



Dyechem Supplies

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Safety Data Sheet
ECO STONE

Prepared pursuant to the provisions of Article 41 of the Industry Safety and Health law.

1	Substance/Product Identification
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Dyechem Supplies
14733 ½ Garfield Ave.
Paramount, CA 90723

Product Trade Name	ECO STONE
CAS Number	Confidential.
Synonyms	None.
Generic Chemical Name	Confidential.
Korean Hazard Class	Material is not a regulated substance.
Product Type	Extrusion
Appearance	Natural pellets.
Created Date	01 January 2017
Preparation/Revision Date	01 January 2009
Issuing Department	Product Safety and Compliance Department (440-943-1200)
Transportation Emergency	FOR TRANSPORT EMERGENCY call: (562)833-5299
MSDS No.	87128501-5121814-4022920-102103

2	Composition/Information on Ingredients
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Hazardous Ingredients This material has no known hazards under applicable laws.
Hazardous ingredient information not provided is considered a trade secret.

3	Hazards Identification
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Principal Hazards

- This material has no known health hazards.

See Section 11 for complete health hazard information.

4	First Aid Measures
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Oral	Treat symptomatically. Get medical attention.
Eyes	Treat as any foreign particulate matter. If hot melted material should splash into the eyes, flush eyes immediately with water for 15 minutes while holding the eyelids open. See a physician for treatment.
Skin	Wash with soap and water. Get medical attention if irritation develops. For contact with molten product, do not remove contaminated clothing. Flush skin immediately with large amounts of cold water. If possible submerge area in cold water. Pack with ice. DO NOT

	attempt to peel polymer from skin. Seek medical attention immediately.
Inhalation	Remove exposed person to fresh air if adverse effects are observed.
Additional Information	Note to physician: Treat symptomatically.

5	Fire Fighting Measures
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Flash Point	Not applicable.
Extinguishing Media	Water spray, dry chemical, foam. CO2 may be ineffective on large fires.
Firefighting Procedures	Recommend wearing self-contained breathing apparatus. Water may cause splattering.
Unusual Fire & Explosion Hazards	Solid does not readily release flammable vapors. Thermoplastic polymers can burn. Protect product from flames; maintain proper clearance when using heat devices, etc. Irritating or toxic substances will be emitted upon burning, combustion or decomposition. Large masses of molten polymer held at elevated temperatures for extended periods of time may auto-ignite.

6	Accidental Release Measures
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Spill Procedures	Pick up free solid for recycle and/or disposal.
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7	Handling and Storage
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Pumping Temperature Maximum Handling	Not applicable.
Temperature Handling Procedures	<p>Not determined.</p> <p>Loading and unloading operations may cause nuisance dust to form. Refer to Processing Guide and/or contact your local Technical Service representative for melt processing temperature range. For most thermoplastic polyurethanes, melt processing is in the range of 177 - 232 deg. C (350 - 450 deg. F), however, some products may process at different temperatures. Heating above 232 deg. C (450 deg. F) can generate hazardous decomposition products (see Section 10). Conduct any operations emitting fumes or vapors (including heat joining, cutting and or sealing of articles and clean up) under well-ventilated conditions. Avoid breathing process vapors. Do not hold product for extended periods of time at elevated temperatures or allow thick masses of hot polymer to accumulate because they can decompose emitting hazardous gasses. Do not taste, swallow, or chew products. Wash thoroughly after processing. Do not store or consume food in processing areas. Fume condensates may include hazardous contaminants from additives. Condensate may be combustible and should be periodically removed from exhaust hoods, ductwork, and other surfaces. Impervious gloves should be worn during cleanup operations to prevent skin contact. Post thermal processing activities necessary to produce molded articles (such as cutting, sanding, sawing, grinding, drilling, or regrinding) may create dust or "fines." Powders, dust, and/or fines may pose a dust explosion hazard. Do not steam sterilize articles made with Estane TPU resins. Methylene dianiline can be formed under these conditions. Electrostatic buildup may occur when pouring or transferring this product from its container. The spark produced may be sufficient to ignite vapors of flammable liquids. Always transfer product by means which avoid static buildup. Avoid pouring product directly from its container into combustible or flammable solvent. The major off-gasses from normal melt processing are expected to be water vapor and carbon dioxide. Other trace volatile organic components may also be emitted. Wash thoroughly after handling.</p>
Maximum Storage Temperature	Not determined.
Storage Procedures	Use good housekeeping measures to prevent dust accumulations. Store in well ventilated place.
Loading Temperature	Not determined.

Exposure Limits**Korea**

Not applicable.

None established

Other Exposure Limits

None known.

Engineering Controls

Use with adequate ventilation.

Gloves Procedures

Use good industrial hygiene practices to avoid skin contact. If contact with the material may occur wear chemically protective gloves.

Eye Protection

Safety Glasses.

Respiratory Protection

Under normal use conditions, respirator is not usually required. Use appropriate respiratory protection if the recommended exposure limit is exceeded, or if exposure to vapors is likely. Cutting operations may create small particles from this product. If inhalation of particles cannot be avoided, wear a dust respirator. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.

Clothing Recommendation

Long sleeve shirt is recommended.

Explosion Data

Material does not have explosive properties.

Flash Point

Not applicable.

Upper Flammable Limit

Not determined.

Lower Flammable Limit

Not determined.

Autoignition Point

Not determined.

Vapor Pressure

Not determined.

pH

Not determined.

Specific Gravity

1.05 (20 °C)

Bulk Density

Not determined.

Water Solubility

Insoluble.

Percent Solid

Not determined.

Percent Volatile

Not determined.

Volatile Organic Compound

Not determined.

Vapor Density

Not determined.

Evaporation Rate

Not determined.

Odor

Faint

Viscosity

Not determined.

Odor Threshold

Not determined.

Boiling Point

Not determined.

Pour Point Temperature

Not determined.

Melting / Freezing Point

Not determined.

Korean Oxidizer

Not applicable.

The above data are typical values and do not constitute a specification. Vapor pressure data are calculated unless otherwise noted.

Stability	Material is normally stable at moderately elevated temperatures and pressures.
Decomposition Temperature	Not determined.
Incompatibility	None known, avoid contact with reactive chemicals.
Polymerization	Will not occur.
Thermal Decomposition	Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. Under combustion conditions, oxides of the following elements will be formed: nitrogen. May also include isocyanates and small amounts of hydrogen cyanide.

11	Toxicological Information
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Oral Toxicity	The LD50 in rats is > 5000 mg/Kg. Based on data from components or similar materials. Ingestion of this material may cause gastrointestinal irritation.
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-- ACUTE EXPOSURE --

Eye Irritation	Not expected to cause eye irritation Based on data from components or similar materials. Particulates may cause mechanical irritation. At processing or combustion temperatures this product may emit fumes and vapors that cause irritation, possibly severe, to the eyes.
Skin Irritation	Not expected to be a primary skin irritant. Based on data from components or similar materials. Contact with heated polymer may cause thermal burns and adhesion of solidified product to the skin.
Dermal Toxicity	The LD50 in rabbits is > 2000 mg/Kg. Based on data from components or similar materials.
Inhalation Toxicity	Overexposure to vapors or mist may cause dizziness, headache, nausea, and/or flu-like symptoms. Avoid inhalation of mists or vapors.
Respiratory Irritation	At processing or combustion temperatures this product may emit fumes and vapors that cause irritation, possibly severe, to the respiratory tract, eyes, or skin.
Dermal Sensitization	No data available to indicate product or components may be a skin sensitizer.
Inhalation Sensitization	No data available to indicate product or components may be respiratory sensitizers.
Chronic Toxicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.

-- CHRONIC EXPOSURE --

Carcinogenicity	No data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Reproductive Toxicity	No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.
Teratogenicity	No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.
Other	Under decomposition conditions, isocyanates may be generated from this product. Isocyanates can cause skin sensitization and/or respiratory sensitization. Pre-existing skin conditions may be aggravated by prolonged or repeated exposure. Persons with sensitive airways (e.g., asthmatics) may react to vapors.

-- ADDITIONAL INFORMATION --

12	Ecological Information
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Freshwater Fish Toxicity	Not determined.
Freshwater Invertebrates	
Toxicity	Not determined.

Algal Inhibition	Not determined.
Saltwater Fish Toxicity	Not determined.
Saltwater Invertebrates	
Toxicity	Not determined.
Bacteria Toxicity	Not determined.
Miscellaneous Toxicity	Not determined.
Biodegradation	Adequate data is not available to estimate the biodegradation potential of this material.

-- ENVIRONMENTAL FATE --

Bioaccumulation	Less than 1.0% of the components potentially bioconcentrate, based on octanol/water coefficients.
Soil Mobility	Not determined.

13	Disposal Considerations
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Waste Disposal	This material, if discarded, is not a hazardous waste under RCRA Regulation 40 CFR 261. Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.
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14	Transport Information
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ICAO/IATA II	Not regulated.
IMDG	Not regulated.
IMDG EMS Fire	Not applicable.
IMDG EMS Spill	Not applicable.
IMDG MFAG	Not applicable.
MARPOL Annex II	Not determined.
USCG Compatibility	Not determined.

Review classification requirements before shipping materials at elevated temperatures.

15	Regulatory Information
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-- Global Chemical Inventories --

USA	All components of this material are on the US TSCA Inventory or are exempt.
EU	All components are in compliance with the EC Seventh amendment Directive 92 /32/EEC.
Japan	All components are in compliance with the Chemical Substances Control Law of Japan.
Australia	All components are in compliance with chemical notification requirements in Australia.
New Zealand	May require notification before sale under New Zealand regulations.
Canada	All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.
Switzerland	May require notification before sale in Switzerland.
Korea	All components are in compliance in Korea.
Philippines	All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).
China	This product requires notification in China.

-- Product Registrations --

**U.S. Dept of Agriculture
NSF Nonfood Compounds**

This product has not been filed with the USDA to support H2 approvals.

**Registration
Finnish Registration**

This product has not been filed with the NSF to support H1 or H2 approvals.

**Number
Swedish Registration**

Not Registered

**Number
Norwegian Registration**

Not Registered

**Number
Danish Registration**

Not Registered

**Number
Swiss Registration Number**

Not Registered

Italian Registration Number

Not Registered

Korean Registration

Number

Not Registered

-- Other / International --

FDA Approval

Not applicable.

Other TSCA Reg.

None known.

SARA Ext. Haz. Subst.

This product does not contain greater than 1.0% of any chemical substance on the SARA Extremely Hazardous Substances list.

SARA Section 313

This product does not contain greater than 1.0% (greater than 0.1% for carcinogenic substance) of any chemical substances listed under SARA Section 313.

CERCLA Hazardous

**Substances
Cal. Prop. 65**

None known.

This product does not intentionally contain any chemicals known by the State of California to cause cancer and/or birth defects. Moreover, we do not routinely analyze its products for impurities which may be such chemicals.

16	Other Information
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US NFPA Codes

Health	Fire	Reactivity	Special
2	1	0	N/E

(N/E) - None established

HMIS Codes

Health	Fire	Reactivity
0	1	0

Precautionary Labels

- This material has no known health hazards.

Revision Indicators

Section: 7 Handling procedures.

Changed: 01/01/2017

Section: 16 HMIS codes.

Changed: 01/01/2017

Section: 16 NFPA Codes.

Changed: 01/01/2017

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