

Safety Data Sheet

Dow Chemical Company Ltd

Safety Data Sheet according to Reg. (EC) N. 453/2010

Product Name: WALOCEL* CRT 1000 G Sodium

Carboxymethylcellulose

Revision Date: 2012/11/09

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

WALOCEL* CRT 1000 G Sodium Carboxymethylcellulose

Chemical Name: Modified cellulose

CAS-No. 9004-32-4

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

Identified uses

Thickener. Binder. Film former. Processing aid.

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 - REGULATION (EC) No 1272/2008

iassification - NEGOLATION (EC) NO 121212000

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

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

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

®(TM)*Trademark

Product Name: WALOCEL* CRT 1000 G Sodium

Carboxymethylcellulose

2.2 Label elements

Labelling - REGULATION (EC) No 1272/2008

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

2.3 Other Hazards

No information available.

Section 3. Composition/information on ingredients

3.1 Substance

This product is a substance.

REACH No.	Amount	Component	Classification: REGULATION (EC) No 1272/2008
_	100.0 %	Modified cellulose##	Not classified
	REACH No.		— 100.0 % Modified

CAS-No. / EC-No. / Index	Amount	Component	Classification: 67/548/EEC
CAS-No.	100.0 %	Modified cellulose##	Not classified.
9004-32-4			
EC-No.			
Polymer			

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.

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.

Revision Date: 2012/11/09

Carboxymethylcellulose

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.

Section 6. Accidental Release Measures

- **6.1 Personal precautions, protective equipment and emergency procedures:** Isolate area. Spilled material may cause a slipping hazard. 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:** Contain spilled material if possible. 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. Keep away from heat, sparks and flame. No smoking, open flames or sources of ignition in handling and storage area. Electrically ground and bond all equipment. Good housekeeping and controlling of dusts are necessary for safe handling of product. 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. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

7.2 Conditions for safe storage, including any incompatibilities Storage

Store in a dry place. See Section 10 for more specific information.

Carboxymethylcellulose

Storage temperature: 5 - 35 °C

7.3 Specific end uses

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

Exposure Controls / Personal Protection Section 8.

8.1 Control parameters **Exposure Limits**

None established

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.

Skin Protection: No precautions other than clean body-covering clothing should be needed. Hand protection: Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized.

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 quidelines. 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 or granules Color White to off-white

Odor Odorless Hq Not applicable

Melting Point No test data available

Freezing Point Not applicable **Boiling Point (760 mmHg)** Not applicable. Flash Point - Closed Cup No test data available

Flammable Limits In Air Lower: No test data available Upper: No test data available

Vapor Pressure Not applicable Vapor Density (air = 1) Not applicable Specific Gravity (H2O = 1) No test data available Solubility in water (by completely soluble in water

weight)

Partition coefficient, n-No data available for this product.

octanol/water (log Pow)

Autoignition Temperature No test data available No test data available **Decomposition**

Temperature

Carboxymethylcellulose

Kinematic Viscosity Not applicable

Explosive propertiesNo test data available
Oxidizing properties
No test 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

Stable under recommended storage conditions. See Storage, Section 7.

10.3 Possibility of hazardous reactions

Polymerization will not occur.

10.4 Conditions to Avoid: Avoid temperatures above 130 °C. Exposure to elevated temperatures can cause product to decompose. Avoid static discharge.

10.5 Incompatible Materials: Avoid contact with oxidizing materials. Avoid contact with: Strong acids. Strong bases.

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. May cause nausea and vomiting. May cause abdominal discomfort or diarrhea.

LD50, rat 15,000 - 27,000 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.

LD50, rabbit > 2,000 mg/kg

Inhalation

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

LC50, 4 h, rat > 5.8 mg/l

Eye damage/eye irritation

May cause slight eye irritation.

Skin corrosion/irritation

Prolonged contact is essentially nonirritating to skin.

Sensitization

Skin

Did not cause allergic skin reactions when tested in guinea pigs.

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

Contains component(s) which did not cause cancer in laboratory animals.

Developmental Toxicity

Contains component(s) which did not cause birth defects or any other fetal effects in lab animals.

Product Name: WALOCEL* CRT 1000 G Sodium

Carboxymethylcellulose

Reproductive Toxicity

Contains component(s) which did not interfere with reproduction in animal studies.

Genetic Toxicology

Contains a component(s) which were negative in in vitro genetic toxicity studies.

Section 12. Ecological Information

12.1 Toxicity

Data for Component: Modified cellulose

Material is not classified as dangerous to aquatic organisms.

Fish Acute & Prolonged Toxicity

LC50, Danio rerio (zebra fish), static test, 96 h: 1,414 mg/l

LC50, Lepomis macrochirus (Bluegill sunfish), 96 h: 100 - 1,000 mg/l

Aquatic Invertebrate Acute Toxicity

EC50, Daphnia magna (Water flea), static test, 48 h, immobilization: 1,414 mg/l

12.2 Persistence and Degradability

Data for Component: Modified cellulose

Material is not readily biodegradable according to OECD/EEC guidelines.

OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method	10 Day Window	
0 %	28 d	OECD 301E Test	fail	

12.3 Bioaccumulative potential

Data for Component: Modified cellulose

Bioaccumulation: No relevant data found.

12.4 Mobility in soil

Data for Component: Modified cellulose

Mobility in soil: No relevant data found.

12.5 Results of PBT and vPvB assessment

Data for Component: Modified cellulose

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

12.6 Other adverse effects

Data for Component: Modified cellulose

No specific, relevant data available for assessment.

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. 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.

Revision Date: 2012/11/09

Carboxymethylcellulose

Section 14. Transport Information

ADR/RID

14.1 UN number

Not applicable

14.2 UN proper shipping name

Proper Shipping Name: NOT REGULATED

14.3 Transport hazard class(es)

Not applicable

14.4 Packing Group

Not applicable

14.5 Environmental hazards

Not considered environmentally hazardous based on available data

14.6 Special precautions for user

Special Provisions: no data available
Hazard identification No:no data available

ADNR / ADN

14.1 UN number

Not applicable

14.2 UN proper shipping name

Proper Shipping Name: NOT REGULATED

14.3 Transport hazard class(es)

Not applicable

14.4 Packing Group

Not applicable

14.5 Environmental hazards

Not considered environmentally hazardous based on available data

14.6 Special precautions for user

no data available

IMDG

14.1 UN number

Not applicable

14.2 UN proper shipping name

Proper Shipping Name: NOT REGULATED

14.3 Transport hazard class(es)

Not applicable

14.4 Packing Group

Not applicable

14.5 Environmental hazards

Not considered environmentally hazardous based on available data

14.6 Special precautions for user

EMS Number: Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

ICAO/IATA

14.1 UN number

Not applicable

14.2 UN proper shipping name

Proper Shipping Name: NOT REGULATED

14.3 Transport hazard class(es)

Not applicable

14.4 Packing Group

Not applicable

14.5 Environmental hazards

Not applicable

14.6 Special precautions for user

no data available

Carboxymethylcellulose

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 we offer may be obtained by contacting us. Ask for a product information brochure or data on how to access our website.

Revision

Identification Number: 1015671 / 3005 / Issue Date 2012/11/09 / Version: 3.0 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.