NOSB NATIONAL LIST
FILE CHECKLIST

PROCESSING

MATERIAL NAME: **#21 Potassium Tartrate**

✓ NOSB Database Form

✓ References

✓ MSDS (or equivalent)

____ FASP (FDA)

✓ TAP Reviews from: Rich Theuer, Joe Montecalvo

NOSB/NATIONAL LIST
COMMENT FORM
PROCESSING

Material Name: #21 Potassium Tartrate

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

COMMENTS/QUESTIONS:

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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: Sept 5, 1995

Name of Material: Potassium Tartrate

Reviewer Name: R Theuer

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

? DON'T KNOW

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

REQUIRE INFO. IF POTASSIUM ACID TARTRATE (CREAM OF TARTAR) IS ISOLATED FROM WINE OR GRAPE JUICE, IT WOULD BE ~~NATURAL~~ NON-SYNTHETIC.

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?

AS PART OF ALUMINUM-FREE BAKING POWDER (SODIUM BICARBONATE AND CORNSTARCH CONSTITUTE REMAINDER)

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

Any additional comments? (attachments welcomed)

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

Signature R Theuer **Date** 8/28/95

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;**

OK { BIO DEGRADABLE
POTASSIUM IS A CROP NUTRIENT

(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;**

I BELIEVE THAT CREAM OF TARTAR IS NATURALLY PRECIPITATED DURING WINE MAKING. USING IT IS BETTER THAN DUMPING IT.

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

~~POSIT~~ POSITIVE
TARTRATE CAN BE METABOLIZED

(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;**

NO ISSUE

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

FOR BAKING NON-YEAST BREADS, ETC. ALUMINUM LEAVENING AGENTS CAN BE USED. EACH LEAVENING SYSTEM IS SUPERIOR IN CERTAIN USES

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

O/C

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: Sept. 5, 1995

Name of Material: Potassium Tartrate

Reviewer Name: DR. JOE MONTECALVO

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) Extracted from tamarind pulp - about 10% yield as tartaric acid. Also can be synthesized by the hydroxylation of maleic acid - chiefly nearly all is a by product of the wine industry. Observed as the salt deposited / obtained during wine making. All potassium tartrate is from by producing wine industry.

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? NO

Please comment on the accuracy of the information in the file: O.K.

Any additional comments? (attachments welcomed)

Occurs naturally in fruits, also Ca + Mg tartrate found in fruits as well.

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

Signature [signature] **Date** 8/27/95

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;

Strong solutions are mildly irritating, astringent

(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	**Potassium tartrate**	Chemical Name	
Other Names	Soluble Tartar		
Code #: CAS		Code #: Other	
N. L. Category	Synthetic Allowed	MSDS	◉ yes ○ no

Chemistry

Family	
Composition	$C_4H_4K_2O_6$.
Properties	Hemihydrate, white crystals or granular powder. Soluble in about .5 part water; almost insoluble in alcohol. Aqueous solution is slightly alkaline to litmus.
How Made	

Use/Action

Type of Use	Processing
Specific Use(s)	Leavening agent, cathartic.
Action	
Combinations	

Status

OFPA	
N. L. Restriction	
EPA, FDA, etc	
Directions	
Safety Guidelines	
State Differences	
Historical status	
Internationl status	

OFPA Criteria

2119(m)1: chemical interactions Not Applicable

2119(m)2: toxicity & persistence Not Applicable

2119(m)3: manufacture & disposal consequences

2119(m)4: effect on human health

2119(m)5: agroecosystem biology Not Applicable

2119(m)6: alternatives to substance

2119(m)7: Is it compatible?

References

The Merck Index, 10th edition. 1983. Merck and Co., Inc., Rahway, NJ

MSDS for POTASSIUM TARTRATE, 1/2-HYDRATE

1 - PRODUCT IDENTIFICATION

PRODUCT NAME: POTASSIUM TARTRATE, 1/2-HYDRATE
FORMULA: KOCO(CHOH)2COOK 1/2H2O FORMULA WT: 235.28
CAS NO.: 00921-53-9 PRODUCT CODES: 3316
EFFECTIVE: 05/05/86 REVISION #01

PRECAUTIONARY LABELLING
BAKER SAF-T-DATA(TM) SYSTEM
HEALTH - 1 SLIGHT
FLAMMABILITY - 0 NONE
REACTIVITY - 0 NONE
CONTACT - 0 NONE
HAZARD RATINGS ARE 0 TO 4 (0 = NO HAZARD; 4 = EXTREME HAZARD).

LABORATORY PROTECTIVE EQUIPMENT: SAFETY GLASSES; LAB COAT

PRECAUTIONARY LABEL STATEMENTS
DURING USE AVOID CONTACT WITH EYES, SKIN, CLOTHING. WASH THOROUGHLY AFTER HANDLING. WHEN NOT IN USE KEEP IN TIGHTLY CLOSED CONTAINER.
SAF-T-DATA(TM) STORAGE COLOR CODE: ORANGE (GENERAL STORAGE)

2 - HAZARDOUS COMPONENTS

COMPONENT	%	CAS NO.
NOT APPLICABLE		

3 - PHYSICAL DATA

BOILING POINT: 200 C (392 F) VAPOR PRESSURE(MM HG): N/A
MELTING POINT: N/A VAPOR DENSITY(AIR=1): N/A
SPECIFIC GRAVITY: 1.98 EVAPORATION RATE: N/A
(H2O=1) (BUTYL ACETATE=1)
SOLUBILITY(H2O): APPRECIABLE (MORE THAN 10 %) % VOLATILES BY VOLUME: 0
APPEARANCE & ODOR: WHITE CRYSTALS.

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.
SPECIAL FIRE-FIGHTING PROCEDURES
FIREFIGHTERS SHOULD WEAR PROPER PROTECTIVE EQUIPMENT AND SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN POSITIVE PRESSURE MODE.
TOXIC GASES PRODUCED: CARBON MONOXIDE, CARBON DIOXIDE

5 - HEALTH HAZARD DATA

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

EFFECTS OF OVEREXPOSURE: NO EFFECTS OF OVEREXPOSURE WERE DOCUMENTED.
TARGET ORGANS: NONE IDENTIFIED
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NONE IDENTIFIED
ROUTES OF ENTRY: NONE INDICATED
EMERGENCY AND FIRST AID PROCEDURES
INGESTION: IF SWALLOWED AND THE PERSON IS CONSCIOUS, IMMEDIATELY GIVE LARGE AMOUNTS OF WATER. GET MEDICAL ATTENTION.
INHALATION: IF A PERSON BREATHES IN LARGE AMOUNTS, MOVE THE EXPOSED PERSON TO FRESH AIR. GET MEDICAL ATTENTION.
EYE CONTACT: IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION.
SKIN CONTACT: IMMEDIATELY WASH WITH PLENTY OF SOAP AND WATER FOR AT LEAST 15 MINUTES.

6 - REACTIVITY DATA

STABILITY: STABLE HAZARDOUS POLYMERIZATION: WILL NOT OCCUR
CONDITIONS TO AVOID: NONE DOCUMENTED
DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE

7 - SPILL AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN THE EVENT OF A SPILL OR DISCHARGE
WEAR SUITABLE PROTECTIVE CLOTHING. CAREFULLY SWEEP UP AND REMOVE.
DISPOSAL PROCEDURE
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 FUME OR DUST 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 GLASSES WITH SIDESHIELDS, PROPER 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

DOMESTIC (D.O.T.)
PROPER SHIPPING NAME CHEMICALS, N.O.S. (NON-REGULATED)

INTERNATIONAL (I.M.O.)
PROPER SHIPPING NAME CHEMICALS, N.O.S. (NON-REGULATED)