

Safety Data Sheet dated 7/9/2015, version 0

1. IDENTIFICATION Product identifier Mixture identification: **CITROSTAB rH** Trade name: Other means of identification: Product codes: 35-760-0001 Recommended use of the chemical and restrictions on use Recommended use: FOR PROFESSIONAL USE Restrictions on use: Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party Company: Enartis USA Inc. 7795 Bell Road Windsor CA 95492 Competent person responsible for the safety data sheet: compliance@enartisvinguiry.com Emergency phone number Phone: +1 (707) 838 6312 Fax: +1 (707) 838 1765

2. HAZARD(S) IDENTIFICATION

Label elements Symbols:



Danger Hazard statements: H318 Causes serious eye damage. Precautionary statements: P280 Wear eye/face protection: wear eye glasses with side protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a doctor. Special Provisions: None Hazards not otherwise classified identified during the classification process: None Ingredient(s) with unknown acute toxicity: None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CTRST/0 Page n. 1 of 7



Substances

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

>= 10% - < 12.5% POTASSIUM METABISULPHITE REACH No.: 01-2119537422-45-XXXX, CAS: 16731-55-8, EC: 240-795-3 \diamond A.3/1 Eye Dam. 1 H318

4. FIRST-AID MEASURES

Description of necessary measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. OBTAIN IMMEDIATE MEDICAL ATTENTION.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Induce vomiting. SEEK A MEDICAL EXAMINATION IMMEDIATELY and present the safety-data sheet.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

None

Indication of immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Treatment:

None

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water. Carbon dioxide (CO2). Unsuitable extinguishing media: None in particular. Specific hazards arising from the chemical Do not inhale explosion and combustion gases. Hazardous combustion products: None Explosive properties: N.A. Oxidizing properties: N.A. Special protective equipment and precautions for fire-fighters Use suitable breathing apparatus . Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely. CTRST/0 Page n. 2 of 7

Safety Data Sheet

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures Wear personal protection equipment. Remove all sources of ignition. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Provide adequate ventilation. Remove persons to safety. Use appropriate respiratory protection. See protective measures under point 7 and 8. Methods and materials for containment and cleaning up Wash with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Do not use on extensive surface areas in premises where there are occupants.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

Storage temperature:

Store at ambient temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters POTASSIUM METABISULPHITE - CAS: 16731-55-8 ACGIH - STE: 0.25 ppm - Notes: (SO2) EU - LTE: 0.5 ppm - STE: 1 ppm - Notes: (SO2) Appropriate engineering controls: None Individual protection measures Eye protection: Eye glasses with side protection. Protection for skin: Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton. Protection for hands: Use protective gloves that provides comprehensive protection. Suitable material: UNI EN 420/UNI EN 374 Respiratory protection: Particle filter device (DIN EN 143). **Thermal Hazards:** None

9. PHYSICAL AND CHEMICAL PROPERTIES Appearance and colour: Solid

Appearance and colour: Sc CTRST/0 Page n. 3 of 7



Odour: Odour threshold: pH: Melting point / freezing point: Initial boiling point and boiling ra Solid/gas flammability:	Characteri N.A. ± 2,05 (So N.A. ange: N N.A.		
Upper/lower flammability or explosive limits:			N.A.
Vapour density:	N.A.		
Flash point:	N.A. °F		
Evaporation rate:	N.A.		
Vapour pressure:	N.A.		
Relative density:	N.A.		
Solubility in water:	100%		
Solubility in oil:	N.A.		
Partition coefficient (n-octanol/v	vater): N	I.A.	
Auto-ignition temperature:	N.A.		
Decomposition temperature:	N.A.		
Viscosity:	N.A.		
Miscibility:	N.A.		
Fat Solubility:	N.A.		
Conductivity:	N.A.		
Substance Groups relevant pro	perties N	I.A.	

10. STABILITY AND REACTIVITY

Reactivity Stable under normal conditions Chemical stability Stable under normal conditions Possibility of hazardous reactions None Conditions to avoid Stable under normal conditions. Incompatible materials None Hazardous decomposition products Toxic gases

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Toxicological information of the product: N.A. Toxicological information of the main substances found in the mixture: CITRIC ĂCID - CAS: 77-92-9 a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat = 11700 mg/kg - Notes: (Citric acid monohydrate) Test: LD50 - Route: Intraperitoneal - Species: Rat = 725 mg/kg - Notes: (Citric acid monohydrate) Test: LD50 - Route: Oral - Species: Mouse = 5400 mg/kg - Notes: (Citric acid monohydrate) Test: LD50 - Route: Intraperitoneal - Species: Mouse = 940 mg/kg - Notes: (Citric acid monohvdrate) Test: LD50 - Route: Intravenous - Species: Mouse = 42 mg/kg - Notes: (Citric acid monohydrate) Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Notes: (Citric acid monohydrate) b) skin corrosion/irritation: Test: Skin Irritant - Route: Skin - Species: Rabbit Negative - Notes: (Citric acid monohydrate) c) serious eye damage/irritation: Test: Eye Irritant - Species: Rabbit Positive - Notes: (Citric acid monohydrate)

CTRST/0 Page n. 4 of 7

Senartis Safety Data Sheet CITROSTAB rH

POTASSIUM METABISULPHITE - CAS: 16731-55-8 a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat = 2300 mg/kg Substance(s) listed on the NTP report on Carcinogens: None. Substance(s) listed on the IARC Monographs: POTASSIUM METABISULPHITE - Group 3. Substance(s) listed as OSHA Carcinogen(s): None. Substance(s) listed as NIOSH Carcinogen(s): None. **12. ECOLOGICAL INFORMATION** Ecotoxicity Adopt good working practices, so that the product is not released into the environment. CITRIC ACID - CAS: 77-92-9 a) Aquatic acute toxicity: Endpoint: LC50 - Species: Fish = 440 mg/l - Duration h: 48 - Notes: (Citric acid monohydrate) Endpoint: LC50 - Species: Daphnia = 1535 mg/l - Duration h: 24 - Notes: (Citric acid monohydrate) Endpoint: LC50 - Species: Algae = 425 mg/l - Duration h: 168 - Notes: (Citric acid monohydrate)

Endpoint: LC50 - Species: Bacteria > 10000 mg/l - Duration h: 16 - Notes: (Citric acid monohydrate) POTASSIUM METABISULPHITE - CAS: 16731-55-8 a) Aquatic acute toxicity: Endpoint: LC50 - Species: Fish = 460-1000 mg/l - Duration h: 96 Endpoint: EC50 - Species: Bacteria = 65 mg/l - Duration h: 17 Persistence and degradability

N.A. Bioaccumulative potential N.A. Mobility in soil

N.A.

Other adverse effects None

13. DISPOSAL CONSIDERATIONS

Waste treatment and disposal methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

14. TRANSPORT INFORMATION

UN number

Not classified as dangerous in the meaning of transport regulations. UN proper shipping name N.A. Transport hazard class(es) N.A. Packing group N.A. Environmental hazards Marine pollutant: No N.A.

CTRST/0 Page n. 5 of 7



Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code) N.A. Special precautions N.A.

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act TSCA inventory: all the components are listed on the TSCA inventory. **TSCA** listed substances: None. SARA - Superfund Amendments and Reauthorization Act Section 302 – Extremely Hazardous Substances: no substances listed. Section 304 – Hazardous substances: no substances listed. Section 313 - Toxic chemical list: no substances listed. CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act No substances listed. CAA - Clean Air Act CAA listed substances: None. CWA - Clean Water Act CWA listed substances: None. USA - State specific regulations California Proposition 65 Substance(s) listed under California Proposition 65: None. Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know: No substances listed. New Jersey Right to know Substance(s) listed under New Jersey Right to know: CITRIC ACID POTASSIUM METABISULPHITE. Pennsylvania Right to know Substance(s) listed under Pennsylvania Right to know: CITRIC ACID POTASSIUM METABISULPHITE.

16. OTHER INFORMATION

Full text of phrases referred to in Section 3: H319 Causes serious eye irritation. H318 Causes serious eye damage.

Safety Data Sheet dated 7/9/2015, version 0 Disclaimer: The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular guality. The information relates only to the specific material and may not be valid for such material used in combination with any other material or in any process.

This Safety Data Sheet cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. CAS: Chemical Abstracts Service (division of the American Chemical

CTRST/0 Page n. 6 of 7



CLP: DNEL: EINECS: GHS:	Society). Classification, Labeling, Packaging. Derived No Effect Level. European Inventory of Existing Commercial Chemical Substances. Globally Harmonized System of Classification and Labeling of Chemicals.
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
NTP:	National Toxicology Program
OSHA:	Occupational Safety and Health Administration
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day.
	(ACGIH Standard).