



# Material Safety Data Sheet UltraPerl

Last Update: April 1,

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT TRADE NAME** UltraPerl

**MANUFACTURER** Northern Filter Media, Inc., 2509 Pettibone Avenue, Muscatine, IA 52761

**TELEPHONE NO.** (563) 263-2711 (Monday – Friday 8:00 am CST – 5:00 pm CST)

**CHEMICAL NAME** Sodium Potassium Aluminum Silicate

**CHEMICAL FAMILY** Silicate

**MATERIAL USE** Filter aid, Functional additive

**DATE OF PREPARATION** April 1, 2010

## SECTION 2: HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW:

**Appearance//Color/Odor** A white to off-white, low density powder. There is no distinctive odor.

**OSHA REGULATORY STATUS** This material is not considered hazardous by the OSHA Hazard Communication Standard (29CFR 1910.1200)

**POTENTIAL HEALTH EFFECTS** See below and Section 11 for additional information

**Likely Routes of Exposure** See below

**EYE** May cause irritation (tear formation and redness) if dust gets in eyes.

**SKIN** Not absorbed by the skin, but may cause dryness if prolonged exposure.

**INGESTION** Ingestion of small to moderate quantities is not considered harmful, but may cause irritation of the mouth, throat and stomach.

**INHALATION** Acute inhalation can cause dryness of the nasal passage and lung congestion, coughing and general throat irritation. Chronic inhalation of dust should be avoided.

### CHRONIC EFFECTS

Perlite is a naturally occurring volcanic glass consisting of fused sodium – potassium – aluminum silicate. Tests conducted on UltraPerl Perlite have not identified crystalline silica as being present above the detection limit (0.05%).

Although there are no published reports of adverse health effects from exposure to perlite dust, dust levels should be maintained below the OSHA Permissible Exposure Limit for perlite and respirators used when airborne dust is present.

### CONDITIONS AGGRAVATED BY EXPOSURE

Pre-existing diseases of the upper respiratory tract and lung such as bronchitis, emphysema, and asthma.

**ENVIRONMENTAL EFFECTS** There are no significant environmental effects.

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

### INGREDIENT IDENTIFICATION

#### APPROXIMATE CONCENTRATION (%)

#### C.A.S. NUMBERS

#### EINECS

#### R Factors

Perlite: >99.0%

93763-70-3

Not listed

R48/20

Proprietary Material: <1.0%

## SECTION 4: FIRST AID MEASURES

**EYE** Flush eyes with generous quantities of water or eye rinse solution. Consult physician if irritation persists.

**SKIN** Use moisture renewing lotions if dryness occurs.

**INGESTION** Drink generous amounts of water to reduce bulk and drying effects.

**INHALATION** Remove to fresh air. Blow nose to evacuate dust.

**NOTE TO PHYSICIANS** No special notes.

**ANTIDOTE** Not applicable

## SECTION 5: FIRE FIGHTING MEASURES

**FLAMMABILITY** This material is not flammable.

**EXTINGUISHING MEDIA** Not applicable, the material is not flammable.

**FIRE-FIGHTING PROCEDURES** Not applicable, the material is not flammable.

**PROTECTIVE EQUIPMENT** Not applicable, the material is not flammable

### HAZARDOUS COMBUSTION

**PRODUCTS** Not applicable, the material does not combust.

### SPECIFIC PHYSICAL AND

**CHEMICAL HAZARDS** Not applicable, the material is not flammable.

**EXPLOSION DATA** Not applicable, the material is not explosive.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS** If dust is present, use respirator fitted with particulate filter as specified in Section 8. Protect eyes with goggles.

**ENVIRONMENTAL PRECAUTIONS** This material is not a significant environmental concern.

**CONTAINMENT AND CLEANUP** Vacuum clean spillage, wet sweep or wash away. Avoid creating dust.

## SECTION 7: HANDLING AND STORAGE

**HANDLING** Minimize dust generation. Avoid contact with eyes. Avoid breathing dust. Repair or dispose of broken bags.

**STORAGE** Store in a dry place to maintain packaging integrity and product quality. Do not store near hydrofluoric acid. Observe all label precautions and warnings.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE GUIDELINES:

Component: Diatomaceous Earth, Natural (kieselguhr)

OSHA PEL: 15 mg/m<sup>3</sup> total dust for products containing <1% quartz

ACGIH TLV: 10 mg/m<sup>3</sup> total dust

MSHA PEL: 5 mg/m<sup>3</sup>

NIOSH REL: 6 mg/m<sup>3</sup>

**ENGINEERING CONTROLS** Local – Control dust within recommended TLV/PEL. Refer to ACGIH publication "Industrial Ventilation" or similar publications for design of ventilation systems.

### PERSONAL PROTECTIVE

**EQUIPMENT:** See below

**EYE / FACE** Goggles to protect from dust

**SKIN** No special equipment is needed.

### RESPIRATORY

Respirators fitted with filters certified to standard 42CFR84 under series N95 should be worn when dust is present. If the dust concentration is less than ten (10) times the Permissible Exposure Limit (PEL) use a quarter or half-mask respirator with a N95 dust filter or a single use dust mask rated N95. If dust concentration is greater than ten (10) times and less than fifty (50) times the PEL, a full-face piece respirator fitted with replaceable N95 filters is recommended. If dust concentration is greater than fifty (50) and less than two hundred (200) times the PEL use a power air-purifying (positive pressure) respirator with a replaceable N95 filter. If dust concentration is greater than two hundred (200) times the PEL use a type C, supplied air respirator (continuous flow, positive pressure), with full face piece, hood or helmet.

**GENERAL HYGIENE** Avoid breathing dust. Avoid contact with eyes. Wash hands after handling and before eating or drinking.

For sampling silica dusts refer to NIOSH Analytical Method 7500 or OSHA method ID 142

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE, COLOR** White to off white powder

**PHYSICAL STATE** Solid

**VAPOR PRESSURE** Not applicable

**BOILING POINT** Not applicable

**FLASH POINT** Not applicable

**FLAMMABILITY LIMITS** Not applicable

**DECOMPOSITION TEMPERATURE** > 800° C

**EVAPORATION RATE** Not applicable

**ODOR THRESHOLD** Not applicable

**PARTITION COEFFICIENT** Not applicable

**ODOR** Odorless

**pH (10% SUSPENSION)** 7

**VAPOR DENSITY** Not applicable

**MELTING POINT** > 800° C

**FLAMMABILITY** Not applicable

**AUTOIGNITION TEMPERATURE** Not applicable

**SPEC. GRAVITY / REL. DENSITY** 2.3

**COEFF. – WATER / OIL** Not applicable

**SOLUBILITY – WATER** < 1%

## SECTION 10: STABILITY AND REACTIVITY

**CHEMICAL STABILITY** Material is stable.

**PHYSICAL HAZARDS** Material is not reactive.

**CONDITIONS TO AVOID** Not applicable

**INCOMPATIBLE MATERIALS** Hydrofluoric acid. Products containing silica may react violently with hydrofluoric acid.

**HAZARDOUS DECOMPOSITION PRODUCTS** Not applicable

## SECTION 11: TOXICOLOGICAL INFORMATION

### CHRONIC EFFECTS / CARCINOGENICITY

Although there are no reports of adverse health effects from exposure to perlite dust, inhalation of high concentrations of perlite dust or any other particulates for prolonged periods of time may cause lung damage. Analyses of these products by X-ray diffraction have not identified any phases of crystalline silica to be present above the detection limit (0.05%).

**ROUTE OF EXPOSURE** Inhalation (chronic)

**SYMPTOMS** Not available

**LD50** Not available

### IMMEDIATE AND DELAYED EFFECTS

No immediate effects. See CHRONIC EFFECTS for potential long-term effects when prolonged exposure to levels of dust in excess of OSHA PEL and ACGIH TLV.

**CORROSIVENESS, SENSITIZATION, IRRITANCY** Not applicable

**REPRODUCTIVE TOXICITY** Not available

**TERATOGENICITY, MUTAGENICITY** Not available

**TOXICOLOGICALLY SYNERGISTIC PRODUCTS** Inhaled smoke from tobacco products (chronic).

## SECTION 12: ECOLOGICAL INFORMATION

**CHARACTERISTICS** Non-biodegradable, inert, with little potential for bioaccumulation.

**POSSIBLE EFFECTS** These products have no demonstrated toxicity in regards to aquatic or terrestrial life.

## SECTION 13: DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL** If this material as supplied becomes a waste, use solid waste disposal common to landfill type operations or in slurry to sumps. Not considered a hazardous waste under RCRA (40CFR Part 261).

**PACKAGING DISPOSAL** Dispose of in accordance with applicable laws and regulations, typically solid waste disposal common to landfill type operations.

## SECTION 14: TRANSPORT INFORMATION

**BASIC SHIPPING INFORMATION** DOT shipping classification 55 (no restrictions). Technical name is "UltraPerl (perlite)".

**ADDITIONAL INFORMATION** No special requirements or placarding necessary.

## SECTION 15: REGULATORY INFORMATION

### U.S. FEDERAL:

**OSHA** Perlite is not classified as a toxic and hazardous substance.

**TSCA** Not listed.

**CERCLA** Perlite is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR 302.

**SARA TITLE III** Not listed.

**NTP** Not listed.

### INTERNATIONAL:

**IARC** Not classified.

**WHMIS Classification** These products are not regulated by WHMIS

**WHMIS Ingredient**

**Disclosure List** Crystalline silica Included for disclosure at 1% or greater, does not apply for these products.

**EEC Label (Risk/Safety Phrases)** R48/20, S22, S38

## **SECTION 16: OTHER INFORMATION**

**NFPA:** 0 – Insignificant  
1 – Slight  
2 – Moderate  
3 – High  
4 – Extreme

**HMIS:** \* - Health  
0 – Flammability  
0 – Reactivity  
E – Protective Equipment

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**REVISION NO.** 6

**Disclaimer:** As of the date of the preparation of this document, the foregoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state laws. No warranty, representation or guaranty of any kind, express or implied, is hereby provided or intended with respect to the completeness of the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by the purchase, resale, use or exposure to our product. Customer users of silica must comply with all applicable health and safety laws, regulations and orders, including OSHA Hazardous Communication Standard.