

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

**Product Name** CC-416

**Other means of identification**

**Product Code** 20426

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Acid CIP cleaner

**Uses advised against** Follow the directions for use on the label when applying this product

**Details of the supplier of the safety data sheet**

**Initial supplier identifier**

Safe Foods Chemical Innovations  
1501 E. 8th Street  
North Little Rock, AR 72114 USA

**Emergency telephone number**

**Initial supplier phone number** 1-501-758-8500  
**Emergency Telephone** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

**Classification**

Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Acute toxicity - Inhalation (Vapors)	Category 3
Serious eye damage/eye irritation	Category 1
Skin corrosion/irritation	Category 1 Sub-category A
Oxidizing liquids	Category 3

**Label elements**

**DANGER**

**Hazard statements**

Fatal if inhaled  
Causes severe skin burns and eye damage  
May intensify fire; oxidizer



**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Wear respiratory protection  
Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Keep away from clothing and other combustible materials  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

**Precautionary Statements - Response**

Specific treatment is urgent (see section 4 on the SDS)  
Immediately call a POISON CENTER or doctor  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER or doctor  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Wash contaminated clothing before reuse  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting  
IN CASE OF FIRE: Use water spray to extinguish

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed. Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other Information**

Harmful to aquatic life with long lasting effects

**Unknown acute toxicity** See Section 11 for additional Toxicological Information**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No.	Weight-%
Water	7732-18-5	65-85
Nitric acid	7697-37-2	15-35

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****First aid measures**

<b>Inhalation</b>	Remove to fresh air. Administer oxygen if breathing is difficult. Call a physician immediately.
<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician immediately.
<b>Skin contact</b>	Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. For severe burns, immediate medical attention is required. Wash contaminated clothing before reuse.
<b>Ingestion</b>	Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician immediately.

**Most important symptoms and effects, both acute and delayed****Symptoms** See Section 11 for additional Toxicological Information.**Indication of any immediate medical attention and special treatment needed****Note to physicians** Treat symptomatically.**5. FIRE-FIGHTING MEASURES**

<b>Suitable Extinguishing Media</b>	Water spray, carbon dioxide (CO <sub>2</sub> ), dry chemical, foam.
<b>Unsuitable extinguishing media</b>	No information available.
<b>Specific hazards arising from the chemical</b>	NFPA Class 1 oxidizer. Exothermic reaction will occur upon dilution with water.
<b>Hazardous combustion products</b>	Nitrogen oxides (NO <sub>x</sub> ).
<b>Explosion data</b>	
<b>Sensitivity to Mechanical Impact</b>	None.
<b>Sensitivity to Static Discharge</b>	None.
<b>Special protective equipment for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures****Personal precautions** Use personal protective equipment as required. Ensure adequate ventilation.**For emergency responders** Isolate area. Keep unnecessary personnel away.**Environmental precautions****Environmental precautions** Prevent entry into waterways, sewers, basements or confined areas. See section 12 for additional ecological information.**Methods and material for containment and cleaning up****Methods for containment** Prevent further leakage or spillage if safe to do so. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.**Methods for cleaning up** Soak up with inert absorbent material. Collect spillage. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water.**7. HANDLING AND STORAGE****Precautions for safe handling****Advice on safe handling** When diluting, always add the product to water. Never add water to the product. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Avoid breathing vapors or mists. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice.**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Containers must be vented. Keep/store only in original container. Keep from freezing. NFPA Class 1 oxidizers must be separated by at least 8 feet from incompatible materials and combustible commodities (NFPA 400 Table 15.3.2.2.2(A)(b) 2016 edition). Oxidizers need to be separated by at least 25 feet from flammable and combustible liquid containers. Separation shall be maintained by dikes, drains, or floor slopes to prevent flammable liquid leakage from encroaching on the separation (NFPA 400 15.2.12.13.1). At least one side of each pile of oxidizers shall be on an aisle (NFPA 400, 15.2.11.3 2016 edition).

**Incompatible materials**

Chlorinated compounds. Alkali. Cyanides. Certain soft metals.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters****Exposure Limits**

Chemical Name	Alberta	British Columbia	Ontario TWA	Quebec
Nitric acid 7697-37-2	TWA: 2 ppm, 5.2 mg/m <sup>3</sup> STEL: 4 ppm, 10 mg/m <sup>3</sup>	TWA: 2 ppm STEL: 4 ppm	TWA: 2 ppm STEL: 4 ppm	TWA: 2 ppm, 5.2 mg/m <sup>3</sup> STEL: 4 ppm, 10 mg/m <sup>3</sup>

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA TWA (time-weighted average)

STEL STEL (Short Term Exposure Limit)

**Appropriate engineering controls****Engineering controls**

Showers, eyewash stations, and ventilation systems.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Tight sealing safety goggles. Face protection shield.

**Skin and body protection**

If there is a risk of contact: Chemical resistant gloves, suit and boots.

**Respiratory protection**

When workers are facing concentrations above the exposure limit, they must use appropriate certified respirators.

**General hygiene considerations**

Do not eat, drink or smoke when using this product. Wash face, hands and any exposed skin thoroughly after handling. Take off contaminated clothing and wash it before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties****Physical state**

Liquid

**Appearance**

Aqueous solution

**Color**

Clear, Colorless

**Odor**

Sour

**Odor threshold**

No information available

**Property****Values****Remarks • Method****pH**

1

±0.5 @ 21°C

**Melting point / freezing point**

&lt; -17 °C / 2 °F

**Boiling point / boiling range**

No information available

**Flash point**

Not flammable

**Evaporation rate**

No information available

**Flammability (solid, gas)**

No information available

**Flammability Limit in Air****Upper flammability limit:**

No data available

**Lower flammability limit:**

No data available

**Vapor pressure**

No data available

**Vapor density**

No data available

**Relative density**

1.2 g/cc

**Water solubility**

Completely soluble

**Solubility in other solvents**

No data available

**Partition coefficient**

No data available

**Autoignition temperature**

No information available

**Decomposition temperature**

No data available

**Kinematic viscosity**

No information available

**Dynamic viscosity**

No data available

**Explosive properties**

No information available.

**Oxidizing properties**

No information available.

**VOC Content (%)**

0.00%

## 10. STABILITY AND REACTIVITY

**Reactivity**

No information available.

**Chemical stability**

Stable under normal conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

<b>Conditions to avoid</b>	Exothermic reaction will occur upon dilution with water. When diluting, always add the product to water. Never add water to the product.
<b>Incompatible materials</b>	Chlorinated compounds. Alkali. Cyanides. Certain soft metals.
<b>Hazardous Decomposition Products</b>	Nitrogen oxides (NOx).

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	Inhalation of vapors in high concentrations may be irritating to eyes, nose, throat and respiratory system.
<b>Eye contact</b>	Corrosive to the eyes and may cause severe damage including blindness.
<b>Skin contact</b>	Corrosive. Contact causes severe skin irritation and possible burns.
<b>Ingestion</b>	Corrosive. Ingestion causes burns of the upper digestive and respiratory tracts.

### Information on toxicological effects

**Symptoms** No information available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Nitric acid 7697-37-2	-	-	= 130 mg/m <sup>3</sup> ( Rat ) 4 h = 2500 ppm ( Rat ) 1 h

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Skin corrosion/irritation</b>	No information available.
<b>Serious eye damage/eye irritation</b>	No information available.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Nitric acid 7697-37-2	-	Group 2A Group 1	-	X

#### Legend

IARC (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans (Nitrate or nitrite (ingested) has been shown to be carcinogenic only under conditions that result in endogenous nitrosation)

Group 1 - Carcinogenic to Humans (May cause cancer upon inhalation of strong inorganic acid mists)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.

### Numerical measures of toxicity

#### Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (inhalation-dust/mist) 0.40

ATEmix (inhalation-vapor) 9.91

**Unknown acute toxicity** 32.5 % of the mixture consists of ingredient(s) of unknown toxicity

32.5 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

32.5 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

32.5 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Nitric acid 7697-37-2	-	72: 96 h Gambusia affinis mg/L LC50	-

**Persistence and degradability** No information available.

#### Bioaccumulation

Chemical Name	Partition coefficient
Nitric acid - 7697-37-2	-2.3

**Mobility** Soluble in water.

**Other adverse effects** No information available.

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

<b>Waste from residues/unused products</b>	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
<b>Contaminated packaging</b>	Empty containers must be triple rinsed prior to disposal. Dispose of in accordance with local regulations.

#### 14. TRANSPORT INFORMATION

<b>UN/ID No.</b>	3264
<b>Proper shipping name</b>	Corrosive liquid, acidic, inorganic, n.o.s. (contains nitric acid)
<b>Hazard Class</b>	8
<b>Packing Group</b>	II

#### 15. REGULATORY INFORMATION

##### Regulatory information

##### International Regulations

**Ozone-depleting substances (ODS)** Not applicable

**Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

##### International Inventories

**TSCA** Complies

**DSL/NDSL** Complies

**EINECS/ELINCS** Complies

##### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

#### 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<b>Prepared By</b>	Technical Department.
<b>Issue Date</b>	18-Oct-2019
<b>Revision Date</b>	27-Feb-2023
<b>Version</b>	1
<b>Revision Note</b>	Company name update.

##### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The health hazards given on this SDS apply to this product in its concentrated form (as supplied) and may differ significantly at use dilution. The signs and symptoms of exposure apply only to negligence in handling or misuse of the concentrated product and not to the routine exposure of the diluted product under conditions of ordinary use.

**End of Safety Data Sheet**