SAFETY DATA SHEET

LOTRYL® MM1339

1. PRODUCT AND COMPANY IDENTIFICATION

Company

SK Global Chemical Americas (SKGCA)
501 Office Center Drive, Suite 188
Fort Washington, Pennsylvania 19034

Functional Polyolefins

Customer Service Telephone Number: (267) 896-3500
(Monday through Friday, 8:00 AM to 5:00 PM EST)

Emergency Information

Transportation: CHEMTREC: (800) 424-9300
(24 hrs., 7 days a week)
Medical: Rocky Mountain Poison Center: (866) 767-5089
(24 hrs., 7 days a week)

Product Information

Product name: LOTRYL® MM1339
Synonyms: Not available
Molecular formula: Mixture
Chemical family: Preparation based on :, Polyethylene
Product use: Polymers industry

2. HAZARDS IDENTIFICATION

Emergency Overview

Color: translucent
Physical state: solid
Form: pellets
Odor: none

***Classification of the substance or mixture:**
Not a hazardous substance or mixture.

GHS-Labelling

Supplemental Hazard Statements:
Processing may release vapors and/or fumes which cause eye, skin and respiratory tract irritation.

Supplemental information:

Potential Health Effects:
The product, in the form supplied, is not anticipated to produce significant adverse human health effects.
Contains high molecular weight polymer(s). Effects due to processing releases: Irritating to eyes, respiratory system and skin.
Prolonged or repeated exposure may cause: headache, drowsiness, nausea, weakness, (severity of effects depends on extent of exposure).

Other:
Handle in accordance with good industrial hygiene and safety practice. (pellets/granules) This product may release fume and/or vapor of variable composition depending on processing time and temperature.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Wt/Wt	GHS Classification**
Proprietary polymer	Proprietary*	>= 60 %	Not classified
Talc (Mg3H2(SiO3)4)	14807-96-6	< 30 %	Not classified
Chlorite-group minerals	1318-59-8	< 5 %	Not classified
Proprietary component	Proprietary*	< 5 %	Not classified

* The specific chemical identity is withheld because it is trade secret information of SKGCA.

**For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1. Description of necessary first-aid measures:

Inhalation:
If inhaled, remove victim to fresh air.

Skin:

In case of contact, immediately flush skin with plenty of water. If molten polymer gets on the skin, cool rapidly with cold water. Do not peel solidified product off the skin. Obtain medical treatment for thermal burns. Remove material from clothing. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eyes:
Immediately flush eye(s) with plenty of water. Obtain medical treatment for thermal burns.

Ingestion:
If swallowed, DO NOT induce vomiting. Get medical attention. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms/effects, acute and delayed:

For most important symptoms and effects (acute and delayed), see Section 2 (Hazard Statements and Supplemental Information if applicable) and Section 11 (Toxicology Information) of this SDS.

4.3. Indication of immediate medical attention and special treatment needed, if necessary:

Unless otherwise noted in Notes to Physician, no specific treatment noted; treat symptomatically.

5. FIREFIGHTING MEASURES

Extinguishing media (suitable):
Water spray, Carbon dioxide (CO2), Foam, Dry chemical

Protective equipment:
Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand / NIOSH approved or equivalent).

Further firefighting advice:
Fire fighting equipment should be thoroughly decontaminated after use.

Fire and explosion hazards:
When burned, the following hazardous products of combustion can occur:
Carbon oxides
Nitrogen oxides (NOx)
Hazardous organic compounds

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, Emergency procedures, Methods and materials for containment/clean-up:
Prevent further leakage or spillage if you can do so without risk. Ventilate the area. Possible fall hazard – floor may become slippery from leakage/spillage of product. Sweep up and shovel into suitable properly labeled containers for prompt disposal. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

Protective equipment:
Appropriate personal protective equipment is set forth in Section 8.

7. HANDLING AND STORAGE

Handling

General information on handling:
Avoid breathing dust.
Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of material from eyes, skin, and clothing.

Storage

General information on storage conditions:
Keep in a dry, cool place. Store in closed containers, in a secure area to prevent container damage and subsequent spillage. Store away from moisture and heat to maintain the technical properties of the product.

Storage stability – Remarks:
Stable under recommended storage conditions.

Storage incompatibility – General:
None known.

Temperature tolerance – Do not store above:
86 °F (30 °C)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Airborne Exposure Guidelines:

Talc (Mg3H2(SiO3)4) (14807-96-6)

US. ACGIH Threshold Limit Values

Form:	Respirable fraction.
Time weighted average	2 mg/m3
Remarks:	The value is for particulate matter containing no asbestos and <1% crystalline silica.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Time weighted average	20millions of particles per cubic foot of air

US. OSHA Table Z-3 (29 CFR 1910.1000)

Form:	Inhalable.
Time weighted average	2.4millions of particles per cubic foot of air
Remarks:	The exposure limit is calculated from the equation, 250/(%SiO2+5), using a value of 100%

	SiO2. Lower percentages of SiO2 will yield higher exposure limits.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Form:	Inhalable.
Time weighted average	0.1 mg/m3
Remarks:	The exposure limit is calculated from the equation, 10/(%SiO2+2), using a value of 100% SiO2. Lower percentages of SiO2 will yield higher exposure limits.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Form:	Total dust
Time weighted average	0.3 mg/m3
Remarks:	The exposure limit is calculated from the equation, 30/(%SiO2+2), using a value of 100% SiO2. Lower values of % SiO2 will give higher exposure limits.

Only those components with exposure limits are printed in this section. Limits with skin contact designation above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required. Limits with a sensitizer designation above mean that exposure to this material may cause allergic reactions.

Engineering controls:
Investigate engineering techniques to reduce exposures below airborne exposure limits or to otherwise reduce exposures. Provide ventilation if necessary to minimize exposures or to control exposure levels to below airborne exposure limits (if applicable see above).If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

Respiratory protection:
Avoid breathing dust. Where airborne exposure is likely or airborne exposure limits are exceeded (if applicable, see above), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components and substances released during processing. Consult respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure or where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

Skin protection:
Processing of this product releases vapors or fumes which may cause skin irritation. Minimize skin

contamination by following good industrial hygiene practice. Wearing protective gloves is recommended. Wash hands and contaminated skin thoroughly after contact with processing fumes or vapors. Wash thoroughly after handling.

Eye protection:
Use good industrial practice to avoid eye contact. Processing of this product releases vapors or fumes which may cause eye irritation. Where eye contact may be likely, wear chemical goggles and have eye flushing equipment available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	translucent
Physical state:	solid
Form:	pellets
Odor:	none
Odor threshold:	No data available
Flash point	Not applicable
Lower flammable limit (LFL):	No data available
Upper flammable limit (UFL):	No data available
pH:	Not applicable
Density:	1.0 g/cm3
Specific Gravity (Relative density):	1 73 °F 23 °C Water=1 (liquid)
Boiling point/boiling range:	Not applicable
Melting point/range:	No data available.
Freezing point:	No data available.
Evaporation rate:	No data available.
Solubility in water:	No data available.
Viscosity, dynamic:	No data available
Oil/water partition coefficient:	No data available.
Thermal decomposition:	> 662 °F (> 350 °C)

Flammability: See GHS Classification in Section 2 if applicable

10. STABILITY AND REACTIVITY

Stability:
The product is stable under normal handling and storage conditions.

Hazardous reactions:
Hazardous polymerization does not occur.

Materials to avoid:
None known.

Conditions / hazards to avoid:
Avoid storing in moist and warm conditions. (to maintain the technical properties of the product). See Hazardous Decomposition Products below.

Hazardous decomposition products:

Thermal decomposition giving toxic, flammable, and / or corrosive products:
Carbon oxides
Nitrogen oxides (NOx)
Hazardous organic compounds

11. TOXICOLOGICAL INFORMATION

Data on this material and/or its components are summarized below.

Data for Proprietary polymer (Proprietary)

Acute toxicity

Oral:
No deaths occurred. (rat) LD50 > 5,000 mg/kg.

Dermal:
No deaths occurred. (rat) LD0 > 2,000 mg/kg.

Skin Sensitization:
Not a sensitizer. Repeated skin exposure. (human subjects) No skin allergy was observed

Repeated dose toxicity
Intratracheal administration to animal / affected organ(s): lung / signs: fibrosis / (dust)

Dietary administration to dog / No adverse effects reported. (Solvent extracts were tested.)

Dietary administration to rat / affected organ(s): liver / (Solvent extracts were tested.)

Carcinogenicity
Chronic implantation administration to rat, mouse, hamster / signs: tumors at the site of application /

Increased incidence of tumors was reported.
Classified by the International Agency for Research on Cancer as: Group 3: Unclassifiable as to carcinogenicity in humans.

Genotoxicity

Assessment in Vitro:
No genetic changes were observed in a laboratory test using: bacteria

Other information
The information presented is from representative materials with this Chemical Abstract Service (CAS) Registry number. The results vary depending on the size and composition of the test substance.

Human experience
Inhalation:
Upper respiratory tract: asthma-like symptoms. (based on reports of occupational exposure to workers) (releases from hot processing)

Data for Talc (Mg3H2(SiO3)4) (14807-96-6)

Acute toxicity

Oral:
Practically nontoxic. (rat) LD50 > 5,000 mg/kg.

Dermal:
No deaths occurred. (rat) LD0 > 2,000 mg/kg.

Inhalation:
No deaths occurred. (rat) 4 h LC0 > 2.1 mg/l. (dust/mist)

Skin Irritation:
Not irritating. (In vitro) EPISKIN Human Skin Model Test (data for a similar material)

Eye Irritation:
Causes mild eye irritation. (rabbit) (data for a similar material)

Skin Sensitization:
Not a sensitizer. Guinea pig maximization test. No skin allergy was observed (data for a similar material)

Repeated dose toxicity
Subchronic oral administration to rat / No adverse effects reported.

Repeated inhalation administration to rat / affected organ(s): upper respiratory tract, blood vessels / signs: inflammation, emphysema, fibrosis

Chronic inhalation administration to rat / signs: fibrosis

Chronic inhalation administration to rat and mouse / affected organ(s): respiratory tract, lymph node / signs: fibrosis, irritation / (Dust inhalation)

Carcinogenicity

Chronic inhalation administration to rat / affected organ(s): adrenal gland, lung / Increased incidence of tumors was reported.

Chronic inhalation administration to mouse / No increase in tumor incidence was reported.

Repeated dietary administration to rat / No increase in tumor incidence was reported.
Classified by the International Agency for Research on Cancer as: Group 3: Unclassifiable as to carcinogenicity in humans.

Genotoxicity

Assessment in Vitro:
No genetic changes were observed in laboratory tests using: bacteria, animal cells

Genotoxicity

Assessment in Vivo:
No genetic changes were observed in laboratory tests using: rats

Developmental toxicity
Exposure during pregnancy. oral (rat, rabbit, hamster, mouse) / No birth defects were observed.

Reproductive effects
Two generations study.. oral (rabbit) / No toxicity to reproduction.

Human experience
Inhalation:
Lung: benign, dust induced lung condition. (severity of effects depends on extent of exposure) (based on reports of occupational exposure to workers)

Human experience
Skin contact:
Skin: skin granulomas. (based on reports of occupational exposure to workers)

Data for Chlorite-group minerals (1318-59-8)

Human experience
Inhalation:
Respiratory tract: A benign dust induced lung condition, without impairment of lung function.. (dust) (repeated or prolonged exposure) (based on reports of occupational exposure to workers)

Data for Proprietary component (Proprietary)

Acute toxicity

Oral:
No deaths occurred. (rat) LD0 > 5,000 mg/kg.

Dermal:
No deaths occurred. (rat) LD0 > 2,000 mg/kg.

Inhalation:
No deaths occurred. 4 h LC0 > 2.8 mg/l. (dust/mist)

Skin Irritation:
Not irritating. (rabbit)

Eye Irritation:
May cause eye irritation. (rabbit)

Skin Sensitization:
Not a sensitizer. LLNA: Local Lymph Node Assay. (mouse) No skin allergy was observed

Repeated dose toxicity
Subchronic oral administration to rat / No adverse effects reported.

Genotoxicity

Assessment in Vitro:
No genetic changes were observed in laboratory tests using: bacteria, animal cells

Developmental toxicity
Exposure during pregnancy. Oral (rat) / No birth defects were observed.

12. ECOLOGICAL INFORMATION

Chemical Fate and Pathway
Data on this material and/or its components are summarized below.

Data for Proprietary component (Proprietary)

Biodegradation:
Readily biodegradable. (28 d) biodegradation 64 %

Octanol Water Partition Coefficient:
log Pow: = 8

Ecotoxicology
Data on this material and/or its components are summarized below.

Data for Talc (Mg3H2(SiO3)4) (14807-96-6)

Aquatic toxicity data:
Practically nontoxic. Danio rerio (zebra fish) 24 h LC50 > 100,000 mg/l (nominal concentrations reported)

Data for Proprietary component (Proprietary)

Aquatic invertebrates:
No adverse effects reported. Daphnia magna (Water flea) 48 h EC50 > 0.13 mg/l (tetrahydrofuran used as cosolvent)

Algae:
No adverse effects reported. Pseudokirchneriella subcapitata (green algae) 72 h ErC50 > 0.05 mg/l (methanol used as cosolvent)

Chronic toxicity to fish:
No adverse effects reported. Danio rerio (zebra fish) 28 d NOEC > 0.105 mg/l (methanol used as cosolvent)

Chronic toxicity to aquatic invertebrates:
No effect up to the limit of solubility. Reproduction Test / Daphnia magna (Water flea) 21 d NOEC > 0.08 mg/l (methanol used as cosolvent)

Chronic toxicity to aquatic plants:
No adverse effects reported. Pseudokirchneriella subcapitata (green algae) 72 h NOEC r > 0.05 mg/l (methanol used as cosolvent)

13. DISPOSAL CONSIDERATIONS

Waste disposal:
Where possible recycling is preferred to disposal or incineration. If recycling is not an option, incinerate or dispose of in accordance with federal, state, and local regulations. Pigmented, filled and/or solvent laden product may require special disposal practices in accordance with federal, state and local regulations. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits. Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

14. TRANSPORT INFORMATION

US Department of Transportation (DOT): not regulated

International Maritime Dangerous Goods Code (IMDG): not regulated

15. REGULATORY INFORMATION

Chemical Inventory Status

US. Toxic Substances Control Act	TSCA	The components of this product are all on the TSCA Inventory.
Canadian Domestic Substances List (DSL)	DSL	All components of this product are on the Canadian DSL
China. Inventory of Existing Chemical Substances in China (IECSC)	IECSC (CN)	Conforms to
Japan. ENCS - Existing and New Chemical Substances Inventory	ENCS (JP)	Conforms to
Japan. ISHL - Inventory of Chemical Substances	ISHL (JP)	Conforms to
Korea. Korean Existing Chemicals Inventory (KECI)	KECI (KR)	Conforms to
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	PICCS (PH)	Conforms to
Australia Inventory of Chemical Substances (AICS)	AICS	Conforms to

United States – Federal Regulations

SARA Title III – Section 302 Extremely Hazardous Chemicals:
The components in this product are either not SARA Section 302 regulated or regulated but present in negligible concentrations.

SARA Title III - Section 311/312 Hazard Categories:
No SARA Hazards

SARA Title III – Section 313 Toxic Chemicals:
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.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - Reportable Quantity (RQ):

The components in this product are either not CERCLA regulated, regulated but present in negligible concentrations, or regulated with no assigned reportable quantity.

United States – State Regulations

New Jersey Right to Know

Chemical name	CAS-No.
Talc (Mg3H2(SiO3)4)	14807-96-6

New Jersey Right to Know – Special Health Hazard Substance(s)

Chemical name	CAS-No.
Talc (Mg3H2(SiO3)4)	14807-96-6

Pennsylvania Right to Know

Chemical name	CAS-No.
Proprietary polymer	Proprietary
Talc (Mg3H2(SiO3)4)	14807-96-6
Chlorite-group minerals	1318-59-8

California Prop. 65
This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive defects.

16. OTHER INFORMATION

Latest Revision(s):

Reference number:	200006949
Date of Revision:	04/22/2019
Date Printed:	04/23/2019

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