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29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier Trade name	Cellulose	mark, Ashland or its subsidiaries, registered in	
Substance name		RITY SODIUM CARBOXYMETHYLCELLULOSE, CMC, 99,5%	
Substance No.	040.070	_	
EC-No.	618-378-0	ô	
CAS-No.	9004-32-4	4	
Relevant identified uses of the substance or mixture and uses advised against Recommended use : Rheology modifier Pharmaceutical			
Details of the supplier of the safety data sheet		Emergency telephone number 1-800-ASHLAND (1-800-274-5263)	
Ashland P.O. Box 2219		Regulatory Information Number	

Regulatory Information Number 1-800-325-3751

Product Information +1-614-790-3333

 ${\sf EHSProductSafety@ashland.com}$

United States of America (USA)

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Columbus, OH 43216

+1-614-790-3333

Combustible Dust

GHS label elements

Signal Word : Warning

:

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Hazard Statements	: May form combustible dust concentrations in air.
Precautionary Statements	: Prevention: Keep dust/air mixtures away from ignition sources. Keep dust/air mixtures away from ignition sources.
Other hazards None known.	

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature	:	organic
-----------------	---	---------

Hazardous components

No hazardous ingredients

SECTION 4. FIRST AID MEASURES

General advice	: No hazards which require special first aid measures.
If inhaled	 If breathed in, move person into fresh air. If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	: First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
In case of eye contact	: Remove contact lenses. Protect unharmed eye.
If swallowed	 Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	: The most important known symptoms and effects are described in the labelling (see Section 2.2) and/or Section 11.

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Notes to physician : No hazards which require special first aid measures.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray Foam
Specific hazards during firefighting	:	Organic dusts at sufficient concentration can form explosive mixtures in air. Do not allow run-off from fire fighting to enter drains or water courses.
		Organic dusts at sufficient concentration can form explosive mixtures in air. Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	Carbon dioxide (CO2) Carbon monoxide
Specific extinguishing methods	:	
		Product is compatible with standard fire-fighting agents.
Further information	:	Standard procedure for chemical fires.
Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	 Avoid dust formation. Avoid breathing dust. Material can create slippery conditions. Persons not wearing protective equipment should be exclusion from area of spill until clean-up has been completed. 	bəbu
Environmental precautions	Prevent further leakage or spillage if safe to do so.	

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Methods and materials for containment and cleaning up	:	Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.
Other information	:	Comply with all applicable federal, state, and local regulations.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	:	Avoid dust formation. Ensure all equipment is electrically grounded and bonded before beginning transfer operations. The material can accumulate static charge and can therefore cause electrical ignition of flammable atmospheres. Smoking, eating and drinking should be prohibited in the application area. For personal protection see section 8. Maintain good housekeeping. Do not permit dust layers to accumulate, for example, on floors, ledges, and equipment, in order to avoid any potential for dust explosion hazards. For further guidance on prevention of dust explosions, refer to National Fire Protection Association (NFPA) 654: "Standard for the Prevention of Fire and Dust Explosions, from the Manufacturing, Processing and Handling of Combustible Particulate Solids".
Conditions for safe storage	:	No smoking.
Materials to avoid	:	No materials to be especially mentioned.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters Contains no substances with occupational exposure limit values.

Engineering measures	 Provide appropriate exhaust ventilation at places where dust is formed. General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

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Personal protective equipmen Respiratory protection	
5	butyl-rubber 480 min > 0.5 mm
Remarks	The exact break through time can be obtained from the protective glove producer and this has to be observed. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Eye protection	Safety glasses
Skin and body protection	Wear as appropriate: Safety shoes Wear resistant gloves (consult your safety equipment supplier).
Hygiene measures	Avoid breathing dust.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: powder
Physical state	: solid
Colour	: off-white
Odour	: odourless
Odour Threshold	: No data available
рН	: 6.5 - 8.5 (as aqueous solution)
Melting point/freezing point	: No data available
Boiling point/boiling range	: No data available

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Flash point	: Not applicable	
Evaporation rate	: No data available	
Flammability (solid, gas)	: Combustible Dust	
Upper explosion limit	: No data available	
Lower explosion limit	: No data available	
Vapour pressure	: No data available	
Relative vapour density	: No data available	
Relative density	: No data available	
Density	: <1 g/cm3	
Bulk density	: 550 - 1,000 kg/m3	
Solubility(ies) Water solubility	: soluble, Limited by viscosity	
Solubility in other solvents	: No data available	
Partition coefficient: n- octanol/water	: No data available	
Auto-ignition temperature	: 360 °C	
Thermal decomposition	: No data available	
Viscosity Viscosity, dynamic	: No data available	
Viscosity, kinematic	: No data available	
Oxidizing properties	: No data available	

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: Stable under recommended storage conditions.
Possibility of hazardous	: Dust may form explosive mixture in air.

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reactions

Conditions to avoid :	UV light. Exposure to sunlight.
	Keep away from heat, flame, sparks and other ignition sources.
Incompatible materials :	Acids Bases Oxidizing agents
Hazardous decomposition products	Carbon monoxide Carbon dioxide (CO2)

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	: Inhalation Skin contact Eye Contact Ingestion	
Acute toxicity Not classified based on availabl Product:	e information.	
Acute oral toxicity	: LD50 (Rat): 27,000 mg/kg	
Acute inhalation toxicity	: LC50 (Rat): > 5,800 mg/l Test atmosphere: dust/mist	
Acute dermal toxicity	: LD50 (Rabbit): > 2,000 mg/kg	
	Assessment: Not classified as acutely toxic by dermal absorption under GHS.	
Skin corrosion/irritation Not classified based on available information. Serious eye damage/eye irritation		

Not classified based on available information.

Product:

Remarks: Unlikely to cause eye irritation or injury., Product dust may be irritating to eyes, skin and respiratory system.

Respiratory or skin sensitisation

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Skin sensitisation: Not classified based on available information. Respiratory sensitisation: Not classified based on available information. Germ cell mutagenicity Not classified based on available information. Carcinogenicity Not classified based on available information. **Reproductive toxicity** Not classified based on available information. STOT - single exposure Not classified based on available information. **STOT - repeated exposure** Not classified based on available information. Aspiration toxicity Not classified based on available information. Product: No aspiration toxicity classification

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity Product:	
	LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l Exposure time: 96 h Test Type: static test
	LC50 (Lepomis macrochirus (Bluegill sunfish)): > 100 mg/l Exposure time: 96 h Test Type: static test
Ecotoxicology Assessment Short-term (acute) aquatic : hazard	Not classified based on available information.
Long-term (chronic) aquatic : hazard	Not classified based on available information.
Persistence and degradability <u>Product:</u> Biodegradability :	Remarks: Inherently biodegradable.
No data available	

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Bioaccumulative potential		
No data available		
Mobility in soil		
No data available		
Other adverse effects		
No data available		
Product:		
Additional ecological information	:	No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
General advice	: Dispose of in accordance with all applicable local, state and federal regulations.
Contaminated packaging	: Empty remaining contents.

SECTION 14. TRANSPORT INFORMATION

International transport regulations

REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD	SUBSIDIARY	PACKING	MARINE
		CLASS	HAZARDS	GROUP	POLLUTANT /
					LTD. QTY.

U.S. DOT - ROAD

Not dangerous goods	

CFR_RAIL_C

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

TDG_ROAD_C

Not dangerous goods

TDG_RAIL_C

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Not dangerous goods

TDG_INWT_C

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

MX_DG

Not dangerous goods

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act CERCLA Reportable Quantity

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
METHANOL	67-56-1	5000	*
* 0 / / / 0 0 /			

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Combustible Dust

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SARA 302	: This material does not contain any components with a section 302 EHS TPQ.
SARA 313	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
US State Regulations Pennsylvania Right To Know CELLULOSE	254504001- 5918 The identity and concentration of one or more component(s) is being withheld under business confidentiality.
New Jersey Right To Know CELLULOSE	254504001- 5918 The identity and concentration of one or more component(s) is being withheld under business confidentiality.
The components of this prod DSL	uct are reported in the following inventories: : All components of this product are on the Canadian DSL
AICS	: On the inventory, or in compliance with the inventory
ENCS	: On the inventory, or in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
TCSI	: On the inventory, or in compliance with the inventory

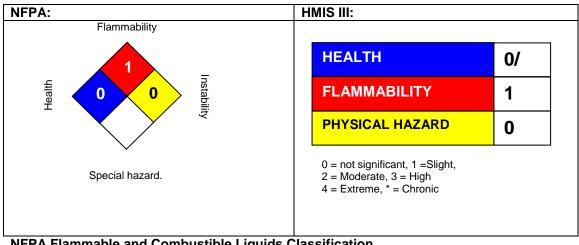
Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information Revision Date: 08/23/2018

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NFPA Flammable and Combustible Liquids Classification Not applicable

Full text of H-Statements

Sources of key data used to compile the Safety Data Sheet Ashland internal data including own and sponsored test reports The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS -

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Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA -International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 -Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA -National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD -Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS -Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative