

SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

- 1.1 Name of Substance:** **Basaltic Rock**
- 1.2 Product Names:** Igneous Rock, Gravel, Basalt, Crushed Rock, Crushed Stone, Blue Rock. Common names includes: Aggregate, Grade A Rock, Grade B Rock, Basalt Sand, Select Borrow, Base Course, Cinder
- 1.3 Intended Use:** Basaltic rock is a quarried, naturally occurring material used in the manufacture of paving materials and other construction applications.
- 1.4 Company Name:** Grace Pacific LLC
- 1.5 Address:** Grace Pacific LLC
P.O. Box 78
Honolulu, Hawaii 96810
- 1.6 Telephone:** (808) 674-8383 (7:30 AM – 4:30 PM, HST)
- 1.7 24-Hour Emergency Telephone:** 1-800-424-9300 (Chemtrec)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

OSHA HCS (29 CFR 1910.1200) / GHS Classification

GHS Classifications: Not classified as dangerous for supply/use under GHS

Label Elements

Hazard Pictogram(s): None

Signal Word(s): None

Hazard Statement(s): Respirable dust may be released during processing, handling, and use of basaltic rock, particularly through crushing, drilling, cutting, loading and unloading. If inhaled in excessive quantities over a prolonged period or extended period, respirable dust can constitute a long term health hazard.

Prevention Statement(s): Avoid actions that may cause the basaltic rock dust to become airborne.
Avoid breathing dust.
As necessary, wear adequate protective clothing.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Substance/Mixture:** Mixture. Basaltic rock is a mixture of angular particles, in a variety of colors from red and grey to black. The size may range from dust to boulders. It is odorless and not flammable. Respirable dust particles may be generated by handling basaltic rock. Inhalation of excessive particulate matter may cause respiratory problems.
- 3.2 CAS number/other identifiers:** Not available
- 3.3 Product code:** Not available

Component Information:

Component	CAS number/Unique Identifier	Weight %
Olivine	1317-71-1	10
Clinopyroxene	12174-37-7	13
Plagioclase	Unknown	38
Titanomagnetite	12178-54-0	12
Microcrystalline (groundmass) Material	Unknown	11

Composition comments:

Basaltic rock is a quarried, naturally occurring material.

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures:

- Inhalation:** Breathing small amounts of dust during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms of inhalation exposure may include the following: irritation (nose, throat, and airways), coughing, and choking. If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention.
- Skin Contact:** Can cause dry skin and abrasions. This material is unlikely to pass into the body through the skin. Clean exposed skin with soap and water. Contact a physician if irritation develops.
- Ingestion:** Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful, but no more so than most other inert materials. Seek medical attention. If individual is conscious, give a large quantity of water. Contact a physician or medical facility for advice about whether to induce vomiting. If possible, do not leave individual unattended.

**Eye Contact:**

Exposure to airborne dust may cause eye irritation or inflammation. Symptoms include stinging, tearing, redness, and swelling of eyes. If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart until particles are removed; seek medical attention if symptoms persist.

4.2 Most Important Symptoms and Effects:**Acute:**

Not applicable

Delayed:

Not applicable

4.3 Indications of Any Immediate Medical Attention and Special Treatment:

Refer to Section 4.1.

SECTION 5: FIRE FIGHTING MEASURES**5.1 Suitable Extinguishing Media:**

Not applicable. Basaltic rock does not pose a fire-related hazard.

5.2 Unsuitable Extinguishing Media:

Not applicable

5.3 Specific Hazards Arising from the Mixture:

Avoid breathing dust.

5.4 Special Protective Equipment and Precautions for Fire-Fighters:

See Section 8 for guidance in selection of personal protective equipment.

5.5 NFPA Rating

Health: 1 Flammability: 0 Reactivity: 0 Special:
None
(0-Minimal, 1-Slight, 2-Moderate, 3-Serious, 4-Extreme)

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1 Personal Precautions, Protective Equipment and Emergency Procedures:**

Avoid actions that cause dust to become airborne. Avoid inhalation of dust. Wear appropriate protective equipment as described in Section 8.

6.2 Environmental Precautions:

Basaltic rock is not subject to the reporting requirements of Title III of SARA, 1986, and 40 CFR 372.

6.3 Methods and Material for Containment and Clean-Up:

This material is a solid and is not likely to flow.

SECTION 7: HANDLING & STORAGE

7.1 Precautions for Safe Handling:

Comply with all applicable EPA, OSHA, NFPA, state, and local requirements. Exercise good personnel hygiene, including removal of soiled clothing and washing with soap and water.

7.2 Conditions for Safe Storage, Including any Incompatibilities:

Not applicable.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters

Substance	Exposure Limits
Basaltic Rock	TLV (ACGIH): None established PEL (OSHA): None established
Olivine	TLV (ACGIH): 10 mg/m ³ TWA ^a PEL (OSHA): 15 (total dust ^b)
Clinopyroxene	TLV (ACGIH): 10 mg/m ³ TWA ^a PEL (OSHA): 15 (total dust ^b)
Plagioclase	TLV (ACGIH): 10 mg/m ³ TWA ^a PEL (OSHA): 15 (total dust ^b)
Titanomagnetite	TLV (ACGIH): 10 mg/m ³ TWA ^a PEL (OSHA): 15 (total dust ^b)
Microcrystalline (groundmass) Material	TLV (ACGIH): 10 mg/m ³ TWA ^a PEL (OSHA): 15 (total dust ^b)

Note: Basaltic rock and its constituent minerals are not listed as carcinogens by the IARC, the National Toxicology Program, or the Occupational Safety and Health Administration.

^a TLV-TWA for particulates having a quartz content of less than 1%.

^b PEL for particulates not otherwise regulated, as listed in 29 CFR 1910.1000 Z-1 Table.

ACGIH American Conference of Industrial Hygienists

OSHA Occupational Safety and Health Administration

TLV Threshold Limit Value.

TWA 8 hour time-weighted average.

8.2 Engineering Controls:

Use local or general exhaust in an enclosed area or when there is inadequate ventilation.

8.3 Personal Protective Equipment [PPE]

Eye/Face Protection:	Wear appropriate safety glasses or goggles to protect eyes from blowing dust.
Hand Protection:	Wear leather or cloth work gloves to prevent skin contact and insulated gloves when handling hot material.
Skin and Body Protection:	Wear appropriate personal protective clothing such as gloves as a precaution. Wash dust-exposed skin with soap and water. Wash work clothes after each use.
Respiratory Protection:	Not normally required. If exposure limits to dust are expected to be exceeded, wear an appropriate, properly-fitted NIOSH/MSHA-approved respirator. Follow manufacturer's directions for respirator use.
Hygiene Measures:	Avoid dust inhalation and direct contact with eyes. Wear suitable protective clothing. If respiratory protection is used, institute a respiratory protection program that includes regular training, inspection, maintenance, and evaluation. Practice good personal hygiene and housekeeping procedures when using these products.



SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

9.1 Physical State:	Solid
9.2 Appearance:	Angular, rounded, or smooth solid material, red or grey to black
9.3 Odor:	None
9.4 Odor Threshold:	Not Applicable
9.5 pH:	8-10
9.6 Melting Point:	Approximately 1,000 to 1,100 °C (~1,800 to 2,000 °F)
9.7 Boiling Point (5 - 95%):	Not Applicable
9.8 Flash point:	Non-combustible
9.9 Evaporation Rate:	Not Applicable
9.10 Flammable Lower Limit:	Not Applicable
9.11 Flammable Upper Limit:	Not Applicable
9.12 Vapor Pressure:	Not Applicable
9.13 Vapor Density:	Not Applicable
9.14 Specific Gravity:	Approximately 3.0
9.15 Density:	2.8-3.0 g/cm ³
9.16 Water Solubility:	Insoluble
9.17 Octanol/Water Partition Coefficient:	Not Available
9.18 Auto-ignition Temperature:	Not Available
9.19 Decomposition Temperature:	Not Applicable
9.20 Viscosity:	Not Applicable

SECTION 10: STABILITY & REACTIVITY

- 10.2 Possibility of Hazardous Reaction:** Stable.
- 10.3 Conditions to Avoid:** Avoid contact with incompatible materials (see Materials to Avoid below).
- 10.4 Incompatible Materials:** Stable under expected conditions of use. Under unexpected conditions of use, basaltic rock may react with hydrofluoric acid, producing corrosive silicon tetrafluoride gas.
- 10.5 Hazardous Decomposition Product(s):** None.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

- Acute Toxicity:** Basaltic rock is inert and not expected to be toxic to humans or sensitive ecological receptors.
- Inhalation (chronic):** No data available.
- Ingestion:** No data available.
- Eye Contact:** Airborne dust may cause immediate or delayed eye irritation or inflammation.
- Skin Contact:** No data available.
- Carcinogenicity:** Basaltic rock and its constituent minerals are not listed as carcinogens by the IARC, the National Toxicology Program, or the Occupational Safety and Health Administration.

OSHA	IARC	NTP	ACGIH
Not classifiable as a human carcinogen	Not classifiable as a human carcinogen	Not classifiable as a human carcinogen	Not classifiable as a human carcinogen

- Mutagenicity:** Not to be expected.
- Reproductive Toxicity:** Not to be expected.

SECTION 12: ECOLOGICAL INFORMATION

- 12.1 Ecotoxicity (aquatic/terrestrial):** Basaltic rock is inert and not expected to be toxic to humans or sensitive ecological receptors.
- 12.2 Persistence and Degradability:** Not applicable
- 12.3 Bioaccumulation Potential:** Not applicable
- 12.4 Mobility:** Not applicable
- 12.5 Other Adverse Effects:** Not applicable

SECTION 13: DISPOSAL CONSIDERATIONS

- 13.1 Disposal Instructions:** Collect and reuse clean materials. Dispose of waste materials in accordance with applicable federal, state, and local laws and regulations

SECTION 14: TRANSPORT INFORMATION

- 14.1 Transport Information:** Not regulated as hazmat by DOT. Basaltic rock is primarily distributed in bulk shipment.
- 14.2 UN Number:** Not applicable
- 14.3 Proper Shipping Name** Not applicable
- 14.4 Transport Hazard Class** Not applicable
- 14.5 Packing Group** Not applicable
- 14.6 Marine Pollutant** Not applicable
- 14.7 Special Precautions for User in Terms of Compliance During Transport:** None

SECTION 15: REGULATORY INFORMATION

US Federal Regulatory Information:

TSCA Chemical Inventory Section 8(b): This product and its components are listed on the TSCA Chemical Inventory.

OSHA Hazard Communication Standard: None listed

EPA Superfund Amendment & Reauthorization Act [SARA]:

SARA Section 302: This product does not contain components that have been listed on the EPA's Extremely Hazardous Substances [EHS] List.

SARA Section 304: This product does not contain components identified either as an EHS or a CERCLA Hazardous Substance, which in case of a spill or release, may be subject to SARA reporting requirements.



SARA Section 313: This product does not contain components subject to reporting on the Toxic Release Inventory [TRI] Form R.

RCRA: If discarded in its purchased form, this product would not be a hazardous waste either by listing or characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

State Regulatory Information:

Hawaii Emergency Planning and Community Right-To-Know [HEPCRA]. Basaltic rock is not identified on the Hawaii Emergency Planning and Community Right-To-Know regulatory list.

SECTION 16: OTHER INFORMATION

16.1 Additional Information:

Revision Date: 9/21/2015. Revised from previous MSDS-Basaltic Rock No. GP-MSDS-004 (revision # 1, 7/27/2011).

Abbreviations:

ACGIH	American Conference of Governmental Industrial Hygienists
°C	Celsius
CAS No.	Chemical Abstract Service number
CERCLA	Comprehensive, Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
DOT	U.S. Department of Transportation
EHS	Extremely Hazardous Substances
EPA	Environmental Protection Agency
°F	Fahrenheit
g/cm³	Gram per cubic centimeter
GHS	Globally Harmonized System
HEPCRA	Hawaii Emergency Planning and Community Right-To-Know
IARC	International Agency for Research on Cancer
mg/m³	milligrams per cubic meter
MSDS	Material Safety Data Sheet
MSHA	Mine Safety and Health Administration
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Level



NTP	National Toxicological Program
pH	Negative log of hydrogen ion
PPE	Personal Protective Equipment
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
UN	United Nations
SARA	Superfund Amendment & Reauthorization Act
TLV	Threshold Limit Value.
TRI	Toxic Release Inventory
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average

Disclaimer: The information and recommendations contained herein are based upon tests believed to be reliable. However, Grace Pacific LLC does not guarantee their accuracy or completeness nor shall any of this information constitute a warranty, whether expressed or implied, as to the safety of the goods, the merchantability of the goods, or the fitness of the goods for a particular purpose. Adjustment to conform to actual conditions of usage maybe required. Users should make their own investigations to determine the suitability of the information for their particular purposes. Grace Pacific LLC assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits arising from the use of these data. The information contained herein is not intend to be and should not be construed as legal advice or as insuring compliance with any federal, state, or local laws or regulations. Any party using this product should review all such laws, rules, or regulations prior to use, including but not limited to U.S. Federal, State, and local laws and regulations.