SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label

: Sodium Bicarbonate

Product Code(s)

: None reported.

Recommended use of the chemical and restrictions on use

: Used in coatings, ink, plastic, rubber, leather products and other unidentified uses

Use pattern: Professional Use Only

Recommended restrictions: None known.

Chemical family

: Pure substance with impurities

Name, address, and telephone number of the supplier:

Comet Chemical Company Ltd.
3463 Thomas Street
Innisfill, ON, Canada
L9S 3W4
705-436-5580

Name, address, and telephone number of the manufacturer:

Refer to supplier

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

White crystals or powder. Odorless.

This material is not classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Label elements

Signal Word

Not required

Hazard statement(s)

Not applicable.

Precautionary statement(s)

Not applicable.

Other hazards

Other hazards which do not result in classification:

Contact with eyes may cause irritation.
Inhalation of dusts may cause respiratory irritation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS #</th>
<th>Concentration (% by weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium bicarbonate</td>
<td>Sodium hydrogen carbonate</td>
<td>144-55-8</td>
<td>100.00</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

**Ingestion**
Do not induce vomiting. Rinse mouth thoroughly. Never give anything by mouth to an unconscious person. Get medical attention if symptoms persist.

**Inhalation**
Immediately remove person to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. Call a POISON CENTER or doctor/physician if you feel unwell.

**Skin contact**
Wash affected areas with soap and water. Take off contaminated clothing and wash before re-use. Get medical attention if irritation develops and persists.

**Eye contact**
Flush with large amounts of water for 15 minutes. Remove contact lenses, if present and easy to do. If irritation or symptoms develop, seek medical attention.

Most important symptoms and effects, both acute and delayed

Direct eye contact may cause temporary redness. Inhalation of dusts may cause respiratory irritation.

Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

**Suitable extinguishing media**
Use media suitable to the surrounding fire such as water fog or fine spray, alcohol foams, carbon dioxide and dry chemical.

**Unsuitable extinguishing media**
Do not use a solid water stream as it may scatter and spread fire.

Special hazards arising from the substance or mixture / Conditions of flammability
Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

Flammability classification (OSHA 29 CFR 1910.106)
Not flammable.

Hazardous combustion products
Sodium oxides. Carbon dioxide and carbon monoxide.

Special protective equipment and precautions for firefighters

**Protective equipment for fire-fighters**
Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. A full-body chemical resistant suit should be worn.

**Special fire-fighting procedures**
Evacuate personnel to safe areas. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. Dike for water control. Avoid release to the environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

All persons dealing with clean-up should wear the appropriate protective equipment including self-contained breathing apparatus. Keep all other personnel upwind and away from the spill/release. Restrict access to area until completion of clean-up. Refer to Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.

Environmental precautions
Ensure spilled product does not enter drains, sewers, waterways, or confined spaces. For large spills, dike the area to prevent spreading.

Methods and material for containment and cleaning up
Sodium Bicarbonate
SDS Preparation Date (mm/dd/yyyy): 08/31/2016

SAFETY DATA SHEET

: Prevent further leakage or spillage if safe to do so. Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. Contact the proper local authorities.

Special spill response procedures
: In case of transportation accident, contact TERRAPURE ENVIRONMENTAL at 1-800-567-7455. US CERCLA Reportable quantity (RQ): None reportable.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling
: Handle in accordance with good industrial hygiene and safety practice. Avoid dust formation.

Conditions for safe storage
: Store in a cool, dry, well-ventilated area. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. No smoking in the area. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

Incompatible materials
: Acids; Ammonium compounds

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>STEL</td>
</tr>
<tr>
<td>Sodium bicarbonate</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td></td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
</tbody>
</table>

Exposure controls

Ventilation and engineering measures
: Provide exhaust ventilation or other engineering controls to keep the airborne concentration of vapours below their respective threshold limit value.

Respiratory protection
: None required under normal conditions. Seek advice from respiratory protection specialists.

Skin protection
: Wear protective gloves. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye / face protection
: Chemical goggles must be worn to prevent dusts from entering the eyes.

Other protective equipment
: An eyewash station and safety shower should be made available in the immediate working area. Other equipment may be required depending on workplace standards.

General hygiene considerations
: Observe good industrial hygiene practices. Avoid breathing dust and fume.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
: White crystals (solid).

Odour
: Odorless.

Odour threshold
: No information available.

pH
: 8.3

Melting/Freezing point
: Decomposes. >50 °C

Initial boiling point and boiling range
: Not applicable.

Flash point
: Not applicable.

Flashpoint (Method)
: Not applicable.
SAFETY DATA SHEET

Evaporation rate (BuAe = 1) : No information available.
Flammability (solid, gas) : The product is not flammable.
Lower flammable limit (% by vol.) : N/Ap
Upper flammable limit (% by vol.) : N/Ap
Oxidizing properties : None known.
Explosive properties : Not explosive
Vapour pressure : No information available.
Vapour density : No information available.
Relative density / Specific gravity : 2.16(water = 1)
Solubility in water : Soluble 96 g/L
Other solubility(ies) : No information available.
Partition coefficient: n-octanol/water or Coefficient of water/oil distribution : Not applicable.
Auto-ignition temperature : No information available.
Decomposition temperature : >50°C
Viscosity : Not applicable.
Volatile (% by weight) : No information available.
Volatile organic Compounds (VOC's) : No information available.
Absolute pressure of container : N/Ap
Flame projection length : N/Ap
Other physical/chemical comments : None known or reported by the manufacturer.

SECTION 10. STABILITY AND REACTIVITY
Reactivity : Not normally reactive.
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions : Hazardous polymerization does not occur.
Conditions to avoid : Avoid contact with incompatible materials. Avoid dust formation.
Incompatible materials : See Section 7 (Handling and Storage) for further details.
Hazardous decomposition products : None known, refer to hazardous combustion products in Section 5.

SECTION 11. TOXICOLOGICAL INFORMATION
Information on likely routes of exposure:
Routes of entry inhalation : YES
Routes of entry skin & eye : YES
Routes of entry Ingestion : YES
Routes of exposure skin absorption : NO
SAFETY DATA SHEET

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation

Inhalation of dusts may cause respiratory irritation.

Sign and symptoms ingestion

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Sign and symptoms skin

May cause mild skin irritation on prolonged contact.

Sign and symptoms eyes

Direct eye contact may cause slight redness.

Potential Chronic Health Effects

Prolonged exposure can cause redness, swelling, itching, cracking of the skin, dermatitis and sensitization.

Mutagenicity

Not expected to be mutagenic in humans.

Carcinogenicity

No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

Reproductive effects & Teratogenicity

Not expected to have other reproductive effects.

Sensitization to material

Not expected to be a skin or respiratory sensitizer.

Specific target organ effects

This material is not classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Medical conditions aggravated by overexposure

Pre-existing skin, eye and respiratory disorders.

Synergistic materials

No information available.

Toxicological data

See below for toxicological data on the substance.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>LC50(4hr) inh, rat</th>
<th>LC50(4hr) oral, rat</th>
<th>LD50 (Rabbit, dermal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium bicarbonate</td>
<td>&gt;4.74 mg/L</td>
<td>4220 mg/kg</td>
<td>N/Av</td>
</tr>
</tbody>
</table>

Other important toxicological hazards

None known or reported by the manufacturer.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

See the following tables for individual ingredient ecotoxicity data.

Ecotoxicity data:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>LC50 / 96h</th>
<th>NOEC / 21 day</th>
<th>M Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium bicarbonate</td>
<td>144-55-8</td>
<td>7100 mg/L</td>
<td>N/Av</td>
<td>None.</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

### Ingredients

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Toxicity to Daphnia</th>
<th>Toxicity to Algae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium bicarbonate</td>
<td>144-55-8</td>
<td>EC50 / 48h: 4100 mg/L (Daphnia magna)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NOEC / 21 day: &gt;576 mg/L (Daphnia magna)</td>
<td>EC50 / 96h or 72h: N/Av</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M Factor: None.</td>
<td>NOEC / 96h or 72h: N/Av</td>
</tr>
</tbody>
</table>

**Persistence and degradability**
- Biodegradation is not applicable to inorganic substances.

**Bioaccumulation potential**
- No data is available on the product itself.

### Components

<table>
<thead>
<tr>
<th>Components</th>
<th>Partition coefficient n-octanol/water (log Kow)</th>
<th>Bioconcentration factor (BCF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium bicarbonate (CAS 144-55-8)</td>
<td>N/Ap</td>
<td>N/Ap</td>
</tr>
</tbody>
</table>

**Mobility in soil**
- High water solubility indicates a high mobility in soil.

**Other Adverse Environmental effects**
- No data is available on the product itself.

### SECTION 13. DISPOSAL CONSIDERATIONS

**Handling for Disposal**
- Handle waste according to recommendations in Section 7. Empty containers may contain hazardous residues.

**Methods of Disposal**
- Dispose in accordance with all applicable federal, state, provincial and local regulations.

**RCRA**
- If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method.
SAFETY DATA SHEET

SECTION 14. TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>Regulatory Information</th>
<th>UN Number</th>
<th>UN proper shipping name</th>
<th>Transport hazard class(es)</th>
<th>Packing Group</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDG</td>
<td>None.</td>
<td>Not regulated.</td>
<td>not regulated</td>
<td>none</td>
<td>□</td>
</tr>
<tr>
<td>49CFR/DOT</td>
<td>None.</td>
<td>Not regulated.</td>
<td>not regulated</td>
<td>none</td>
<td>□</td>
</tr>
<tr>
<td>IMDG</td>
<td>None.</td>
<td>Not regulated.</td>
<td>not regulated</td>
<td>none</td>
<td>□</td>
</tr>
<tr>
<td>ICAO/IATA</td>
<td>None.</td>
<td>Not regulated.</td>
<td>not regulated</td>
<td>none</td>
<td>□</td>
</tr>
</tbody>
</table>

Special precautions for user:
Appropriate advice on safety must accompany the package.

Environmental hazards:
This product does not meet the criteria for an environmentally hazardous mixture, according to the IMDG Code. See Section 12 for more environmental information.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:
This information is not available.

SECTION 15 - REGULATORY INFORMATION

US Federal Information:
Components listed below are present on the following U.S. Federal chemical lists:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>TSCA Inventory</th>
<th>CERCLA Reportable Quantity(RQ) (40 CFR 117.302):</th>
<th>SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355:</th>
<th>SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical</th>
<th>Toxic Chemical</th>
<th>de minimus Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium bicarbonate</td>
<td>144-55-8</td>
<td>Yes</td>
<td>N/Ap</td>
<td>N/Av</td>
<td>No</td>
<td>N/Ap</td>
<td>N/Ap</td>
</tr>
</tbody>
</table>

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: None.
Sodium Bicarbonate
SDS Preparation Date (mm/dd/yyyy): 08/31/2016

SAFETY DATA SHEET

US State Right to Know Laws:
The following chemicals are specifically listed by individual States:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>California Proposition 65</th>
<th>State “Right to Know” Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium bicarbonate</td>
<td>144-55-8</td>
<td>No</td>
<td>NA  No No No No No</td>
</tr>
</tbody>
</table>

Canadian Information:
Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).
WHMIS information: Refer to Section 2 for a WHMIS Classification for this product.

International Information:
Components listed below are present on the following International Inventory list:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>European EINECs</th>
<th>Australia AICS</th>
<th>Philippines PICCS</th>
<th>Japan ENCS</th>
<th>Korea KECI/KECL</th>
<th>China IECSC</th>
<th>NewZealand IOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium bicarbonate</td>
<td>144-55-8</td>
<td>205-633-8</td>
<td>Present</td>
<td>Present</td>
<td>(1)-310; (1)-164</td>
<td>KE-31360</td>
<td>Present</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

SECTION 16. OTHER INFORMATION

Legend: ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: Code of Federal Regulations
CNS: Central Nervous System
DOT: Department of Transportation
EPA: Environmental Protection Agency
EINECS: European Inventory of Existing Commercial chemical Substances
IARC: International Agency for Research on Cancer
IBC: Intermediate Bulk Container
IMDG: International Maritime Dangerous Goods
Inh: Inhalation
LC: Lethal Concentration
LD: Lethal Dose
N/A: Not Applicable
N/Av: Not Available
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TWA: Time Weighted Average
SAFETY DATA SHEET

WHMIS: Workplace Hazardous Materials Identification System

References:
1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2016
3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2016(Chempendium, HSDB and RTECs).
4. Material Safety Data Sheets from manufacturer.
5. US EPA Title III List of Lists - 2016 version.

Preparation Date (mm/dd/yyyy):
08/31/2016

Other special considerations for handling:
Provide adequate information, instruction and training for operators.

Prepared for:
Comet Chemical Company Ltd.
3463 Thomas Street
Innisfill, ON L9S 3W4
Information (M-F 8:00-5:00): 705-436-5580
www.cometchemical.com

Prepared by:
ICC The Compliance Center Inc.
Telephone: (888) 442-9628 (U.S.); (888) 977-4834 (Canada)
http://www.thecompliancecenter.com

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END OF DOCUMENT