

vPvB = very Persistent, very Bioaccumulative

**Literature:**

ECB = European Chemicals Bureau

EPA Ecotox = US Environmental Protection Agency

RTECS = Register of Toxic Effects of Chemical Substances

**Other information:**

The classification and labelling of the mixture is based on the M-factor for Cetylpyridinium monohydrate.

**Training advice:**

No special training is required. However, the user should be well instructed in the execution of his/her task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.

**Other information:**

Prepared based on the information available to Alttox A/S August 2018

**Changes since the previous edition:**

Section 4.2 and 15