

Revision Date: 18 June 2018

SAFETY DATA SHEET

Royalene® 591

1. IDENTIFICATION

Product Name Royalene® 591

Identified uses Synthetic rubber

Supplier Lion Copolymer Geismar, LLC

P.O. Box 397 Geismar Louisiana 70734

USA

Telephone +1 (800) 535-9960

customerservice@lionelastomers.com

Contact Person Customer Service

Manufacturer Lion Copolymer Geismar, LLC

36191 Highway 30

Geismar

Louisiana 70734

USA

Emergency Telephone Chemtrec: +1 703-527-3887

2. HAZARD(S) IDENTIFICATION

AppearanceSolid baleColorWhite/off-whiteOdorCharacteristicGHS PictogramNo pictogram required

GHS Classification

Physical and Chemical Hazards Not classified Human Health Not classified Environment Not classified

OSHA Regulatory Status

This product in not hazardous as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ethylene-Propylene Ethylidene Norbornene Terpolymer CAS # 25038-36-2

>98%

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4. FIRST-AID MEASURES

Description of First Aid Measures

Inhalation

Move into fresh air and keep at rest. For breathing difficulties oxygen may be necessary. Get medical attention if any discomfort continues.

Ingestion

Immediately rinse mouth and drink plenty f water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Transport immediately to hospital and bring along these instructions.

Skin Contact

Remove contaminated clothing immediately and wash skin with soap and water. Product in use may be molten. Burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.

Eye Contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persist, seek medical attention and bring these instructions.

Most important symptoms and effects, both acute and delayed

General information

Seek medical attention for all burns, regardless how minor they may seem.

Inhalation

No specific symptoms noted.

Ingestion

No specific symptoms noted.

Eve Contact

No specific symptoms noted.

Indication of any immediate medical attention and special treatment needed

Notes to the Physician

No recommendation give, but first aid may still be required incase of accidental exposure, inhalation, or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROPMPTLY!

5. FIRE-FIGHTING MEASURES

Auto Ignition Temperature (°C)

Not available.

Flammability Limit – Lower (%)

Not available.

Flash Point (°C)

Not applicable.

Extinguishing Media

Fire can be extinguished using: Water

Hazardous Combustion Products

In case of fire, toxic gases (CO, CO₂, NO_x) may be formed.

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

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Specific Hazards

In case of fire, toxic gases may be formed.

Special Fire Fighting Procedures

Avoid breathing fire vapors. NOTE! Use air-supplied respirators to protect against gases/fumes.

Protective Equipment for Fire-Fighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Wear protective clothing as described in Section 8 of this safety data sheet.

Environmental Precautions

Avoid discharge to the aquatic environment.

Spill Clean Up Methods

For waste disposal, see section 13.

Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13. See section 11 for additional information on health hazards.

7. HANDLING AND STORAGE

Handling

Avoid spilling, skin and eye contact.

Storage

Store in tightly closed original container in a dry, cool and well-ventilated place. Store away from: direct light sources, indeirect light sources, sunlight (ultraviolet)m fluorescent light.

Storage Class

Unspecified storage

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective Equipment









Engineering Measures

Provide sufficient ventilation during operations which cause vapor formation.

Respiratory Equipment

In case of inadequate ventilation or when the product is heated, use suitable respiratory equipment with gas filter (type A2).

Hand Protection

Use suitable protective gloves if risk of skin contact.

Eye Protection

Wear approved safety goggles.

Thermal Hazards

The molten product can cause serious burns.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Solid bale

Color White/off-white

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Odor Characteristic

Solubility Insoluble in water; soluble in organic solvents.

Initial boiling point and boiling range Not applicable

Melting point (*C) Not available

Relative density 0.87

Bulk density870 kg/m3Vapor Density (air=1)Not availableVapor PressureNot availableEvaporation RateNot applicableEvaporation FactorNot applicablepH-Value, Conc. SolutionNot applicablepH-Value, Diluted SolutionNot applicable

Viscosity 70 Mooney @ 125°C

Decomposition Temperature (°C) Not available Odor Threshold, Lower Not available Odor Threshold, Upper Not available Flash Point Not avilable Auto Ignition Temperature (°C) Not available Flammability Limit - Lower (%) Not available Flammability Limit- Upper (%) Not available Partition Coefficient (N-Octanol/Water) Not available

Solid/Liquid Ignition on Contact with Air No

Oxidizing Properties Not determined

10. STABILITY AND REACTIVITY

Reactivity

No specific reactivity hazards associated with this product.

Stability

Stable under normal temperature conditions and recommended use.

Hazardous Polymerization

Will not polymerize

Conditions to Avoid

Avoid exposure to high temperatures or direct sunlight.

Materials to Avoid

No incompatible groups noted.

Hazardous Decomposition Products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. TOXICOLOGICAL INFORMATION

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Toxicological Information

No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

There are no data on the ecotoxicty of this product.

Partition Coefficient

Not applicable

13. DISPOSAL CONSIDERATIONS

Waste Management

This product is not considered to be hazardous waste under the definitions of the EPA and the Resource Conservation and Recovery Act (RCRA). However, ant local or state regulation governing the process and disposal of waste should be followed.

Disposal Methods No specific methods given.

14. TRANSPORT INFORMATION

 General
 Not regulated

 Road Transport Notes
 Not regulated

 Rail Transport Notes
 Not regulated

 Sea Transport Notes
 Not regulated

 Air Transport Notes
 Not regulated

15. REGULATORY INFORMATION

US Federal Regulations

SARA Section 302

Extremely Hazardous Substances

NONE

Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification to the National Response Center of release of quantities of hazardous substances equal to or greater than the reportable quantities (RQ) in 40CFR302.4 Components present in this product at a level which could require reporting under the statute are:

NONE

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40CFR372 (SARA 313). Components present in this product t a level which could require reporting under the statute are:

NONE

SARA 311/312 Hazard Categories

Acute Health Hazard ***NONE***
Chronic Health Hazard ***NONE***
Fire Hazard ***NONE***
Sudden Release of Pressure Hazard ***NONE***
Reactive Hazard ***NONE***

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)

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Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) and Volatile Organic Compounds (VOCs) (see 40 CFR 61)
This product does not contain any substances regulated as hazardous air pollutants (HAPS) or volatile organic compounds (VOCs) under Section 112 of the Clean Air Act Amendments of 1990

Food and Drug Adminsistration

This product is compliant with the following regulations for indirect food contact:

21CFR175.105 Adhesives

21CFR 177.2600 Rubber articles intended for repeated use

US State Regulations

California Proposition 65 Not listed

New Jersey Right-to-Know Not listed

Massachusetts Right-to-Know Not Listed

Pennsylvania Right-to-Know Not Listed

CONEG (HEAVY METALS)

Based on information provided by our suppliers, the raw materials used in the manufacture of this product contain no toxic heavy metals in concentrations greater than trace levels including lead, mercury, cadmium and hexavalent chromium which are not present in concentrations

at or greater than 100 ppm as specified in the CONEG model legislation for Toxics in Packaging.

International Inventories

EU-EINECS/ELINCS

None of the ingredients is listed

Canada - DSL/NDSL

All ingredients are listed or exempt

US - TSCA

All ingredients are listed or exempt

Australia – AICS

All ingredients are listed or exempt

Japan – MITI

All ingredients are listed or exempt

Korea – KECI

All ingredients are listed or exempt

China _IECSC

All ingredients are listed or exempt

Philippines - PICCS

All ingredients are listed or exempt

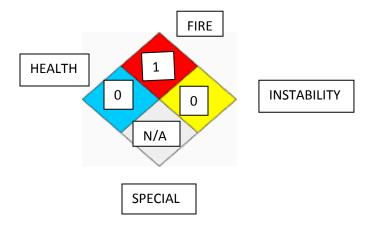
16. OTHER INFORMATION

HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

HEALTH	0
FLAMMABILITY	1
PHYSICAL	0
PERSONAL PROTECTION	Х

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

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The opinions expressed herein are those of qualified experts within Lion Copolymer Geismar, LLC. We believe that the information contained herein is current as of the date of this safety data sheet. Since the use of this information and of these opinions and the conditions of use of this product are not within the control of Lion Copolymer Geismar, LLC, it is the user's obligation to determine the conditions of safe use of these products.

Revision Date 18 June 2018

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