

# Hess Grade: NCS-5

## PARTICLE SIZE SPECIFICATION GRADE NCS-5

Dx	MICRON	MM
D90	< 20	0.020
D50	3-6	0.003-0.006
TEST METHOD: Refer to Standard Method		

## LOOSE BULK DENSITY GRADE NCS-5

36 lb/per cubic foot [576.6 kg/per cubic meter] (ASTM C29)

## OTHER PROPERTIES GRADE NCS-5

HEGMAN GRIND	OIL ABSORPTION (cc/100g)
6.5	41.60
MEAN PARTICLE SIZE (vol, μm)	ISO BRIGHTNESS (dry)
10.3	82



HP Grade NCS-5 (Non-Crystalline Silica) is used as a functional filler/extender for industrial coatings. The amorphous, non-crystalline structured nature of our NCS silica products make them safe to use.

## GRADE APPLICATIONS

- Functional filler/extender in paints and industrial coatings
- Filler/extender for rubber compounds
- Filler/extender for plastics and fiberglass compounds
- Filler/extender for silicones and caulking
- Filler/extender for epoxies
- Concrete pozzolan
- Plastics tumbling

## PACKAGING OPTIONS

- 1 or 2.5 lb resealable bags
- 20 lb [9 kg] box
- 50 lb [22.6 kg] bags
- 2000 lb [907 kg] super sacks (palletted)
- Bulk shipped in rail car or tractor trailer

## ORDER

- Samples, small quantities, and single production bags (up to 3): order direct from the [PumiceStore.com](http://PumiceStore.com)
- Partial pallets, full pallets, 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	GENERAL PROPERTIES
• Silicon Dioxide: 76.2%	• Appearance: White powder
• Aluminum Oxide: 13.5%	• Hardness (MOHS): 6
• Ferric Oxide: 1.1%	• pH: 7.2
• Ferrous Oxide: 0.1%	• Radioactivity: None
• Sodium Oxide: 1.6%	• Softening Point: 900 degrees C
• Potassium Oxide: 1.8%	• Water Soluble Substances: 0.15%
• Calcium Oxide: 0.8%	• Loss on Ignition - 5%
• Titanium Oxide: 0.2%	• GE Brightness: 84
• Magnesium Oxide: .05%	• Specific Gravity: 2.2
• Moisture: <1.0%	• Reactivity: Inert
• Crystalline SiO <sub>2</sub> : None Detected	(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.*