

MOMENTIVE SPECIALTY CHEMICALS INC.
180 E BROAD STREET
COLUMBUS OH 43215-3799
USA

MOMENTIVE™

920673

CERTIFICATE OF ANALYSIS

CMC COLORADO
34775 UNITED AVE
PUEBLO CO 81001
USA

Date	01/16/2014
Purchase order item	SAMPLE PER SCOTT BAS
Purchase order date	01/14/2014
Delivery item	85219923 000010
Delivery date	01/21/2014
Order item	3358235 000010
Order date	01/14/2014
Customer number	61002
Shipping date	01/16/2014

Certified that the whole of the supplies detailed hereon have been inspected and tested and, unless otherwise stated, conform in all respects with the contract/purchase order requirements.

Material:

920673 MGSRIMR035c EPIKOTE(TM) Resin MGS RIMR 035C

Vehicle/Vessel: FEDEX FREIGHT

Batch LL4A0077 / Quantity 480 LB

Manufactured date 01/15/2014

Characteristic	Unit	Value	Lower Limit	Upper Limit	Test Method
Refractive index		2	2	2	ASTM D1218
Viscosity 25°C	mPa·s	1300	1100	1500	ASTM D2196
Density 25°C	g/cm3	1	1	1	ASTM D1475
Weight per Epoxide	g/eq	189	182	198	ASTM D1652
DSC Onset (TG1)	°C		75	-	ASTM D3418
DSC Midpoint (TG2)	°C		80	-	ASTM D3418
DSC End (TG3)	°C		85	-	ASTM D3418
Gel time 38°C	min	188	150	250	LM-083

Momentive Specialty Chemicals Inc. certifies that this product will meet the specification listed above.

If you have any questions regarding this certification or delivery, please call your customer service representative at 866-443-9466.

Lori Babineaux, Quality Manager

This document is computer generated and therefore requires no signature.

*** End ***

Material Safety Data Sheet

FOR INDUSTRIAL USE ONLY

EPIKOTE™ Resin MGS RIMR 035C

Revision Date 05-SEP-2012

1. Product and company identification**Product name** EPIKOTE™ Resin MGS RIMR 035C**MSDS Number** BAK0000399**Product use** Binder**Manufacturer, Importer,
Supplier****Print date** 16-JAN-2014**Telephone**

For additional health and safety or regulatory information, call

2. Hazards identification**Form** Liquid**Odor** characteristic.**OSHA/HCS status** This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).**Emergency overview** **WARNING !**
CAUSES EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY CAUSE RESPIRATORY TRACT IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.**Potential acute health effects****Inhalation** Slightly irritating to the respiratory system.**Ingestion** Not expected to be harmful under normal conditions of use.**Skin** Irritating to skin. May cause sensitization by skin contact.**Eyes** Irritating to eyes.**Potential chronic health effects****Chronic effects** Contains material that can cause target organ damage.**Carcinogenicity** No known significant effects or critical hazards.**Mutagenicity** No known significant effects or critical hazards.**Teratogenicity** No known significant effects or critical hazards.

mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Notes to physician

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

Flammability of the product	In a fire or if heated, a pressure increase will occur and the container may burst.
<u>Extinguishing media</u>	
Suitable	Use an extinguishing agent suitable for the surrounding fire.
Not suitable	None known.
Special exposure hazards	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Hazardous combustion products	Decomposition products may include the following materials: carbon oxides, halogenated compounds,
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Large spill	Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.
Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Eyes	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	
Physical state	: Liquid
Color	: Yellowish.
Odor	: characteristic.
Odor threshold	: Not available
pH	: Not available
Boiling point	: Greater than 200 °C (392 °F)
Flash point	: Greater than 150 °C (302 °F)
Evaporation rate	: Not available
Flammable limits	
Upper:	: Not available
Lower:	: Not available
Vapor pressure	: Less than 0.1 hPa
Vapor density	: Not available
Relative density	: Not available
Solubility	: Partial
Partition coefficient: n-octanol/water	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
Viscosity	: Kinematic-Not available Dynamic- Approx. 1,250 mPa·s @25 °C (77 °F)
Typical % solids	: Not available

Other Information

Not applicable.

10. Stability and reactivity

Reactivity	Stable under normal conditions.
Stability	The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid	Strong oxidizer,
Materials to avoid	No specific data.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Regulatory information CFR	UN/NA number	Proper shipping name	Classes/*PG	Reportable Quantity (RQ)
		Non-regulated		
TDG		Non-regulated		
IMO/IMDG	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXIDE DERIVATIVES)	Class 9 III	
IATA (Cargo)	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXIDE DERIVATIVES)	Class 9 III	

*PG : Packing group

15. Regulatory information

US regulations

HCS Classification Irritating material, Sensitizing material, Target organ effects

U.S. Federal regulations

SARA 311/312 Classification Immediate (acute) health hazard, Delayed (chronic) health hazard

SARA 313 - Supplier Notification

This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.

None required.

SARA 302 Extremely Hazardous Substances None required.

State regulations

Massachusetts RTK Substances None required.

New Jersey RTK Hazardous Substances None required.

Pennsylvania RTK Hazardous Substances None required.

California Prop. 65: None required.

Canada

WHMIS (Canada)

Class D-2B: Material causing other toxic effects (Toxic).

Canadian lists

Canadian NPRI: None required.

International regulations

Chemical inventories

Australia inventory (AICS) All components are listed or exempted.

Canada inventory All components are listed or exempted.

Europe inventory All components are listed or exempted.

Japan inventory All components are listed or exempted.

China inventory (IECSC) All components are listed or exempted.

Korea inventory All components are listed or exempted.

New Zealand Inventory (NZIoC) Not determined.

Philippines inventory (PICCS) All components are listed or exempted.

United States inventory (TSCA 8b) All components are listed or exempted.