NOSB NATIONAL LIST
FILE CHECKLIST

CROPS

MATERIAL NAME: #16 Sodium silicate

☑ NOSB Database Form

☐ References

☑ MSDS (or equivalent)

☑ TAP Reviews from: Walter Jeffery
Material Name: #16 Sodium silicate

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. This material should be placed on the proposed National List as:
   _____ Prohibited Natural _____ Allowed Synthetic.
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: Sodium Silicate

Reviewer Name: WALTER JEFFERY RECEIVED JUL 29 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)
produced by the reaction of high purity quartz sand
and sodium carbonate or by dissolving finely ground sand in sodium hydroxide

This material should be added to the National List as:

☐ Synthetic Allowed ☐ Prohibited Natural

or, ☐ Non-synthetic (This material does not belong on National List)

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

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

not much info

Any additional comments? (attachments welcomed)

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

Signature WALTER JEFFERY 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;
   little potential for detrimental interaction

(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;
   non-toxic, long considered inert nuisance material

(3) the probability of environmental contamination during manufacture, use, misuse or disposal of such substance;
   not likely

(4) the effect of the substance on human health;
   not a hazard

(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;

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

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

**NOSB Materials Database**

**Sodium Silicate**

- Common Name: Sodium Silicate
- Other Names: Synthetic Allowed
- Reg. No.: 1344-09-8
- Code #: CAS N. L. Category

**Chemical Name**

- Code #: Other
- MSDS yes no

**Chemistry**

- Family
- Composition
- Properties
- How Made

**Use/Action**

- Type of Use: Crops
- Specific Use(s): floating tree fruits
- Action
- Combinations

**Status**

- OFPA
- N. L. Restriction
- EPA, FDA, etc
- Directions
- Safety Guidelines
  - Historical status
  - International status
1 - PRODUCT IDENTIFICATION

PRODUCT NAME: SODIUM SILICATE SOLUTION
FORMULA: Na₂O(SiO₂)ₓ(H₂O)ᵧ
FORMULA WT: .00
CAS NO.: 01344-09-8
COMMON SYNONYMS: WATER GLASS; SOLUBLE GLASS; SILICATE OF SODA
PRODUCT CODES: 3877
EFFECTIVE: 10/24/85
REVISION #01

PRECAUTIONARY LABELLING

BAKER SAF-T-DATA(TM) SYSTEM

HEALTH - 1 SLIGHT
FLAMMABILITY - 0 NONE
REACTIVITY - 0 NONE
CONTACT - 2 MODERATE

HAZARD RATINGS ARE 0 TO 4 (0 = NO HAZARD; 4 = EXTREME HAZARD).

LABORATORY PROTECTIVE EQUIPMENT

SAFETY GLASSES; LAB COAT
PRECAUTIONARY LABEL STATEMENTS

WARNING
CAUSES IRRITATION
AVOID CONTACT WITH EYES, SKIN, CLOTHING.
KEEP IN TIGHTLY CLOSED CONTAINER. WASH THOROUGHLY AFTER HANDLING.

SAF-T-DATA(TM) STORAGE COLOR CODE: ORANGE (GENERAL STORAGE)

2 - HAZARDOUS COMPONENTS

COMPONENT% CAS NO.
SODIUM SILICATE 35-40 1344-09-8

3 - PHYSICAL DATA

BOILING POINT: 102 C (216 F)
VAPOR PRESSURE(MM HG): 18
MELTING POINT: N/A
VAPOR DENSITY(AIR=1): N/A
SPECIFIC GRAVITY: 1.30
EVAPORATION RATE: N/A
(BUTYL ACETATE=1)
SOLUBILITY(H₂O): COMPLETE (IN ALL PROPORTIONS) % VOLATILES BY VOLUME: 70-80

APPEARANCE & ODOR: COLORLESS, TURBID LIQUID WITH NO ODOR OR SLIGHTLY
SOAPY ODOR

4 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (CLOSED CUP) N/A
FLAMMABLE LIMITS: UPPER - N/A % LOWER - N/A %

FIRE EXTINGUISHING MEDIA

USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.
5 - HEALTH HAZARD DATA

CARCINOGENICITY: NTP: NOnard: NO Z LIST: NO OSHA REG: NO

EFFECTS OF OVEREXPOSURE
CONTACT WITH SKIN OR EYES MAY CAUSE IRRITATION.

TARGET ORGANS
NONE IDENTIFIED

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE
NONE IDENTIFIED

ROUTES OF ENTRY
NONE INDICATED

EMERGENCY AND FIRST AID PROCEDURES
IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. FLUSH SKIN WITH WATER.

6 - REACTIVITY DATA

STABILITY: STABLEHAZARDOUS POLYMERIZATION: WILL NOT OCCUR
INCOMPATIBILITIES: MINERAL ACIDS, ORGANIC ACIDS, MOST COMMON METALS, ORGANIC MATERIALS

7 - SPILL AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN THE EVENT OF A SPILL OR DISCHARGE
WEAR SUITABLE PROTECTIVE CLOTHING. TAKE UP WITH SAND OR OTHER NONCOMBUSTIBLE ABSORBENT MATERIAL AND PLACE INTO CONTAINER FOR LATER DISPOSAL. FLUSH SPILL AREA WITH WATER.

DISPOSAL PROCEDURE

MSDS for SODIUM SILICATE SOLUTION Page 3

DISPOSE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

8 - PROTECTIVE EQUIPMENT

VENTILATION: USE ADEQUATE GENERAL OR LOCAL EXHAUST VENTILATION TO KEEP VAPOR AND MIST LEVELS AS LOW AS POSSIBLE.

RESPIRATORY PROTECTION: NONE REQUIRED WHERE ADEQUATE VENTILATION CONDITIONS EXIST. IF AIRBORNE CONCENTRATION IS HIGH, USE AN APPROPRIATE RESPIRATOR OR DUST MASK.

EYE/SKIN PROTECTION: SAFETY GOGGLES, UNIFORM, APRON, RUBBER GLOVES ARE RECOMMENDED.

9 - STORAGE AND HANDLING PRECAUTIONS

SAF-T-DATA(TM) STORAGE COLOR CODE: ORANGE (GENERAL STORAGE)
SPECIAL PRECAUTIONS
KEEP CONTAINER TIGHTLY CLOSED. SUITABLE FOR ANY GENERAL CHEMICAL STORAGE AREA.

10 - TRANSPORTATION DATA AND ADDITIONAL INFORMATION