SAFETY DATA SHEET

Revision Date 27-Feb-2023 **Version** 1

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

Product identifier

Product Name **CC-400**

Other means of identification

Product Code 20604

Recommended use of the chemical and restrictions on use

Recommended Use Scale and buildup remover

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 3
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1

Label elements

DANGER

Hazard statements

Causes severe skin burns and eye damage
Toxic if inhaled

Precautionary Statements - Prevention

Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor
Specific treatment (see Section 4 on SDS)

Eyes

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

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Wash contaminated clothing before reuse

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor

Ingestion

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

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

May be harmful if swallowed Toxic to aquatic life with long lasting effects

Unknown acute toxicity See Section 11 for additional Toxicological Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical Name	CAS No.	Weight-%
Water	7732-18-5	50-70
Phosphoric acid	7664-38-2	30-40
Nitric acid	7697-37-2	1-10

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

4. FIRST AID MEASURES

First aid measures

Inhalation Remove to fresh air. Administer oxygen if breathing is difficult. Call a physician immediately.

Eye contact 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.

Skin contact 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.

Ingestion 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

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, foam.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical NFPA Class 1 oxidizer. Exothermic reaction will occur upon dilution with water.

Hazardous combustion products Carbon monoxide. Carbon dioxide (CO2). Phosphorus oxides. Nitrogen oxides (NOx).

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Special protective equipment for fire-fighters 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 equipment. 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. Keep from freezing. NFPA Class 1 oxidizers must be separated by al least 8 feet from incompatible materials and combustible commodities (NFPA 400 Table 15.3.2.2.2.2(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
Phosphoric acid 7664-38-2	TWA: 1 mg/m^3 STEL: 3 mg/m^3	TWA: 1 mg/m^3 STEL: 3 mg/m^3	TWA: 1 mg/m^3 STEL: 3 mg/m^3	TWA: 1 mg/m^3 STEL: 3 mg/m^3
Nitric acid 7697-37-2	TWA: 2 ppm, 5.2 mg/m^3 STEL: 4 ppm, 10 mg/m^3	TWA: 2 ppm STEL: 4 ppm	TWA: 2 ppm STEL: 4 ppm	TWA: 2 ppm, 5.2 mg/m^3 STEL: 4 ppm, 10 mg/m^3

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)
STEL	STEL (Short Term Exposure Limit)
Ceiling (CEV)	Maximum limit value
*	Skin designation

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	Pink
Odor	Sour
Odor threshold	No information available

Property	Values	Remarks • Method
pH	1	±1 @ 21°C
Melting point / freezing point	< -7 °C / < 20 °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	1.24 g/cc	
Water solubility	Soluble in water	
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.
Conditions to avoid Exothermic reaction will occur upon dilution with water. When diluting, always add the product to water. Never add water to the product.
Incompatible materials Chlorinated compounds. Alkali. Cyanides. Certain soft metals.
Hazardous Decomposition Products Carbon monoxide. Carbon dioxide (CO2). Phosphorus oxides. Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

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

Information on toxicological effects

Symptoms No information available.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Phosphoric acid 7664-38-2	= 1530 mg/kg (Rat)	= 2740 mg/kg (Rabbit)	> 850 mg/m^3 (Rat) 1 h
Nitric acid 7697-37-2	-	-	= 2500 ppm (Rat) 1 h

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

Skin corrosion/irritation No information available.
Serious eye damage/eye irritation No information available.
Respiratory or skin sensitization No information available.
Germ cell mutagenicity No information available.

Carcinogenicity

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

Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

Numerical measures of toxicity

Acute toxicity

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

ATEmix (oral) 4,636.40
ATEmix (dermal) 8,303.00
ATEmix (inhalation-dust/mist) 0.6445
ATEmix (inhalation-vapor) 42.9520

Unknown acute toxicity 38.025 % of the mixture consists of ingredient(s) of unknown toxicity

5.025 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
5.025 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
38.025 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
33 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
5.025 % 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	Toxicity to microorganisms	Crustacea
Phosphoric acid 7664-38-2	-	3 - 3.5: 96 h Gambusia affinis mg/L LC50	-	4.6: 12 h Daphnia magna mg/L EC50
Nitric acid 7697-37-2	-	72: 96 h Gambusia affinis mg/L LC50	-	-

Persistence and degradability No information available.
Bioaccumulation No information available.

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

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

14. TRANSPORT INFORMATION

TDG

UN/ID No. 3264
Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s. (contains phosphoric and nitric acids)
Hazard Class 8
Packing Group 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

Prepared By Technical Department.
Issue Date 30-Nov-2016
Revision Date 27-Feb-2023
Version 1
Revision Note 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