

# SAFETY DATA SHEET

according to Regulation (EC) No.1907/2006

Version 2.0 Revision Date 07.25.2011

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## Material Safety Data Sheet

# Polyquaternium-10 msds

### Section 1: Identification of the Substance/Preparation and of the Company/Undertaking

#### Identification of the substance or preparation

**Product Name** : Polyquaternium-10  
**INCI Name** : Polyquaternium-10  
**Synonyms** : Cellulose, 2-(2-hydroxy-3-(trimethylammonium)propoxy)ethyl ether, chloride  
**CAS#** : 81859-24-7 / 53568-66-4 / 54351-50-7 / 55353-19-0 / 68610-92-4  
**EINECS/ELINCS** : \*617-262-2 / \*611-015-2 / - / - / \*614-667-6

#### Company/undertaking identification

##### **M.C.Biotec Inc.**

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### Section 2: Hazards Identification

#### **Classification of the substance or mixture**

According to Regulation (EC) No1272/2008

Skin irritation (Category 2)

Eye irritation (Category 2)

Specific target organ toxicity - single exposure (Category 3)

According to European Directive 67/548/EEC as amended.

Irritating to eyes, respiratory system and skin.

#### **Label elements**

##### **Pictogram**



##### **Signal word**

Warning

##### **Hazard statement(s)**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

##### **Precautionary statement(s)**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

<b>Hazard symbol(s)</b>																			
<b>Xi</b>	Irritant																		
<b>R-phrase(s)</b>																			
R36/37/38	Irritating to eyes, respiratory system and skin.																		
<b>S-phrase(s)</b>																			
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.																		
S36	Wear suitable protective clothing.																		
<b>Section 3: Composition and Information on Ingredients</b>																			
<b>Synonyms:</b> Cellulose, 2-(2-hydroxy-3-(trimethylammonium)propoxy)ethyl ether, Chloride																			
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For the full text of the H-Statements mentioned in this Section, see Section 16.																			
<b>Section 4: First Aid Measures</b>																			
<b>Eyes Contact</b>	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.																		
<b>Skin Contact</b>	After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.																		
<b>Ingestion</b>	Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.																		
<b>Additional Information</b>	Note to physician: Treat symptomatically.																		
<b>Section 5: Fire Fighting Measures</b>																			
Suitable extinguishing media																			
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.																			
Special protective equipment for fire-fighters																			
Wear self contained breathing apparatus for fire fighting if necessary.																			
<b>Section 6: Accidental Release Measures</b>																			
<b>Small Spill:</b>																			
Use appropriate tools to put the spilled solid in a convenient waste disposal container. If necessary: Neutralize the																			

residue with a dilute solution of sodium carbonate. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:**

Use a shovel to put the material into a convenient waste disposal container. Neutralize the residue with a dilute solution of sodium carbonate. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

**Section 7: Handling and Storage**

**Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

**Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place.  
 Store in cool place.

**Section 8: Exposure Controls/Personal Protection**

**Engineering Controls:**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:**

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not available.

**Section 9: Physical and Chemical Properties**

**Appearance**

Form	Powder
Color	Almost white or pale yellow

**Safety data**

pH ( 2%, 25°C )	5.5-6.5
Viscosity (2%, 25°C, mPa.s)	300-500
Melting point	290 °C - lit.
Boiling point	N/A
Flash point	N/A
Ignition temperature	N/A

Lower explosion limit	N/A
Upper explosion limit	N/A
Water solubility	solubility in water (normal temperature)
*N/A: no data available	
<b>Section 10: Stability and Reactivity</b>	
<b>Chemical stability</b>	
Stable under recommended storage conditions.	
<b>Conditions to avoid</b>	
no data available	
<b>Hazardous decomposition products</b>	
Hazardous decomposition products formed under fire conditions. - Carbon oxides	
<b>Section 11: Toxicological Information</b>	
<b>Acute toxicity</b>	
no data available	
<b>Skin corrosion/irritation</b>	
no data available	
<b>Serious eye damage/eye irritation</b>	
no data available	
<b>Respiratory or skin sensitization</b>	
no data available	
<b>Germ cell mutagenicity</b>	
no data available	
<b>Carcinogenicity</b>	
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.	
<b>Reproductive toxicity</b>	
no data available	
<b>Specific target organ toxicity - single exposure</b>	
Inhalation - May cause respiratory irritation.	
<b>Specific target organ toxicity - repeated exposure</b>	
no data available	
<b>Aspiration hazard</b>	
no data available	
<b>Potential health effects</b>	
<b>Inhalation</b>	May be harmful if inhaled. Causes respiratory tract irritation.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Skin</b>	May be harmful if absorbed through skin. Causes skin irritation.
<b>Eyes</b>	Causes serious eye irritation.
<b>Signs and Symptoms of Exposure</b>	
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.	

<b>Additional Information</b> RTECS: no data available												
<b>Section 12: Ecological Information</b>												
<b>Toxicity</b> no data available <b>Persistence and degradability</b> no data available <b>Bioaccumulative potential</b> no data available <b>Mobility in soil</b> no data available <b>PBT and vPvB assessment</b> no data available <b>Other adverse effects</b> no data available												
<b>Section 13: Disposal Considerations</b>												
<b>Product</b> Offer surplus and non-recyclable solutions to a licensed disposal company. <b>Contaminated packaging</b> Dispose of as unused product.												
<b>Section 14: Transport Information</b>												
<b>DOT (US)</b> Not dangerous goods <b>IMDG</b> Not dangerous goods <b>IATA</b> Not dangerous goods												
<b>Section 15: Regulatory Information</b>												
Registry information: This product is not hazardous.												
<b>Section 16: Other Information</b>												
<b>Text of H-code(s) and R-phrase(s) mentioned in Section 3</b> <table border="0" style="width: 100%;"> <tr> <td style="padding-right: 20px;">Eye Irrit.</td> <td>Eye irritation</td> </tr> <tr> <td>H315</td> <td>Causes skin irritation.</td> </tr> <tr> <td>H319</td> <td>Causes serious eye irritation.</td> </tr> <tr> <td>H335</td> <td>May cause respiratory irritation.</td> </tr> <tr> <td>Skin Irrit.</td> <td>Skin irritation</td> </tr> <tr> <td>STOT SE</td> <td>Specific target organ toxicity - single exposure</td> </tr> </table>	Eye Irrit.	Eye irritation	H315	Causes skin irritation.	H319	Causes serious eye irritation.	H335	May cause respiratory irritation.	Skin Irrit.	Skin irritation	STOT SE	Specific target organ toxicity - single exposure
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**Disclaimer**

*The information above is based on our present knowledge. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. Users should make their own investigations to determine the suitability of the information for their particular purposes.*

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