

1. Identification of the substance/preparation and of the company/undertaking

Product Name Gemini C-2000

UN/ID No. UN1760

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Liquid Alkaline One-Step Cleaner

Uses advised against No information available

Supplier Address

Anderson Chemical Company, 325 South Davis Avenue, Litchfield, MN 55355 (320-693-2477)

Emergency telephone number

Chemtrec 1-800-424-9300

2. Hazards identification

Classification

OSHA Regulatory Status

Skin Corrosion/Irritation Category 1 Sub-category A

Serious Eye Damage/Irritation Category 1

Corrosive to Metals Category 1



Label Elements

Signal word: **Danger**

Hazard Statements

Causes severe skin burns and eye damage.

May be corrosive to metals.

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. Keep only in original container.

Precautionary Statements - Response

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

IF INHALED: Remove victim to fresh air and keep comfortable for breathing.

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.

Absorb spillage to prevent material damage.

Precautionary Statements - Storage

Store locked up. Store in a corrosive resistant container.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)

Other Information

Harmful if swallowed or inhaled.

Harmful to aquatic life with long lasting effect.

3. Composition/information on ingredients

| Chemical Name | CAS Number | % by Weight |
|---------------------|------------|-------------|
| Potassium hydroxide | 1310-58-3 | 1-5 |
| Sodium Hydroxide | 1310-73-2 | 10-20 |

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

4. First aid measures

General advice

Immediate medical attention is required.

Eye contact

Flush immediately with water for 15 minutes. Lift upper and lower eyelids for complete rinsing. Get immediate medical attention.

Skin Contact

Flush with water for 15 minutes. Get medical attention. Remove contaminated clothing and wash before reuse.

Inhalation

Remove victim from immediate source of exposure to fresh air. If breathing is difficult, administer oxygen if available. If victim is not breathing, administer CPR. If individual experiences nausea, headache, or dizziness, get immediate medical attention.

Ingestion

Rinse mouth with water. Give water to dilute. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to a semi-comatose, comatose, convulsing or unconscious person.

Self-protection of the first aider

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms

Corrosive. Causes irritation (possibly severe), burns to the eyes. May cause permanent eye damage. Causes irritation (possibly severe), burns to the skin. Causes irritation (possibly severe), burns, pulmonary edema to the respiratory tract. Causes irritation (possibly severe), burns, nausea, vomiting to the gastrointestinal tract. The severity of effects depend on concentration and how soon after exposure the area is washed.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

5. Fire-fighting measures

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

None known.

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

Hazardous combustion products

Toxic fumes of sodium oxide.

Explosion Data

Sensitivity to mechanical impact None

Sensitivity to static discharge None

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use water spray to cool fire exposed containers. Move containers from fire area if you can do it without risk.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions

Evacuate nonessential personnel. Ventilate area. Wear appropriate personal protection equipment. Avoid contact with skin, eyes or clothing. Corrosive material. Keep people away from and upwind of spill/leak.

Environmental precautions

See Section 12 for additional ecological information. Prevent entry into sewers or waterways.

Methods for containment

Completely contain spilled material with dikes or sand bags, etc.

Methods for cleaning up

Recover as much material as possible into containers for disposal or reuse. Remaining material may be diluted with water and neutralized. Flush spill area with water. Neutralization products, both solid and liquid, must be recovered for disposal.

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Do not get in eyes, on skin, or clothing. Do not breathe vapors or mists. Do not ingest. Wash thoroughly after handling. Wear protective clothing/equipment. Use with adequate ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed and properly labeled. Containers that have been emptied will retain product residue and should be handled as if they were full. Store in a cool, dry, well-ventilated place away from incompatible materials. Wash hands before eating, drinking, using tobacco, applying make-up or using the toilet. Do not store, use, and/or consume foods, beverages, tobacco in areas where this product is stored.

Incompatible materials

Oxidizing agent. Acids. Bases. Water. Organic material. Reducing sugars. Metals. (Aluminum, magnesium, zinc, copper, lead, tin and their alloys).

8. Exposure controls/personal protection

Control parameters

Exposure Guideline

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|----------------------------------|------------------------------|---|---|
| Potassium hydroxide 1310-58-3 | Ceiling: 2 mg/m ³ | (vacated) Ceiling: 2 mg/m ³ | Ceiling: 2 mg/m ³ |
| Sodium Hydroxide 1310-73-2 | Ceiling: 2 mg/m ³ | TWA: 2 mg/m ³ (vacated) Ceiling: 2 mg/m ³ | IDLH: 10 mg/m ³ Ceiling: 2 mg/m ³ |

Appropriate engineering controls

Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear protective splash proof safety goggles. Additional full face protection is recommended if splashing is a possibility.

Skin and body protection

Wear protective gloves and protective clothing. Protective shoes or boots.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations

Wash contaminated clothing before reuse.

9. Physical and chemical properties

Information on basic physical and chemical properties

| | |
|---------------------------------|-----------------------------|
| Physical state | Liquid |
| Color | Clear, colorless |
| Odor | Orderless |
| Odor threshold | No information available |
| pH | 12.8 - 12.8, pH 1% solution |
| Melting point/freezing point | No information available |
| Boiling point / boiling range | No information available |
| Flash point | No information available |
| Evaporation rate | No information available |
| Flammability (solid, gas) | No information available |
| Flammability upper limit in air | No information available |
| Flammability lower limit in air | No information available |
| Vapor pressure | No information available |
| Vapor density | No information available |
| Specific Gravity | 1.221 - 1.241 |
| Water solubility | Soluble in water |
| Partition coefficient | No information available |
| Autoignition temperature | No information available |

| | |
|----------------------------------|--------------------------|
| Decomposition temperature | No information available |
| Kinematic viscosity | No information available |
| Dynamic viscosity | No information available |

10. Stability and reactivity

Reactivity

No information available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

NEVER add water to product. ALWAYS add product, with constant stirring, slowly to surface of water to minimize heat generation and splattering. Mixing with acid or incompatible materials may cause splattering and release of large amounts of heat. Will react with some metals forming flammable hydrogen gas. Carbon monoxide gas may form upon contact with reducing sugars or food and beverage products in enclosed spaces.

Incompatible materials

Oxidizing agent. Acids. Bases. Water. Organic material. Reducing sugars. Metals. (Aluminum, magnesium, zinc, copper, lead, tin and their alloys).

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. Toxicological information

Information on likely routes of exposure

Product Information

| | |
|---------------------|--|
| Inhalation | May cause irritation of respiratory tract. |
| Eye contact | Corrosive to the eyes and may cause severe damage including blindness. |
| Skin Contact | Contact causes severe skin irritation and possible burns. |
| Ingestion | May be harmful if swallowed. |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|----------------------------------|---------------|-------------------------|-------------------|
| Potassium hydroxide 1310-58-3 | 214 mg/kg rat | No data available | No data available |
| Sodium Hydroxide 1310-73-2 | - | = 1350 mg/kg (Rabbit) | - |

Information on toxicological effects

Symptoms No information available

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

| | |
|-------------------------------|--------------------------|
| Sensitization | No information available |
| Germ cell mutagenicity | No information available |
| Carcinogenicity | No information available |

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|---------------|-------|------|-----|------|
| | | | | |

| | |
|---------------------------------|--------------------------|
| 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 - Product Information

ATEmix (dermal) 7714 mg/kg

12. Ecological information

Ecotoxicity

Harmful to aquatic life with long lasting effects

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|----------------------------------|----------------------|---|-----------|
| Potassium hydroxide 1310-58-3 | | LC50 (Gambusia affinis): 80 mg/L 96h static | -- |

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|-------------------------------|----------------------|---|-----------|
| Sodium Hydroxide 1310-73-2 | - | 45.4: 96 h Oncorhynchus mykiss mg/L LC50 static | - |

Persistence and degradability No information available
Bioaccumulation No information available

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

Other adverse effects No information available

13. Disposal considerations

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging Do not reuse container.

| Chemical Name | California Hazardous Waste Status |
|----------------------------------|-----------------------------------|
| Potassium hydroxide 1310-58-3 | Toxic Corrosive |
| Sodium Hydroxide 1310-73-2 | Toxic, Corrosive |

14. Transport information

DOT Regulated
UN/ID No. UN1760
Proper shipping name Corrosive Liquid, N.O.S.
Hazardous ingredients (Sodium hydroxide/Potassium Hydroxide)
Hazard class 8
Packing group II

15. Regulatory information

US Federal Regulations

SARA 311/312 Hazards

Skin Corrosion/Irritation
 Serious Eye Damage/Irritation
 Corrosive to Metals

CWA (Clean Water Act)

This product does contain substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical Name | Reportable Quantities | Toxic Pollutants | Priority Pollutants | Hazardous Substances |
|----------------------------------|-----------------------|------------------|---------------------|----------------------|
| Potassium hydroxide 1310-58-3 | 1000 lb | -- | -- | X |
| Sodium Hydroxide 1310-73-2 | 1000 lb | - | - | X |

CERCLA

This material, as supplied, contains substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|----------------------------------|--------------------------|----------------|---|
| Potassium hydroxide 1310-58-3 | 1000 lb | -- | RQ 1000 lb final RQ RQ 454 kg final RQ |

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|-------------------------------|--------------------------|----------------|---|
| Sodium Hydroxide 1310-73-2 | 1000 lb | - | RQ 1000 lb final RQ RQ 454 kg final RQ |

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

NFPA Health hazards 3 Flammability 0 Instability 1 **Physical and Chemical Properties**
HMIS Health hazards 3 Flammability 0 Physical hazards 1 **Personal protection** X
Prepared By L. Tipka
Issue Date 2014-10-20
Revision Date 2026-03-11
Revision Note Review no update

Disclaimer

The information provided in this Material 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 information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet