

NOSB NATIONAL LIST FILE CHECKLIST

PROCESSING

MATERIAL NAME: #8 Perlite



NOSB Database Form



References



MSDS (or equivalent)



FASP (FDA)



**TAP Reviews from: Joe Montecalvo, James
Johnson**

**NOSB/NATIONAL LIST
COMMENT FORM
PROCESSING**

Material Name: #8 Perlite

Please use this page to write down comments, questions, and your anticipated vote(s).

COMMENTS/QUESTIONS:

1. In my opinion, this material is:
_____ Synthetic _____ Non-synthetic.

2. Should this material be allowed in an "organic food" (95% or higher organic ingredients)? _____ Yes _____ No
(IF NO, PROCEED TO QUESTION 3.)

3. Should this substance be allowed in a "food made with organic ingredients" (50% or higher organic ingredients)? _____ Yes _____ No

TAP REVIEWER COMMENT FORM for USDA/NOSB

Use this page or an equivalent to write down comments and summarize your evaluation regarding the data presented in the file of this potential National List material. Complete both sides of page. Attach additional sheets if you wish.

This file is due back to us by: Aug. 5, 1996

Name of Material: Perlite

Reviewer Name: JAMES A. JOHNSON RECEIVED JUL 3 0 1996

Is this substance Synthetic or non-synthetic? Explain (if appropriate)

If synthetic, how is the material made? (please answer here if our database form is blank) Volcanic rock heated to about 900°C. Slightly water and neutral in reaction (PH 7.0). It does not decay, but handling will fracture it. (McNeill, D.B., 1989, Compost and soilless mix for houseplants, Fairmount, Inc. & J. Paul Jones, Inc. - 1989)

This material should be added to the National List as: June 1997

Synthetic Allowed Prohibited Natural

or, Non-synthetic (Allowed as an ingredient in organic food)
 Non-synthetic (Allowed as a processing aid for organic food)

or, this material should not be on the National List

Are there any use restrictions or limitations that should be placed on this material on the National List?

no

Please comment on the accuracy of the information in the file:

very accurate info

Any additional comments? (attachments welcomed)

none

Do you have a commercial interest in this material? Yes; No

Signature James A. Johnson Date 7/29/96

Please address the 7 criteria in the Organic Foods Production Act:
(comment in those areas you feel are applicable)

- (1) the potential of such substances for detrimental chemical interactions with other materials used in organic farming systems;

None

- (2) the toxicity and mode of action of the substance and of its breakdown products or any contaminants, and their persistence and areas of concentration in the environment;

None

- (3) the probability of environmental contamination during manufacture, use, misuse or disposal of such substance;

None

- (4) the effect of the substance on human health;

eye irritation and possible respiratory irritation

- (5) the effects of the substance on biological and chemical interactions in the agroecosystem, including the physiological effects of the substance on soil organisms (including the salt index and solubility of the soil), crops and livestock;

Beneficial to soilless medium

- (6) the alternatives to using the substance in terms of practices or other available materials; and

Use of natural substances

- (7) its compatibility with a system of sustainable agriculture.

Yes, as it is a natural substance and is not a necessary industrial product.

TAP REVIEWER COMMENT FORM for USDA/NOSB

Use this page or an equivalent to write down comments and summarize your evaluation regarding the data presented in the file of this potential National List material. Complete both sides of page. Attach additional sheets if you wish.

This file is due back to us by: Aug. 5, 1996

Name of Material: Perlite

Reviewer Name: JOE MONTECALVO RECEIVED AUG 05 1996

Is this substance Synthetic or non-synthetic? Explain (if appropriate)

Synthetic

If synthetic, how is the material made? (please answer here if our database form is blank)

contains 45-75 SiO₂
10-20% Al₂O₃
5% H₂O } composition of Perlite

This material should be added to the National List as:

Synthetic Allowed Prohibited Natural

or, Non-synthetic (Allowed as an ingredient in organic food)

Non-synthetic (Allowed as a processing aid for organic food)

or, this material should not be on the National List

Are there any use restrictions or limitations that should be placed on this material on the National List?

Only ARA Filler Aid

Please comment on the accuracy of the information in the file:

O.K. good

Any additional comments? (attachments welcomed)

None

Do you have a commercial interest in this material? Yes; No

Signature

Dr. Joe Montecalvo

Date

7/27/96

Please address the 7 criteria in the Organic Foods Production Act:
(comment in those areas you feel are applicable)

- (1) the potential of such substances for detrimental chemical interactions with other materials used in organic farming systems;

None

- (2) the toxicity and mode of action of the substance and of its breakdown products or any contaminants, and their persistence and areas of concentration in the environment;

None

- (3) the probability of environmental contamination during manufacture, use, misuse or disposal of such substance;

None

- (4) the effect of the substance on human health;

SAMPLE FOR CLAY AND SiO_2

- (5) the effects of the substance on biological and chemical interactions in the agroecosystem, including the physiological effects of the substance on soil organisms (including the salt index and solubility of the soil), crops and livestock;

None

- (6) the alternatives to using the substance in terms of practices or other available materials; and

None

- (7) its compatibility with a system of sustainable agriculture.

O.K.

Identification

Common Name **Perlite** Chemical Name
Other Names
Code #: CAS Code #: Other
N. L. Category Non-agricultural MSDS yes no

Chemistry

Family
Composition
Properties In natural state, perlite occurs as a dense, gray to brown, glassy volcanic rock consisting essentially of fused sodium potassium aluminum silicate plus 3% to 5% water. Powdered perlite is slightly soluble in water and sparingly soluble in dilute acids and alkalis.
How Made Natural mineral is fractured and heated at high temperature (900 Degrees F.) so that it pops like popcorn, expanding to 20 times its original volume. Expanded material is crushed to yield a white nonhygroscopic powder.

Type of Use Processing

Use/Action

Specific Use(s) Filter aid in food processing.

Action

Combinations

Status

OFPA

N. L. Restriction

EPA, FDA, etc

Directions

Safety Guidelines

Historical status

International status

NOSB Materials Database

OFPA Criteria

2

2119(m)1: chemical interactions

2119(m)2: toxicity & persistence

2119(m)3: manufacture & disposal consequences

2119(m)4: effect on human health

2119(m)5: agroecosystem biology

2119(m)6: alternatives to substance

2119(m)7: Is it compatible?

References

AU: Martyr,-R.F.

TI: New developments in the uses of graded horticultural perlite.

SO: Acta-Hortic. The Hague : International Society for Horticultural Science. May 1982. (126)
p. 143-146.

CN: DNAL 80-AC82

PY: 1982

PRODUCT NAME : STRUCTO-LITE PREMIXED PERLITE

MATERIAL SAFETY DATA SHEET
STRUCTO-LITE PREMIXED PERLITE

SECTION I - Product Identification

MANUFACTURERS NAME : UNITED STATES GYPSUM COMPANY
EMERGENCY TEL NO. : (312)321-4383
PREPARATION DATE : 04/22/86
INFORMATION TEL. NO. : () -
PRODUCT NUMBER : 00397
PRODUCT NAME : STRUCTO-LITE PREMIXED PERLITE
PRODUCT CLASS : GYPSUM PLASTER

M A T E R SECTION II - Hazardous Components S H E E T

NONE

SECTION III - Physical Data

BOILING RANGE : NA VAPOUR DENSITY(AIR=1) : NA
EVAPORATION RATE: NA VOLATILE VOLUME : NA WT/GAL: NA
OTHER PROPERTIES :
HARDENS IN 1.5 HOURS
WHITE POWDER-LOW ODOR

SECTION IV - Fire and Explosion Hazard Data

SPECIAL PRECAUTIONS :
DEW POINT CONDITIONS-AVOID MOISTURE

SECTION V - Health Hazard Data

DISPOSAL PROCEDURE :
SANITARY LANDFILL BY REGS
OTHER PRECAUTIONS :
NONE

SECTION VI - Reactivity Data

RESPIRATORY PROTECTION :
NIOSH APP RESP IF ABOVE TLV
VENTILATION :
LOCAL IF ABOVE TLV
SKIN PROTECTION :
NONE
EYE PROTECTION :
SAFETY GLASSES
OTHER PROTECTIVE EQUIPMENT :
NONE
HYGIENIC PRACTICES :
NONE

SECTION VII - Spill and Disposal Procedures

FLAMMABILITY CLASSIFICATION : NONE
FLASH POINT : NA
FLAMMABLE LIMITS UPPER - NA LOWER - NA
EXTINGUISHING MEDIA :
NA
UNUSUAL FIRE AND EXPLOSION HAZARDS :
NA
SPECIAL FIRE-FIGHTING PROCEDURES :
NA

SECTION VIII - Protective Equipment

STABILITY : STABLE
HAZARDOUS POLYMERIZATION : WILL NOT OCCUR
HAZARDOUS DECOMPOSITION PRODUCTS :
NA
CONDITIONS TO AVOID :
NA
INCOMPATIBILITY (MATERIALS TO AVOID) :
NA

SECTION IX - Storage and Handling Precautions

EFFECTS OF OVEREXPOSURE :

EYE IRRITANT-MAY DRY SKIN

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE :

UNKN

PRIMARY ROUTE(S) OF ENTRY : EYE/SKIN CONTACT; INHALE; INGEST

EMERGENCY AND FIRST AID PROCEDURES :

EYE-FLUSH 15 MIN-SEE DR IF PERSISTS; SKIN-WASH W/SOAP/WATER; INHALE-
FRESH AIR

INGEST-HARDENS WHEN WET-SEE DR

SECTION X - Transportation Data and Additional Information

N/A

(TM) and (R) : Registered Trademarks

N/A = Not Applicable OR Not Available

The information published in this Material Safety Data Sheet has been
compiled

from our experience and data presented in various technical publications. It is
the user's responsibility to determine the suitability of this information for
adoption of necessary safety precautions. We reserve the right to revise
Material Safety Data Sheets periodically as new information becomes available.

Copyright by Manufacturer

LICENSE GRANTED TO MAKE UNLIMITED COPIES FOR INTERNAL USE ONLY
by OREGON STATE UNIVERSITY

