SAFETY DATA SHEET

1. Identification

Product identifier: Sodium Bicarbonate

Other means of identification
Product No.: 7451, 7751, 7752, 7750, 7749, 7412, 7396, 3510, 3509, 3506, 7903

Recommended use and restriction on use
   Recommended use: Not available.
   Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer
   Company Name: Avantor Performance Materials, Inc.
   Address: 3477 Corporate Parkway, Suite 200
            Center Valley, PA 18034
   Telephone: Customer Service: 855-282-6867
   Fax: Environmental Health & Safety
   Contact Person: info@avantormaterials.com

Emergency telephone number:
   24 Hour Emergency: 908-859-2151
   Chemtrec: 800-424-9300

2. Hazard(s) identification

Hazard classification
   Not classified

Label elements

   Hazard symbol: No symbol
   Signal word: No signal word.
   Hazard statement: Not applicable

Precautionary statement Not applicable

Other hazards which do not result in GHS classification: None.

3. Composition/information on ingredients

Substances

   Composition comments: No hazardous ingredients.

4. First-aid measures
General information: Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

Ingestion: Rinse mouth thoroughly. Call a POISON CENTER or doctor/physician if you feel unwell.

Inhalation: Move to fresh air. Get medical attention if symptoms persist.

Skin contact: Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.

Eye contact: Flush thoroughly with water. If irritation occurs, get medical assistance.

Most important symptoms/effects, acute and delayed

Symptoms: May cause skin and eye irritation.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed. Treat symptomatically.

5. Fire-fighting measures

General fire hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep unauthorized personnel away. Ventilate closed spaces before entering them. Use personal protective equipment. See Section 8 of the MSDS for Personal Protective Equipment.

Methods and material for containment and cleaning up: Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination.

Notification Procedures: Inform authorities if large amounts are involved.

Environmental precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.
7. Handling and storage

Precautions for safe handling: Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling. See Section 8 of the MSDS for Personal Protective Equipment.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed. Store in a dry place. Store in a well-ventilated place.

8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None of the components have assigned exposure limits.

Appropriate engineering controls

No data available.

Individual protection measures, such as personal protective equipment

General information:

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area.

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection: Wear protective gloves.

Other: Wear suitable protective clothing.

Respiratory protection: In case of inadequate ventilation use suitable respirator. During dust-raising work: Dust mask/respirator.

Hygiene measures: Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Wash contaminated clothing before reuse.

9. Physical and chemical properties

Appearance

Physical state: Solid
Form: powder
Color: White
Odor: Odorless
Odor threshold: No data available.
PH: 8.3 (25 °C) (0.1 molar aqueous solution)
Melting point/freezing point: 50 °C
Initial boiling point and boiling range: No data available.
Flash Point: Not applicable
Evaporation rate: No data available.
Flammability (solid, gas): No data available.
Upper/lower limit on flammability or explosive limits

- **Flammability limit - upper (%):** No data available.
- **Flammability limit - lower (%):** No data available.
- **Explosive limit - upper (%):** No data available.
- **Explosive limit - lower (%):** No data available.
- **Vapor pressure:** No data available.
- **Vapor density:** No data available.
- **Relative density:** 2.2 (20 °C)
- **Solubility(ies):**
  - **Solubility in water:** Soluble
  - **Solubility (other):** No data available.
- **Partition coefficient (n-octanol/water):** No data available.
- **Auto-ignition temperature:** No data available.
- **Decomposition temperature:** No data available.
- **Viscosity:** No data available.

**Other information**

- **Molecular weight:** 84.01 g/mol (CH₂O₃.Na)

**10. Stability and reactivity**

- **Reactivity:** No dangerous reaction known under conditions of normal use.
- **Chemical stability:** Material is stable under normal conditions.
- **Possibility of hazardous reactions:** Hazardous polymerization does not occur.
- **Conditions to avoid:** Excessive heat. Moisture.
- **Incompatible materials:** Acids. Strong oxidizing agents.
- **Hazardous decomposition products:** Carbon dioxide Carbon monoxide Sodium oxides

**11. Toxicological information**

**Information on likely routes of exposure**

- **Ingestion:** May be harmful if swallowed.
- **Inhalation:** Dust may irritate respiratory system.
- **Skin contact:** None under normal conditions.
- **Eye contact:** May irritate eyes.

**Information on toxicological effects**

- **Acute toxicity (list all possible routes of exposure)**
  - **Oral Product:** LD 50 (Rat): 4,220 mg/kg
  - **Dermal Product:** No data available.
  - **Inhalation Product:** No data available.
Repeated dose toxicity
Product: No data available.

Skin corrosion/irritation
Product: May cause skin irritation.

Serious eye damage/eye irritation
Product: May irritate eyes.

Respiratory or skin sensitization
Product: Not a skin sensitizer.

Carcinogenicity
Product: This substance has no evidence of carcinogenic properties.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogenic components identified

No carcinogenic components identified

Germ cell mutagenicity
In vitro
Product: No mutagenic components identified

In vivo
Product: No mutagenic components identified

Reproductive toxicity
Product: No components toxic to reproduction

Specific target organ toxicity - single exposure
Product: None known.

Specific target organ toxicity - repeated exposure
Product: None known.

Aspiration hazard
Product: Not classified

Other effects: None known.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:
Fish
Product: LC 50 (Western mosquitofish (Gambusia affinis), 96 h): 7,550 mg/l

Aquatic invertebrates
Product: No data available.

Chronic hazards to the aquatic environment:
Fish
Product: No data available.
Aquatic invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: No data available.

Persistence and degradability

Biodegradation
Product: There are no data on the degradability of this product.

BOD/COD ratio
Product: No data available.

Bioaccumulative potential

Bioconcentration factor (BCF)
Product: No data available on bioaccumulation.

Partition coefficient n-octanol / water (log Kow)
Product: No data available.

Mobility in soil: No data available.

Other adverse effects: The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated packaging: Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT
Not regulated.

IMDG
Not regulated.

IATA
Not regulated.

15. Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):
None present or none present in regulated quantities.
Superfund amendments and reauthorization act of 1986 (SARA)

Hazard categories
   Not listed.

SARA 302 Extremely hazardous substance
   None present or none present in regulated quantities.

SARA 304 Emergency release notification
   None present or none present in regulated quantities.

SARA 311/312 Hazardous chemical
   None present or none present in regulated quantities.

SARA 313 (TRI reporting)
   None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)
   None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
   None present or none present in regulated quantities.

US state regulations

US. California Proposition 65
   No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act
   No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List
   No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances
   No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK
   No ingredient regulated by RI Right-to-Know Law present.

Inventory Status:
   Australia AICS: On or in compliance with the inventory
   Canada DSL Inventory List: On or in compliance with the inventory
   EINECS, ELINCS or NLP: On or in compliance with the inventory
   Japan (ENCS) List: On or in compliance with the inventory
   China Inv. Existing Chemical Substances: On or in compliance with the inventory
   Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory
   Canada NDSL Inventory: Not in compliance with the inventory.
   Philippines PICCS: On or in compliance with the inventory
   US TSCA Inventory: On or in compliance with the inventory
   New Zealand Inventory of Chemicals: On or in compliance with the inventory
   Japan ISHL Listing: On or in compliance with the inventory
   Japan Pharmacopoeia Listing: Not in compliance with the inventory.

16. Other information, including date of preparation or last revision
NFPA Hazard ID

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue date: 06-05-2014
Revision date: No data available.
Version #: 1.0
Further information: No data available.

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