

SAFETY DATA SHEET

This safety data sheet complies with the requirements of: 29CFR1910.1200

Issue Date 08-May-2015 Revision Date 27-May-2015 Version 1

Product identifier

Product Name RGA 1

Other means of identification

RGA 1 **Product Code** UN/ID no. UN 1999

Premium Modified Wet/Dry Elastomeric Flashing Cement **Synonyms**

Recommended use of the chemical and restrictions on use

Recommended Use Used for repairing roofs and roof flashings that are wet or under water. This permits repairs

immediately and can prevent more extensive water damage.

Uses advised against For exterior use only. Do not use indoors.

Details of the supplier of the safety data sheet

R.M. Lucas Company Manufacturer Address Supplier Address MULE-HIDE PRODUCTS CO., INC

3211 South Wood Street 1195 PRINCE HALL DRIVE Chicago, Illnois 60608 BELOIT, WI 53511 - United States (773) 523-4300

T (608)365-3111

Emergency telephone number

Emergency Telephone Call CHEMTREC Day or Night:

Within USA and Canada: 1-800 424-9300 Outside USA and Canada: 1-703-527-3887

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1
Aspiration toxicity	Category 1
Flammable liquids	Category 3

Label elements

Emergency Overview

Danger

Hazard statements

May cause genetic defects

May cause cancer

Causes damage to organs through prolonged or repeated exposure

May be fatal if swallowed and enters airways

Flammable liquid and vapor



Odor Solvent (Mineral Spirits) Appearance Thick mastic Physical state Liquid

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep container tightly closed when product is not in use.

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Disposal should be in accordance with applicable local, regional, national and international laws and regulations.

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

May be harmful in contact with skin

• Toxic to aquatic life with long lasting effects

Unknown acute toxicity 16.035104% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Mixture

This product is a mixture.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Common name Flashing Cement.

Synonyms Premium Modified Wet/Dry Elastomeric Flashing Cement.

Chemical nature Organic solvents and additives.

Chemical Name	CAS No.	Weight-%	Trade Secret
Asphalt (at Ambient Temperature)	8052-42-4	50 - 60%	*

Mineral Spirits (with < 0.1% Benzene)	8052-41-3	20 - 30%	*
Hydrated Aluminum-Magnesium Silicate (Attapulgite)	12174-11-7	0 - 10%	*
Cellulose Fiber	9004-34-6	0 - 10%	*
Aromatic Naptha	64742-95-6	0 - 10%	*
Kaolin	1332-58-7	0 - 10%	*
Alkyl Amine Acetate	28701-67-9	0 - 10%	*
Nonane	111-84-2	0 - 10%	*
Quartz	14808-60-7	0 - 10%	*

4. FIRST AID MEASURES

Description of first aid measures

General advice Contains petroleum distillate. Harmful or fatal if swallowed. Vapor harmful. May affect the

brain or central nervous system causing dizziness, headache, or nausea. Reports have associated repeated and prolonged occupational exposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling

contents may be harmful or fatal.

Eye contact In the case of contact with eyes, rinse immediately with plenty of water and seek medical

advice.

Skin contact Wash thoroughly with soap and water. Remove contaminated clothing and shoes. Wash

contaminated clothing before reuse. In the case of skin irritation or allergic reactions see a

physician.

Inhalation Move to fresh air in case of accidental inhalation of vapors. If continued difficulty with

breathing is experienced, get medical attention immediately.

Ingestion Not an expected route of exposure. If swallowed, do not induce vomiting. Get medical

attention immediately.

Self-protection of the first aider First aider: Pay attention to self-protection!.

Most important symptoms and effects, both acute and delayed

Symptoms May cause skin irritation. May cause eye irritation.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical. Carbon dioxide (CO2). Sand. Use foam or water FOG as a last resort.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Sealed container may rupture/burst when heated or exposed to excessive heat.

Hazardous combustion productsThermal decomposition (burning) may release irritating, corrosive and/or toxic gases, vapors and fumes.

Explosion data

Sensitivity to Mechanical Impact Not sensitive.

Sensitivity to Static Discharge May be ignited by heat, sparks or flames.

Protective equipment and precautions for firefighters

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As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions No action should be taken involving any personal risk or without suitable training. Use

personal protective equipment as required.

Other Information Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area).

Environmental precautions

Environmental precautions Avoid release to the environment. Prevent further leakage or spillage if safe to do so.

Prevent product from entering sewers, drains, or waterways. Local authorities should be advised if significant spillages can not be contained. See Section 12 for additional

ecological information.

Methods and material for containment and cleaning up

Methods for containment Contain spillage with non-combustible absorbent material, e.g. sand, earth, diatomaceous

earth, vermiculite.

Methods for cleaning up Pick up the absorbed material (described just above) and transfer to properly labeled

containers for disposal according to local / national regulations (see Section 13).

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

outdoors.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a cool, dry, well-ventilated place. Keep away from heat,

sparks, flame and other sources of ignition.

Incompatible materials Strong acids. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines No ACGIH or OSHA PEL is assigned to this mixture.

Exposure limits for the component materials are shown below.

This product, as supplied, is not believed to contain any hazardous material that exceeds

exposure limits established by OSHA.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Asphalt (at Ambient Temperature) 8052-42-4	TWA: 0.5 mg/m³ benzene soluble aerosol fume, inhalable fraction	-	Ceiling: 5 mg/m³ fume 15 min
Mineral Spirits (with < 0.1% Benzene) 8052-41-3	TWA: 100 ppm	TWA: 500 ppm TWA: 2900 mg/m³ (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m³	IDLH: 20000 mg/m³ Ceiling: 1800 mg/m³ 15 min TWA: 350 mg/m³
Hydrated Aluminum-Magnesium Silicate (Attapulgite) 12174-11-7	TWA: 1 mg/m³ respirable fraction	-	<u>-</u>

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Cellulose Fiber 9004-34-6	TWA: 10 mg/m³	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 15 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction (vacated) TWA: 5 mg/m³ (vacated) STEL: 10 mg/m³	TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust TWA: 1 mg/m³
Kaolin 1332-58-7	TWA: 2 mg/m³ particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 10 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust
Nonane 111-84-2	TWA: 200 ppm	(vacated) TWA: 200 ppm (vacated) TWA: 1050 mg/m³	TWA: 200 ppm TWA: 1050 mg/m ³
Quartz 14808-60-7	TWA: 0.025 mg/m³ respirable fraction	(vacated) TWA: 0.1 mg/m³ respirable dust : (30)/(%SiO2 + 2) mg/m³ TWA total dust : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m³ TWA respirable fraction	IDLH: 50 mg/m³ respirable dust TWA: 0.05 mg/m³ respirable dust

Appropriate engineering controls

Engineering Controls Use natural cross ventilation, local (mechanical) pick-up, and/or general area mechanical

cross ventilation. Ventilation pattern should be designed to prevent accumulation of asphalt vapors. Ventilation must be sufficient to maintain asphalt vapor concentrations below the

TWA limits outlined above.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Wear protective gloves and protective clothing that is resistant to chemical penetration. Skin and body protection

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, a NIOSH/MSHA approved respiratory protection

should be worn.

Wash face, hands and any exposed skin thoroughly after handling. Wash contaminated **General Hygiene Considerations**

clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid Thick mastic **Appearance** Color Black

Solvent (Mineral Spirits) Odor **Odor threshold** 1-30 PPM. Odor thresholds vary greatly. Do not rely on odor threshold alone to

determine potentially hazardous substances.

Values Remarks • Method **Property**

Not applicable

None / -70 °C None / -94 °F Melting point/freezing point

Boiling point / boiling range

> 154 °C / 310 °F Flash point > 40.5 °C / > 105 °F

Evaporation rate

Flammability (solid, gas) No information available Flammability Limit in Air

Melting Point is not applicable. Freezing points are shown.

Setaflash Butly acetate = 1

Flammable above 105 degrees F and 40.5 degrees C.

0.1

Upper flammability limit: 7.0
Lower flammability limit: 1.6

Vapor pressure 0.3 (kPa) @ 20 °C

Vapor density 5.3 Where: Air = 1 at 68 degrees F (20 degrees C)

Specific Gravity 1.09 Water = 1g/ml

Water solubility Insoluble
Solubility in other solvents Soluble in aromatic and aliphatic

solvents.

Partition coefficientNo information availableNo data available

Autoignition temperature330 °C / 626 °FDecomposition temperatureNo information availableKinematic viscosityNo information availableDynamic viscosityNo information available

Explosive properties Vapor accumulation could flash or explode if ignited.

Oxidizing properties None

Other Information

Softening point Not applicable

Molecular weightNo information availableVOC Content (%)Less than 250 g/l.Density9.2 to 9.6 lb/galBulk densityNot applicable

10. STABILITY AND REACTIVITY

Reactivity

Not applicable Not applicable

Chemical stability

Stable.

Possibility of Hazardous Reactions

None under normal use.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid

Avoid static discharge. Avoid heat, sparks, and open flame.

Incompatible materials

Strong acids. Strong oxidizing agents.

Hazardous Decomposition Products

Combustion may produce carbon monoxide, carbon dioxide, and other asphyxiants.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Toxicological testing has not been conducted for this product overall. Available toxicological

data for individualing redients are summarized below.

Inhalation Avoid breathing vapors or mists.

Eye contact Avoid contact with eyes. Contact with eyes may cause irritation.

Skin contact May cause irritation.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately. Not an expected

route of exposure.

* The IARC Monograph (Vol. 103, 2013, Bitumen and Bitumen Emissions) defines Asphalt

as 'Group 2B, Possible Carcinogen to Humans'. This definition is based on studies of exposure to Asphalt fumes at elevated temperatures. The Monograph states that

temperature plays an important role in determining the degree of exposure and also the carcinogenic potential of bitumen emissions. This same Monograph states that Asphalt is non volatile at ambient temperature. There is no data presented in the Monograph to demonstrate that Asphalt at ambient temperature is considered a carcinogen. Since the normal use of this product is at ambient temperature, the Asphalt used in this product is not listed as a carcinogen. No other national or international agency has defined Asphalt as a carcinogen.

* No significant exposure to Crystalline Silica (Quartz) is thought to occur during the use of products in which Crystalline Silica (Quartz) is bound to other materials, such as in paints and coatings. As one reference, see California Office of Health Hazard Assessment at: http://www.oehha.org/prop65/CRNR_notices/safe_use/sylicasud2.html

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Asphalt (at Ambient Temperature) 8052-42-4	> 5000 mg/kg(Rat)	> 2000 mg/kg(Rabbit)	-
Cellulose Fiber 9004-34-6	> 5 g/kg(Rat)	> 2 g/kg(Rabbit)	> 5800 mg/m³(Rat) 4 h
Aromatic Naptha 64742-95-6	= 8400 mg/kg(Rat)	> 2000 mg/kg(Rabbit)	= 3400 ppm (Rat) 4 h
Nonane 111-84-2	-	-	= 3200 ppm (Rat) 4 h
Quartz 14808-60-7	= 500 mg/kg(Rat)	-	-

Information on toxicological effects

Symptoms Inhalation of high vapor concentrations may cause symptoms like headache, dizziness,

tiredness, nausea and vomiting.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritationCan cause skin irritation.

Serious eye damage/eye irritation Irritating to eyes.

Irritation Irritating to eyes, respiratory system and skin.

Corrosivity Not classified.

Sensitization May cause sensitization of susceptible persons. **Germ cell mutagenicity** Contains a known or suspected mutagen.

Carcinogenicity This product contains one or more substances which are classified by IARC as

carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly

carcinogenic to humans (Group 2B).

Chemical Name	ACGIH	IARC	NTP	OSHA
Asphalt (at Ambient Temperature) 8052-42-4	-	Group 2B	-	Х
Hydrated Aluminum-Magnesium Silicate (Attapulgite) 12174-11-7	-	Group 2B Group 3	-	X
Cellulose Fiber 9004-34-6	-	Group 1	Known	Х
Quartz 14808-60-7	A2	Group 1	Known	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

A4 - Not Classifiable as a Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not classifiable as a human carcinogen.

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity Developmental ToxicityNone known for product as a whole.
None known for product as a whole.

Teratogenicity None known.

STOT - single exposure
STOT - repeated exposure
Aspiration hazard
No information available.
No information available.
No information available.

Numerical measures of toxicity - No information available

The following values are calculated based on chapter 3.1 of the GHS document For exterior use only. Do not use indoors.

ATEmix (oral) 7,144.00 **ATEmix (dermal)** 2,799.00

12. ECOLOGICAL INFORMATION

Ecotoxicity

96.9662 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Aromatic Naptha	-	9.22: 96 h Oncorhynchus mykiss	6.14: 48 h Daphnia magna mg/L
64742-95-6		mg/L LC50	EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
Asphalt (at Ambient Temperature)	>6
8052-42-4	

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Disposal should be in accordance with applicable local, regional, national and international

laws and regulations.

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

DOT Regulated

DOT Ground: Not regulated if shipped in containers < 119 gallons (450 liters). DOT Ground: Regulated if shipped in containers >119 gallons (450 liters).

UN 1999 Proper shipping name UN 1999 Tars, Liquid

Hazard Class 3 Packing Group III

<u>TDG</u> Regulated

UN/ID no. UN 1999 Proper shipping name Tars, Liquid

Hazard Class 3
Packing Group III

MEX Regulated NA 1999

ICAO (air) Regulated 1999

IATARegulatedUN/ID no.1999

IMDGRegulatedUN/ID no.1999

RID Not applicable in the United States.

ADR Not applicable in the United States.

ADN Not applicable in the United States.

15. REGULATORY INFORMATION

International Inventories

TSCA All of the components of this product are listed on the US TSCA (Toxic Substances Control

Act) Inventory or are exempt.

DSL/NDSL All of the components of this product are listed on the DSL.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard Yes
Chronic Health Hazard Yes
Fire hazard Yes
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Hydrated Aluminum-Magnesium Silicate (Attapulgite) - 12174-11-7	Carcinogen
Cellulose Fiber - 9004-34-6	Carcinogen
Quartz - 14808-60-7	Carcinogen

U.S. State Right-to-Know Regulations

This product contains the following substances regulated by various State Right-to-Know regulations.

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Asphalt (at Ambient Temperature) 8052-42-4	Х	X	X
Mineral Spirits (with < 0.1% Benzene) 8052-41-3	Х	X	Х
Cellulose Fiber 9004-34-6	Х	X	X
Kaolin 1332-58-7	Х	X	X
Nonane 111-84-2	Х	X	X
Quartz 14808-60-7	Х	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA Health hazards 2 Flammability 2 Instability 0 Physical and Chemical

Properties -

<u>HMIS</u> Health hazards 2 Flammability 2 Physical hazards 0 Personal protection - Chronic Hazard Star Legend *= Chronic Health Hazard

Prepared By Prepared by Robert Barry

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Revision Note

No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet