

Safety Data Sheet Dow Chemical Company Ltd

Product Name: CELLOSIZE (TM) HYDROXYETHYL CELLULOSE Revision Date: 2011/03/04

QP-3L

Print Date: 17 Feb 2014

Dow Chemical Company Ltd encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

Section 1. Identification of the substance/preparation and of the company/undertaking

1.1 Product identifiers

Product Name

CELLOSIZE ™ HYDROXYETHYL CELLULOSE QP-3L

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

Thickener. Film former. Stabiliser. Protective colloid. Binder. We recommend that you use this product in a manner consistent with the listed use. If your intended use is not consistent with the stated use, please contact your sales or technical service representative.

1.3 Details of the supplier of the safety data sheet

COMPANY IDENTIFICATION

Dow Chemical Company Ltd Diamond House, Lotus Park Kingsbury Crescent TW18 3AG Staines, Middlesex United Kingdom

Customer Information Number: 0203 139 4000

SDSQuestion@dow.com

1.4 EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact: 0031 115 694 982 **Local Emergency Contact:** 00 31 115 69 4982

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to EU Directives 67/548/EEC or 1999/45/EC

This product is not classified as dangerous according to EC criteria.

2.2 Label elements

®(TM)*Trademark

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Labelling according to EC Directives

This product is not classified as dangerous according to EC criteria.

Safety data sheet available for professional users on request.

2.3 Other Hazards

No information available.

Section 3. Composition/information on ingredients

3.2 Mixture

This product is a mixture.

CAS-No. / EC-No. / Index	REACH No.	Amount	Component	Classification: REGULATION (EC) No 1272/2008
CAS-No. 9004-62-0 EC-No. Polymer	_	>= 86.0 %	Hydroxyethyl cellulose##	Not classified
CAS-No. 127-09-3 EC-No. 204-823-8	_	<= 7.5 %	Sodium acetate##	Not classified
CAS-No. 7732-18-5 EC-No. 231-791-2	_	<= 5.0 %	Water##	Not classified
CAS-No. 9004-34-6 EC-No. 232-674-9	_	<= 1.5 %	Cellulose#	Not classified

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EC-No. 232-674-9

Substance(s) with an Occupational Exposure Limit.

Voluntarily disclosed component(s).

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4. First-aid measures

4.1 Description of first aid measures

General advice: If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: Move person to fresh air; if effects occur, consult a physician.

Skin Contact: Wash skin with plenty of water.

Eye Contact: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist. May cause injury due to mechanical action.

Ingestion: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

4.2 Most important symptoms and effects, both acute and delayed

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), no additional symptoms and effects are anticipated.

4.3 Indication of immediate medical attention and special treatment needed

No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

Section 5. Fire Fighting Measures

5.1 Extinguishing Media

Water. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers.

5.2 Special hazards arising from the substance or mixture

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

Unusual Fire and Explosion Hazards: Do not permit dust to accumulate. When suspended in air dust can pose an explosion hazard. Minimize ignition sources. If dust layers are exposed to elevated temperatures, spontaneous combustion may occur. Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, electrically bond and ground equipment and do not permit dust to accumulate. Dust can be ignited by static discharge.

5.3 Advice for firefighters

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. Cool surroundings with water to localize fire zone. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires. Dust explosion hazard may result from forceful application of fire extinguishing agents.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

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Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures: Material becomes slippery when wet. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

- **6.2 Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.
- **6.3 Methods and materials for containment and cleaning up:** Sweep up. Use care to minimize generation of airborne dust. Do not use water for cleanup. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

Section 7. Handling and Storage

7.1 Precautions for safe handling Handling

General Handling: Avoid contact with eyes. Wash thoroughly after handling. Good housekeeping and controlling of dusts are necessary for safe handling of product. No smoking, open flames or sources of ignition in handling and storage area. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Keep away from heat, sparks and flame. Powdered material may form explosive dust-air mixture. Keep container closed. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

7.2 Conditions for safe storage, including any incompatibilities Storage

Store in a dry place. Protect from atmospheric moisture.

Shelf life: Use within 36 Months

7.3 Specific end uses

See the technical data sheet on this product for further information.

Section 8. Exposure Controls / Personal Protection

8.1 Control parameters Exposure Limits

Component	List	Type	Value
Cellulose	Ireland OELV	TWA Respirable dust.	4 mg/m3
	Ireland OELV	TWA Total inhalable dust.	10 mg/m3
	Ireland OELV	STEL Total inhalable dust.	20 mg/m3
	ACGIH	TWA	10 mg/m3
	UK WEL	TWA Inhalable dust.	10 mg/m3
	UK WEL	TWA Respirable dust.	4 mg/m3

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UK WEL STEL

20 mg/m3

Inhalable dust.

8.2 Exposure controls

Personal Protection

Eye/Face Protection: Use safety glasses (with side shields). Safety glasses (with side shields) should be consistent with EN 166 or equivalent. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles. Chemical goggles should be consistent with EN 166 or equivalent.

Skin Protection: Wear clean, body-covering clothing.

Hand protection: Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). When prolonged or frequently repeated contact may occur, a glove is recommended to prevent contact with the solid material. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Respiratory Protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. In dusty or misty atmospheres, use an approved particulate respirator. Use the following CE approved airpurifying respirator: Particulate filter, type P2.

Ingestion: Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

Engineering Controls

Ventilation: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

Section 9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance

Physical State Powder
Color White
Odor Mild

Odor ThresholdNo test data availablepH6.0 - 7.0 LiteratureMelting PointNo test data availableFreezing PointNot applicable

Boiling Point (760 mmHg)
Flash Point - Closed Cup
Evaporation Rate (Butyl

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

Acetate = 1)

Flammability (solid, gas) No

Flammable Limits In Air

Lower: No test data available
Upper: No test data available

Vapor Pressure
Vapor Density (air = 1)
Specific Gravity (H2O = 1)
Not applicable
Not applicable
0.4 - 0.6 Literature

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Solubility in water (by

completely miscible with water

weight)

Partition coefficient, n-

No data available for this product.

octanol/water (log Pow) Autoignition Temperature

> 400 °C *Literature*No test data available

Decomposition Temperature

Kinematic Viscosity

Explosive properties

Oxidizing properties

Not applicable
no data available
no data available

9.2 Other information

Section 10. Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Thermally stable at typical use temperatures. Hygroscopic.

10.3 Possibility of hazardous reactions

Polymerization will not occur.

10.4 Conditions to Avoid: Avoid temperatures above 200°C (392°F) Exposure to elevated temperatures can cause product to decompose. Avoid static discharge. Avoid moisture.

10.5 Incompatible Materials: Avoid contact with oxidizing materials.

10.6 Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity

Ingestion

Very low toxicity if swallowed. Swallowing may result in gastrointestinal irritation.

Single dose oral LD50 has not been determined.

For the major component(s): Estimated. LD50, Rat > 8,700 mg/kg

Aspiration hazard

Based on physical properties, not likely to be an aspiration hazard.

Dermal

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

The dermal LD50 has not been determined.

Inhalation

Dust may cause irritation to upper respiratory tract (nose and throat). For narcotic effects: No relevant data found.

As product: The LC50 has not been determined.

Eye damage/eye irritation

May cause slight eye irritation. Solid or dust may cause irritation or corneal injury due to mechanical action.

Skin corrosion/irritation

Prolonged exposure not likely to cause significant skin irritation. Repeated contact may cause slight skin irritation with local redness.

Sensitization

Skin

For the major component(s): Did not cause allergic skin reactions when tested in humans.

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Respiratory

No relevant data found.

Repeated Dose Toxicity

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Chronic Toxicity and Carcinogenicity

Similar cellulosics did not cause cancer in long-term animal studies.

Developmental Toxicity

Similar cellulosics did not cause birth defects or other toxic effects to the fetus in laboratory animal studies.

Reproductive Toxicity

In animal studies, a similar cellulosic has been shown not to interfere with reproduction.

Genetic Toxicology

Similar cellulosics were negative in both in vitro and animal genetic toxicity studies.

Component Toxicology - Hydroxyethyl cellulose

Skin Absorption	The dermal LD50 has not been determined. ,		
Skin Absorption	For similar material(s): LD50, Rabbit > 2,000 mg/kg		
Component Toxicology - Sodiui	m acetate		
Skin Absorption	LD50, Rabbit > 10,000 mg/kg		
Component Toxicology - Sodium acetate			
Inhalation	LC50, 1 h, Aerosol, Rat > 30 mg/l		

Section 12. Ecological Information

12.1 Toxicity

For the major component(s): Not expected to be acutely toxic to aquatic organisms. For the minor component(s): Material is not classified as dangerous to aquatic organisms (LC50/EC50/IC50/LL50/EL50 greater than 100 mg/L in most sensitive species).

12.2 Persistence and Degradability

For the major component(s): No appreciable biodegradation is expected. For the minor component(s) Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

12.3 Bioaccumulative potential

Bioaccumulation: Based on information for component(s): Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

12.4 Mobility in soil

Mobility in soil: For the major component(s):, Expected to be relatively immobile in soil (Koc > 5000)., For the minor component(s):, Potential for mobility in soil is very high (Koc between 0 and 50).

12.5 Results of PBT and vPvB assessment

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

12.6 Other adverse effects

No relevant data found.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Any disposal practice must be in compliance with all local and national laws and regulations. Do not dump into any sewers, on the ground, or into any body of water.

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Section 14. Transport Information

ROAD & RAIL

NOT REGULATED

OCEAN

NOT REGULATED

AIR

NOT REGULATED

INLAND WATERWAYS

NOT REGULATED

Section 15. Regulatory Information

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

European Inventory of Existing Commercial Chemical Substances (EINECS)

This product is a polymer according to the definition in Directive 92/32/EEC (7th Amendment to Directive 67/548/EEC) and all of its starting materials and intentional additives are listed in the European Inventory of Existing Commercial Chemical Substances (EINECS) or in compliance with European (EU) chemical inventory requirements.

15.2 Chemical Safety Assessment

Not applicable.

Section 16. Other Information

Hazard statement in the composition section

Product Literature

Additional information on this and other products may be obtained by visiting our web page.

Revision

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Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Dow Chemical Company Ltd urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.