SECTION 01: PRODUCT AND COMPANY IDENTIFICATION

Product name: Sodium Carbonate  
Formula: \( \text{Na}_2\text{CO}_3 \)  
Chemical family: Carbonates  
Synonyms: Disodium carbonate, soda ash and carbonic acid disodium salt.  
Product use: For laboratory use only

Manufacturer: CLAISSE  
Address: 350, FRANQUET, QUEBEC (QUEBEC) G1P 4P3, CANADA  
Phone: +1 418 656-6453  
Fax: +1 418 656-1169

Emergency telephone number: CANUTEC (24h): +1 613 996-6666

SECTION 02: HAZARDS IDENTIFICATION

GHS and (EC) No 1272/2008 classification  
Acute toxicity, Oral (Category 5)  
Skin corrosion/irritation (Category 3)  
Serious eye damage/Eye irritation (Category 2A).

Label elements:  
Pictogram:

![Pictogram]

Signal word: Warning  
SGH 07

Hazard statements:  
H303 May be harmful if swallowed.  
H316 Causes mild skin irritation.  
H319 Causes serious eye irritation.

Precautionary statements:  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264 Wash hands and clothes thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Other hazards  
No data available.
SECTION 03: COMPONENT INFORMATION

<table>
<thead>
<tr>
<th>Compound</th>
<th>Synonym</th>
<th>Molecular formula</th>
<th>Molecular Weight (g/mol)</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Index-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Carbonate</td>
<td>See Section 01</td>
<td>Na$_2$CO$_3$</td>
<td>105.99</td>
<td>497-19-8</td>
<td>207-838-8</td>
<td>011-005-00-2</td>
<td>100</td>
</tr>
</tbody>
</table>

SECTION 04: FIRST AID MEASURES

Description of first aid measures

General information
Seek immediate medical advice.
Take affected persons out of danger area and lay down.

After inhalation
In case of unconsciousness place patient stably in side position for transportation.
Supply fresh air. If required, provide artificial respiration. Keep patient warm. If symptoms persist, consult a physician.

After skin contact
Immediately wash with water and soap and rinse thoroughly. If skin irritation persists, consult a physician.

After eye contact
Rinse opened eye for several minutes under running water. If symptoms persist, consult a physician.

After swallowing
Rinse out mouth and then drink plenty of water. If symptoms persist, consult a physician.

Most important symptoms and effects, both acute and delayed
No data available.

Indication of any immediate medical attention and special treatment needed
No data available.

SECTION 05: FIREFIGHTING MEASURES

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media
No data available.

Special protective equipment for fire fighters
Wear self-contained breathing apparatus for firefighting if necessary.

Hazardous combustion products
Hazardous decomposition products formed under fire conditions: carbon oxides.
SECTION 06: ACCIDENTAL RELEASE MEASURES

Personal precautions
Use personal protective equipment. Avoid dust formation. Avoid breathing dust, vapours, fumes or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions
Avoid dispersal of spilled material, runoff and contact with soil waterways, drains and sewers.

Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed and non-leaking containers for local chemical disposal.

Reference to other sections
See Section 7 for information on safe handling and storage. See Section 8 for information on exposure controls and personal protection. See Section 13 for disposal information.

SECTION 07: HANDLING AND STORAGE

Precautions for safe handling
Provide suction extractors if dust is formed.
Do not inhale dust, smoke or mist.
Avoid contact with the eyes and skin.
Prevent formation of dust.
Prevent formation of aerosols.

Conditions for safe storage, including any incompatibilities
Requirements to be met by storerooms and receptacles: no special measures required.
Information about storage in one common storage facility: not required.
Further information about storage conditions: keep container tightly sealed; store receptacle in a well-ventilated area; store in dry conditions.

Specific end use(s)
No data available.

SECTION 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
No exposure limits have been established.

Exposure Control
Personal protective equipment
General protective and hygienic measures
Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work shifts. Avoid contact with the eyes and skin.

Respiratory protection
For nuisance exposure, use type N95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection, use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Hand protection
Handle with gloves. The glove material has to be impermeable and resistant to the product, the substance or preparation. Selection of the glove material must be made considering the penetration times, rates of diffusion and degradation. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

   Protective gloves.

Eye protection
Wear safety glasses with side shields conforming to EN 166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

   Safety glasses with side shields (EN 166).

Skin and body protection
Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the specific workplace.

Specific engineering controls
Use mechanical exhaust or laboratory fume hood to avoid exposure.

Environmental exposure controls
Use mechanical exhaust or laboratory fume hood to avoid exposure.

### SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Safety data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form: Powder</td>
<td>pH: Basic in solution</td>
</tr>
<tr>
<td>Colour: White</td>
<td>Melting point/freezing point: 851°C/1564°F</td>
</tr>
<tr>
<td></td>
<td>Initial boiling point/boiling range: No data available</td>
</tr>
<tr>
<td></td>
<td>Flash point: No data available</td>
</tr>
<tr>
<td></td>
<td>Flammability: No data available</td>
</tr>
<tr>
<td></td>
<td>Ignition point: No data available</td>
</tr>
<tr>
<td></td>
<td>Autoignition point: No data available</td>
</tr>
<tr>
<td></td>
<td>Lower flammable/explosive limit: No data available</td>
</tr>
<tr>
<td></td>
<td>Upper flammable/explosive limit: No data available</td>
</tr>
<tr>
<td></td>
<td>Vapour pressure: Negligible</td>
</tr>
<tr>
<td></td>
<td>Relative density: 2.53 at 20°C</td>
</tr>
<tr>
<td></td>
<td>Solubility: 215 g/L at 20°C in water</td>
</tr>
<tr>
<td></td>
<td>Partition coefficient n-octanol/water: No data available</td>
</tr>
<tr>
<td></td>
<td>Decomposition temperature: No data available</td>
</tr>
</tbody>
</table>
Viscosity: No data available
Relative vapour density: No data available
Odour: No data available
Odour threshold: No data available
Evaporation rate: No data available
Explosive properties: No data available
Oxidizing properties: No data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity
The solution in water is alkaline. Decomposes by reaction with strong acids.

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
No dangerous reactions known.

Conditions to avoid
Incompatible materials.

Incompatible materials
Finely divided aluminum and strong acids.

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions: carbon oxides and sodium oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity

<table>
<thead>
<tr>
<th>Compound</th>
<th>Oral LD50</th>
<th>Inhalation LC50</th>
<th>Dermal LD50</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Carbonate</td>
<td>2800 mg/kg bw</td>
<td>800 mg/m³ (guinea pig)</td>
<td>&gt;2000 mg/kg bw</td>
<td>No data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1200 mg/m³ (mice)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2300 mg/m³ (rat)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
Acute skin irritation/corrosion studies were performed with sodium carbonate in accordance with Henkel Hellas S.A. Atalanti. ECETOC, Technical Report No. 66, 1995 (LIT 7835) [IUCLID 2000], EPA 16 CFR 1500.3 and testing comparable to OECD Guideline 404. Based on the results obtained, sodium carbonate has not to be classified and labelled irritating to the skin according to Directive 67/548/EEC (DSD) and Regulation (EC) No 1272/2008 (CLP).

Serious eye damage/eye irritation
Acute eye irritation/corrosion studies were performed with sodium carbonate in accordance with Solvay S.A. Bruxelles Murphy J.C. et al. (1982), Toxicology, 23, p. 281 [IUCLID 2000], EPA 16 CFR 1500.42 and testing comparable to OECD Guideline 405. With respect to eye irritation, sodium carbonate has to be classified into irritating to the eye according to the Regulation (EC) No 1272/2008 (CLP) and according to the Directive 67/548/EEC (DSD).
Respiratory or skin sensitization
No data available.

Germ cell mutagenicity (in vitro) – gene mutation
No data available.

Germ cell mutagenicity (in vivo) – DNA damage and/or repair
No data available.

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH (A4 group).

Reproductive toxicity
No data available.

STOT – SE (GHS)
No data available.

STOT – RE (GHS)
No data available.

Signs and symptoms of exposure
Burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.

Synergistic effects
No data available.

Additional information

<table>
<thead>
<tr>
<th>Compound</th>
<th>RTECS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Carbonate</td>
<td>VZ4050000</td>
</tr>
</tbody>
</table>

SECTION 12: ECOLOGICAL INFORMATION

Toxicity
Aquatic environment toxicity (acute)
No data available.

Aquatic environment toxicity (long-term)
No data available.

Persistence and degradability
No data available.

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects
Will affect drinking water supplies. The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have harmful or damaging effects on the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Product disposal
The generation of waste should be avoided or minimized wherever possible.

Contaminated packaging disposal
Dispose as an unused product.

Waste treatment-relevant information
Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional and local authority requirements.

Sewage disposal-relevant information
Avoid dispersal of spilled material, runoff and contact with soil, waterways, drains and sewers.

Other disposal recommendations
Contact a licensed professional waste disposal service to dispose of this material.

SECTION 14: TRANSPORT INFORMATION

UN number
ADR, ADN, IMDG, IATA, TDG, DOT Not applicable.

UN Proper shipping name
Not applicable.

Transport hazard class(es)
ADR, ADN, IMDG, IATA, TDG, DOT Not applicable.

Packing group
ADR/IMDG/IATA/TDG/DOT Not applicable.

Environmental hazards
Environmentally hazardous substance/marine pollutant: No.

Special precaution for user
Not applicable.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture
This safety data sheet complies with the requirements of regulation (EC) No. 1907/2006.

Chemical safety assessment
A chemical safety assessment has not been carried out.
DSL status
All components of this product are on the Canadian DSL list.

WHMIS classification
D2B  Toxic material  Moderate eye irritant
This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

HMIS classification
Health hazard:  1
Chronic health hazard:  *
Flammability:  0
Physical hazards:  0

Potential health effects
Inhalation:  May cause respiratory irritation.
Skin:  May cause skin irritation.
Eyes:  Causes serious eye irritation.
Ingestion:  May be harmful if swallowed.

SECTION 16: OTHER INFORMATION

Date of issue
2016-08-15

Notice to the reader
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 only 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.

Abbreviations and acronyms
ACGIH:  American Conference of Governmental Industrial Hygienists
ADR:  European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN:  European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterway
b.w.:  Body weight
CAA:  Clean Air Act
CAS:  Chemical Abstracts Service (division of the American Chemical Society)
CEN:  European Committee for Standardization
CERCLA:  Comprehensive Environmental Response, Compensation and Liability Act
CFR:  Code of Federal Regulations
CLP:  Classification, Labelling and Packaging
CPR:  Controlled Products Regulations
DNEL:  Derived No-Effect Level
DOT:  Department of Transportation
DSL:  Domestic Substance List
EINECS:  European Inventory of Existing Commercial Chemical Substances
GHS:  Globally Harmonized System of Classification and Labelling of Chemicals
HDPE:  High Density PolyEthylene
HEPA:  High Efficiency Particulate Air
HMIS:  Hazardous Material Information System
IARC:  International Agency for Research on Cancer
IATA:  International Air Transport Association
IBC: Intermediate Bulk Container
IDLH: Immediately Dangerous to Life or Health Concentrations
IMDG: International Maritime Dangerous Goods Code
LC50: Median Lethal Concentration
LD50: Median Lethal Dose
LOAEL: Lowest Observed Adverse Effect Level
LOEC: Lowest Observable Effect Concentration
MARPOL: MARine POLlution
NIOSH: The National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
NOEC: No Observable Effect Concentration
OECD: Organisation for Economic Co-operation and Development
OSHA: Occupational Safety and Health Administration
PBT: Persistent Bioaccumulative and Toxic
PEL: Permissible Exposure Limits
PNEC: Predicted No-Effect Concentration
RCF: Refractory Ceramic Fibers
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
SCP: Standards Completion Program (NIOSH/OSHA)
STEL: Short Term Exposure Limit
STOT – RE: Specific Target Organ Toxicity – Repeated exposure
STOT – SE: Specific Target Organ Toxicity – Single exposure
TDG: Transport of Dangerous Goods
TLV: Threshold Limit Value
TSCA: Toxic Substances Control Act
TWA: Time-Weighted Average exposure value
UN: United Nations
vPvB: very Persistent and very Bioaccumulative
WHMIS: Workplace Hazardous Materials Information System