

# Hess Grade: $\frac{3}{8}$ fines MN

## PARTICLE SIZE SPECIFICATION GRADE $\frac{3}{8}$ fines MN\*

SIZE			ALLOWABLE PERCENT PASSING
MICRON	MM	U.S. MESH	
9525	9.5	3/8	95-100
4750	4.75	4	60-92
2380	2.38	8	40-75
300	0.3	50	15-40
150	0.15	100	10-25

TEST METHOD: ASTM C136-06

## LOOSE BULK DENSITY GRADE $\frac{3}{8}$ fines MN

**58 lbs/per cubic foot (damp) [929 kg/per cubic meter]** (ASTM C29)



**Left:** HP Grade three-eighths fines MN\* (mine grade) has a 3/8-inch top-end stone size with extensive fines content. **Right:** Grade used to amend garden soil—resist compaction, improve root zone aeration, drainage and moisture retention.

\*MINE GRADES are crushed and screened at the mine and are not dried for packaging in palletized production bags, but rather available in bulk quantities.

## GRADE APPLICATIONS

- Lightweight aggregate/sand for block (CMU) and manufactured stone and brick veneer products
- Soil conditioner for damaged and/or poor native soils
- Lightweight engineered soils
- Spill absorbent
- Bulking agent
- Compost conditioner

## RETAIL PRODUCT BRANDS

Brands under the Hess umbrella using HP Grade 3/8 fines MN: SoilRox™, Compost Sugar™.

## PACKAGING OPTIONS

- 2.5 lb [1.1 kg] resealable bags
- 20 lb [9 kg] box
- 32 lb [14.5 kg] pails
- 775 lb [352 kg] super sacks (palletted)
- 2000 lb [907 kg] super sacks (palletted)
- Bulk shipped in rail car or tractor trailer

## ORDER

- Samples, small quantities: order direct from the [PumiceStore.com](http://PumiceStore.com)
- Palletted super sacks, truckloads: contact us at [sales@hesspumice.com](mailto:sales@hesspumice.com) or call **208-766-4777**

## PUMICE TECHNICAL DATA

Chemical analysis, physical properties, and other common data shared by all Hess Pumice grades are detailed on back.

**Hess** | **PUMICE**  
IDAHO USA

(208) 766-4777 • [www.hesspumice.com](http://www.hesspumice.com)

*Mining and refining the purest commercial deposit of white pumice on the planet.*

# Hess Pumice Technical Data

## CHEMICAL ANALYSIS AND PHYSICAL PROPERTIES

**Chemical Name:** Amorphous Aluminum Silicate

### TYPICAL ANALYSIS

- Silicon Dioxide: 76.2%
- Aluminum Oxide: 13.5%
- Ferric Oxide: 1.1%
- Ferrous Oxide: 0.1%
- Sodium Oxide: 1.6%
- Potassium Oxide: 1.8%
- Calcium Oxide: 0.8%
- Titanium Oxide: 0.2%
- Magnesium Oxide: .05%
- Moisture: <1.0%
- Crystalline SiO<sub>2</sub>: None Detected

### GENERAL PROPERTIES

- Appearance: White powder
- Hardness (MOHS): 6
- pH: 7.2
- Radioactivity: None
- Softening Point: 900 degrees C
- Water Soluble Substances: 0.15%
- Loss on Ignition - 5%
- GE Brightness: 84
- Specific Gravity: 2.2
- Reactivity: Inert  
(except in the presence of calcium hydroxide or hydrofluoric acid)

## DESCRIPTION

Amorphous (non-crystalline) in structure and composed primarily of aluminum silicate, pumice is a naturally calcined volcanic glass foam consisting of highly vesicular strands permeated with tiny air bubbles. It is these frothy, friable glass vesicles that, when carefully refined to various grades, give pumice its unique and infinitely useful qualities.

## NOTES

- **Chemical analysis and physical properties** provided are common to all raw Hess pumice grades.
- **Grade Variety.** The natural, hard-yet-friable character of our pumice combined with our crushing and screening expertise allow us to offer pumice grades and grade blends down to 3 microns.
- **Safe to Use.** No hazardous crystalline structure: testing for crystalline silica (airborne particles of respirable size) finds no measurable Crystalline Silica (SiO<sub>2</sub>) present. Free of heavy metals, pesticides, nano-particles, allergens. Certified organic input material.
- **Purity:** As the result of centuries of wave action from a now-extinct inland sea, our pumice is remarkably pure. Our mine grades are typically comprised of 98% pumice and 2% other igneous minerals, which are not removed through our mining processes.
- **Storage:** Keep dry and protected from the elements until use.

*Pumice is a foamed glass stone naturally expanded by explosive volcanic eruption.*