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-541**

Other means of identification

Product Code 20587

Recommended use of the chemical and restrictions on use

Recommended Use Non-Foaming Chlorinated 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

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

Label elements

DANGER

Hazard statements

Causes severe skin burns and eye damage

Precautionary Statements - Prevention

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)
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

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Information

Very toxic 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	70-90
Potassium hydroxide	1310-58-3	5-10
Sodium hypochlorite	7681-52-9	1-5

Chemical Name	CAS No.	Weight-%
Sodium polyacrylate	68479-09-4	1-5
Sodium chloride	7647-14-5	1-5
Sodium silicate	1344-09-8	< 1
Sodium hydroxide	1310-73-2	< 0.5

*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 In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, 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 Exothermic reaction will occur upon dilution with water.

Hazardous combustion products Chlorine gas released on contact with acids, or during thermal decomposition. Carbon monoxide. Carbon dioxide (CO2).

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 Exothermic reaction will occur upon dilution with water. 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. Keep from freezing. Store in accordance with local regulations.

Incompatible materials Oxidizing agent. Acids. Amphoteric metals (aluminum, copper, zinc).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical Name	Alberta	British Columbia	Ontario TWA	Quebec
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m^3	Ceiling: 2 mg/m^3	CEV: 2 mg/m^3	Ceiling: 2 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 Clear light yellow

Odor Chlorine

Odor threshold No information available

Property	Values	Remarks • Method
pH	12	±1 @ 21°C (2% solution)
Melting point / freezing point	-18 °C / 0 °F	
Boiling point / boiling range	99-105 °C / 210-220 °F	
Flash point	Not flammable	
Evaporation rate	< 1	
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	> 1	
Relative density	1.19 g/cc	
Water solubility	Miscible 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 None known based on information supplied.

Incompatible materials Oxidizing agent. Acids. Amphoteric metals (aluminum, copper, zinc).

Hazardous Decomposition Products Chlorine gas released on contact with acids, or during thermal decomposition. Carbon monoxide. Carbon dioxide (CO2).

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 Contact causes severe skin irritation and possible burns.

Ingestion Ingestion causes burns of the upper digestive and respiratory tracts. Can burn mouth, throat, and stomach.

Information on toxicological effects

Symptoms No information available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium hydroxide 1310-58-3	= 284 mg/kg (Rat)	-	-
Sodium hypochlorite 7681-52-9	= 8.91 g/kg (Rat)	> 10000 mg/kg (Rabbit)	-
Sodium chloride 7647-14-5	= 3 g/kg (Rat)	> 10 g/kg (Rabbit)	> 42 g/m^3 (Rat) 1 h
Sodium silicate 1344-09-8	= 1960 mg/kg (Rat)	> 4640 mg/kg (Rabbit)	-
Sodium hydroxide 1310-73-2	140 - 340 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	-

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
Sodium hypochlorite 7681-52-9	-	Group 3	-	-

Legend

IARC (International Agency for Research on Cancer)
Group 3 - "not classifiable as human carcinogens" (listed as hypochlorite salts)

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) 5,581.20

Unknown acute toxicity 20.985 % of the mixture consists of ingredient(s) of unknown toxicity

4.5 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

12.6 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

20.985 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

20.985 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

20.985 % 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
Potassium hydroxide 1310-58-3	-	80: 96 h Gambusia affinis mg/L LC50 static	-
Sodium hypochlorite 7681-52-9	0.095: 24 h Skeletonema costatum mg/L EC50	0.06 - 0.11: 96 h Pimephales promelas mg/L LC50 flow-through 4.5 - 7.6: 96 h Pimephales promelas mg/L LC50 static 0.18 - 0.22: 96 h Oncorhynchus mykiss mg/L LC50 static 0.03 - 0.19: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.4 - 0.8: 96 h Lepomis macrochirus mg/L LC50 static 0.28 - 1: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.05 - 0.771: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	2.1: 96 h Daphnia magna mg/L EC50 0.033 - 0.044: 48 h Daphnia magna mg/L EC50 Static
Sodium chloride 7647-14-5	-	5560 - 6080: 96 h Lepomis macrochirus mg/L LC50 flow-through 12946: 96 h Lepomis macrochirus mg/L LC50 static 6020 - 7070: 96 h Pimephales promelas mg/L LC50 static 6420 - 6700: 96 h Pimephales promelas mg/L LC50 static 7050: 96 h Pimephales promelas mg/L LC50 semi-static 4747 - 7824: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	340.7 - 469.2: 48 h Daphnia magna mg/L EC50 Static 1000: 48 h Daphnia magna mg/L EC50
Sodium silicate 1344-09-8	-	301 - 478: 96 h Lepomis macrochirus mg/L LC50 3185: 96 h Brachydanio rerio mg/L LC50 semi-static	216: 96 h Daphnia magna mg/L EC50
Sodium hydroxide 1310-73-2	-	45.4: 96 h Oncorhynchus mykiss mg/L LC50 static	-

Persistence and degradability No information available.

Bioaccumulation

Chemical Name	Partition coefficient	
Potassium hydroxide - 1310-58-3	0.65	0.83

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. 1760
Proper shipping name Corrosive liquids, n.o.s. (contains potassium hydroxide and sodium hypochlorite)
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 No information available

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 03-Oct-2019
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