

SAFETY DATA SHEET (SDS)

Section 1. Identification

Product identifier	CITRIC ACID USP
Other means of identification	None
Recommended use and restrictions on use	Water soluble acidifying agent in a 500 g pouch or a 25 kg bag.
Initial supplier identifier	Vétoquinol N.-A. Inc. 2000 Chemin Georges, Lavaltrie, Qué (Canada), J5T 3S5 Tel. (450) 586-2252
Emergency telephone number/restriction on use	Canada – CANUTEC 24 hour number 613-996-6666

Section 2. Hazard identification

Classification of hazardous product (name of the category or subcategory of the hazard class)
Skin irritation (Category 3) Eye irritation (Category 2A)

Information elements (symbols, signal words, hazard statements and precautionary statements of the category/subcategory)



Warning

H316 Causes mild skin irritation.

H319 Causes serious eye irritation.

P264 Wash hands/nails/face thoroughly after handling. P280 Wear gloves/protective clothing/eye protection/face protection. P332 + P313 If skin irritation occurs: Get medical attention. P305 + P351 + P338 IF IN EYES, Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical attention.

(following sentences not mandatory) P403 + P203 + P235 Store in a well-ventilated place. Keep container tightly closed. Keep cool. P501 Dispose of contents/container into safe container in accordance with local, regional or national regulations.

Other hazards known | None

Section 3. Composition/information on ingredients

Chemical name (common name/synonyms)	CAS number or other	Concentration (%)
Citric Acid	77-92-9	100 %

Section 4. First-aid measures

Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.
Ingestion	IF SWALLOWED: Immediately call a doctor. DO NOT INDUCE VOMITING. NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Rinse mouth thoroughly with water. Have victim drink two glasses of water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration.
Skin contact	If skin irritation occurs: Get medical attention. Rinse skin with water (5-10 minutes).
Eye contact	IF IN EYES, Rinse cautiously with water for several minutes (15-20). Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Most important symptoms and effects (acute or delayed)	Eye irritation.
Indication of immediate medical attention/special treatment	In all cases, call a doctor. Do not forget this document.

Section 5. Fire-fighting measures

Specific hazards of the hazardous product (hazardous combustion products)
Carbon oxides and other irritant/toxic gases and fumes.
Suitable and unsuitable extinguishing media
In case of fire: Use carbon dioxide, chemical powder agent and appropriate foam to extinguish surrounding products.
Special protective equipment and precautions for fire-fighters
During a fire, irritating/toxic smoke and fumes may be generated. Do not enter fire area without proper protection. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece. Shield personnel to protect from venting, rupturing or bursting cans. Move containers from fire area if it can be done without risk. Water spray may be useful in cooling equipment and cans exposed to heat and flame.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate protective equipment (See Section 8).
Methods and materials for containment and cleaning up
Ventilate area of release. Stop the leak if it can be done safely. Contain and absorb any spilled liquid concentrate with inert absorbent material, then place material into a container for later disposal (see Section 13). Contaminated absorbent material may pose the same hazards as the spilled product. Notify the appropriate authorities as required.

Section 7. Handling and storage

Precautions for safe handling

Wear gloves/protective clothing/eye protection/face protection.
Before handling, it is very important that engineering controls are operating, and that protective equipment requirements and personal hygiene measures are being followed. People working with this chemical should be properly trained regarding its hazards and its safe use. Inspect containers for leaks before handling. Label containers appropriately. Ensure proper ventilation. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with eyes, skin and clothing. Keep away from heat, sparks and flame. Avoid generating high concentrations of dusts, vapours or mists. Keep away from incompatible materials (Section 10). Keep containers closed when not in use. Empty containers are always dangerous. Refer also to Section 8.

Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Store away from incompatible materials (Section 10). Inspect all incoming containers to make sure they are properly labelled and not damaged. Storage area should be clearly identified, clear of obstruction and accessible only to trained personnel. Inspect periodically for damage or leaks.

Section 8. Exposure controls/Personal protection

Control parameters (biological limit values or exposure limit values and source of those values)

Exposure limits: ACGIH – TLV-TWA & PEL-TWA – No value for the ingredients or the product itself.

Appropriate engineering controls

Use under well-ventilated conditions. Local exhaust ventilation system is recommended to maintain concentrations of contaminants below exposure limits. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Individual protection measures/personal protective equipment

Respiratory protection is required if the concentrations are higher than the exposure limits. Use a NIOSH approved respirators if the exposure limits are unknown. Chemically protective gloves (impervious), and other protective clothing to prevent prolonged or repeated skin contact, must be worn during all handling operations. Wear protective chemical splash goggles to prevent mists from entering the eyes. Wash hands/nails/face thoroughly after handling. Do not eat, drink or smoke when using this product. Practice good personal hygiene after using this material. Remove and wash contaminated work clothing before re-use.

Section 9. Physical and chemical properties

Appearance, physical state/colour	Crystalline white powder	Vapour pressure	Not available
Odour	Odourless	Vapour density	Heavier than air
Odour threshold	Not available	Relative density	1.665
pH	2.2 (1% solution)	Solubility	Very soluble
Melting/freezing point	153°C	Partition coefficient - n-octanol/water	Not available
Initial boiling point/range	Decompose @ 175°C	Auto-ignition temperature	Not available
Flash point	Not available	Decomposition temperature	Not available
Evaporation rate	Not available	Viscosity	Not available
Flammability (solids and gases)	Not available	VOC	Not available
Upper and lower flammability/explosive limits	Not available	Other	None known

Section 10. Stability and reactivity

Reactivity

Does not react under the recommended storage and handling conditions prescribed.

Chemical stability

Stable under the recommended storage and handling conditions prescribed.

Possibility of hazardous reactions

None known.

Conditions to avoid (static discharge, shock or vibration)

None known.

Incompatible materials

Oxidizing materials; strong acids; etc.

Hazardous decomposition products

None known



Section 11. Toxicological information	
Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact)	
Causes mild skin irritation. Causes serious eye irritation.	
Symptoms related to the physical, chemical and toxicological characteristics	
Skin irritation, redness, stinging, pain; Eye irritation, redness, tearing.	
Delayed and immediate effects (chronic effects from short-term and long-term exposure)	
Skin Sensitization – No data available; Respiratory Sensitization – No data available; Germ Cell Mutagenicity – No data available; Carcinogenicity – No ingredient listed by IARC, ACGIH, NTP or OSHA Reproductive Toxicity – No data available; Specific Target Organ Toxicity – Single Exposure – No data available; Specific Target Organ Toxicity – Repeated Exposure – No data available; Aspiration Hazard – No data available; Health Hazards Not Otherwise Classified – No data available.	
Numerical measures of toxicity (ATE; LD₅₀ & LC₅₀)	
CAS 77-92-9 LD ₅₀ Oral - Rat - 5400 mg/kg; LC ₅₀ Inhalation - Rat - 4 h – None; LD ₅₀ Dermal - Rabbit - None ATE not available in this document.	
Section 12. Ecological information	
Ecotoxicity (aquatic and terrestrial information)	
CAS 77-92-9 Toxicity to fish LC50 - Leuciscus idus melanotus - 440 mg/l - 48 h OECD Test Guideline 203 Toxicity to daphnia and other aquatic invertebrates static test - Daphnia magna (Water flea) - 1535 mg/l - 24 h.	
Persistence and degradability	No data available
Bioaccumulative potential	No bioaccumulation is to be expected.
Mobility in soil	No data available
Other adverse effects	No data available for the product.
Section 13. Disposal considerations	
Information on safe handling for disposal/methods of disposal/contaminated packaging	
Dispose of contents/container into safe container in accordance with local, regional or national regulations.	
Section 14. Transport information	
UN number; Proper shipping name; Class(es); Packing group (PG) of the TDG Regulations	
NOT REGULATED	
UN number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime)	
NOT REGULATED	
UN number; Proper shipping name; Class(es); Packing group (PG) of the IATA (air)	
NOT REGULATED	
Special precautions (transport/conveyance)	None
Environmental hazards (IMDG or other)	None
Bulk transport (usually more than 450 L in capacity)	Possible
Section 15. Regulatory information	
Safety/health Canadian regulations specifics	Refer to Section 2 for the appropriate classification. This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR).
Environmental Canadian regulations specifics	Refer to Section 3 for ingredient(s) of the DSL
Safety/health/environmental outside regulations specifics	
United States OSHA information: This product is regulated according to OSHA (29 CFR). United States EPA (Environmental Protection Agency) information: 40 CFR Refer to the ingredients listed in Section 3 & Sections 12; 13 & 14. United States TCSA information: Refer to the ingredients listed in Section 3. National Fire Protection Association (NFPA): HEALTH: 1 FLAMMABILITY: 0 INSTABILITY: 0 SPECIAL HAZARDS: Refer to Section 2 & 3. HAZARD SCALE: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe California Proposition 65: This product does not contain traces of a material that is known to the State of California to cause cancer or other reproductive harm.	



Section 16. Other information

Date of the latest revision of the safety data sheet | October 30, 2015 version 1 (NSS ENTREPRISE INC.)

References | Safety Data Sheets from manufacturer/supplier & from Canadian Centre for Occupational Health and Safety, CCOHS.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
ATE	Acute toxicity estimate
CAS	Chemical Abstract Service
DSL	Domestic Substance List
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods Code
LC	Lethal concentration
LD	Lethal Dosage
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program (U.S.A.)
OSHA	Occupational Safety and Health Administration (U.S.A.)
PEL	Permissible Exposure Limit
STEL	Short-term Exposure Limit
TDG	Transport of dangerous goods in Canada
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.