Version: 1.0

Revision date: 13.09.2024

Safety Data Sheet

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

SECTION 1: Identification

Product identifier

Trade name/designation:	Sodium Carbonate, Monohydrate, Crystal N.F. - F.C.C. Crystal
Product No.:	3600
Synonyms:	none

Relevant identified uses of the substance or mixture and uses advised against

Recommended use	For Laboratory, Research or Manufacturing Use.
Uses advised against	Not determined.

Details of the supplier of the safety data sheet

Supplier

Avantor Performance Materials, LLC.

Street	100 Matsonford Rd, Suite 200
Postal code/City	Radnor, PA 19087, United States
Telephone	+1-855-282-6867
Telefax	+1-610-573-2610

Emergency phone number

Telephone	+1-800-424-9300 (Chemtrec, 24 hrs/day, 7 days/week, USA and Canada)

Preparation Information
Product Information Compliance

E-mail	SDS@avantorsciences.com

SECTION 2: Hazard identification

Classification of the substance or mixture

Label elements

Health hazards

Eye irritation, category 2

Hazard pictograms

Signal word: Warning

Hazard statements

H319 - Causes serious eye irritation.

Precautionary statements

Prevention:

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Hazard(s) not otherwise classified (HNOC)

none

SECTION 3: Composition/information on ingredients

Substances

Substance name:	Sodium Carbonate, Monohydrate
Molecular formula:	$Na_2CO_3.1H_2O$
Molecular weight:	124 g/mol
CAS No.:	5968-11-6

SECTION 4: First aid measures

General information

Do not leave affected person unattended. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. When in doubt or if symptoms are observed, get medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. When in doubt or if symptoms are observed, get medical advice.

In case of skin contact

Wash off any skin contamination immediately. When in doubt or if symptoms are observed, get medical advice.

After eye contact:

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. When in doubt or if symptoms are observed, get medical advice.

In case of ingestion

Rinse mouth thoroughly with water. Do NOT induce vomiting. Call a POISON CENTER.

Most important symptoms/effects, acute and delayed

After inhalation: May cause respiratory irritation. Shortness of breath. After skin contact: Irritation. After eye contact: Irritation. Inflammation and corneal changes. After ingestion: Nausea. Vomiting.

Indication of any immediate medical attention and special treatment needed

After inhalation: Provide fresh air. Put victim at rest, cover with a blanket and keep warm. Treat symptomatically. After skin contact: Wash with plenty of water and soap. If necessary, treat skin irritations with a dermatocorticoid foam. After eye contact: Rinse immediately carefully and thoroughly with eye-bath or water. Treat symptomatically. After ingestion: Rinse mouth immediately and drink plenty of water. After ingestion of large amounts, immediate gastric lavage in intubation should be considered.

SECTION 5: Fire fighting measures

Extinguishing media

Suitable extinguishing media

ABC-powder
Carbon dioxide (CO_2).
Dry sand
Nitrogen

Extinguishing media which must not be used for safety reasons

Water spray.
Full water jet

Specific hazards arising from the chemical

Non-combustible corrosive substances (liquid).
Causes eye irritation.
Substance is non-flammable. Adapt fire and explosion protection measures to the combustible substances in the area.
Fire may produce irritating, corrosive and/or toxic gases.
In case of fire may be liberated:
Carbon monoxide
Carbon dioxide (CO_2).
Sodium oxides

Advice for firefighters

In case of fire and/or explosion do not breathe fumes.
Protective equipment and precautions for firefighters:
Wear a self-contained breathing apparatus and chemical protective clothing.
Co-ordinate fire-fighting measures to the fire surroundings.
In case of fire: Evacuate area.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Use personal protective equipment as required. Avoid substance contact. Avoid contact with eyes and skin. Do not breathe dust. Remove victim out of the danger area. In case of fire: Evacuate area. For emergency responders: Substance is non-flammable. Adapt fire and explosion protection measures to the combustible substances in the area. Wear a self-contained breathing apparatus and chemical protective clothing.

Environmental precautions

No special environmental measures are necessary.

Methods and material for containment and cleaning up

Collect in closed and suitable containers for disposal.

Additional information

Decomposition products in case of fire: see section 5. Personal protection equipment (PPE): see section 8
Disposal information: see section 13

SECTION 7: Handling and storage

Precautions for safe handling

Advices on safe handling
Use personal protective equipment as required.
Avoid contact with eyes and skin.
Do not inhale.
Use extractor hood (laboratory).
Measures to prevent fire, aerosol and dust generation
Use extractor hood (laboratory).
Usual measures for fire prevention.
Measures required to protect the environment
Dispose of waste according to applicable legislation.

Wash hands before breaks and after work. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

Conditions for safe storage, including any incompatibilities

Recommended storage temperature: 15°C – 25°C or 30°C depending on climatic conditions.
Store in a well-ventilated place. Keep container tightly closed. Packaging materials: High density polyethylene (HDPE) Glass Unsuitable container/equipment material: Metal container

SECTION 8: Exposure controls/personal protection

Control parameters

Does not contain substances above concentration limits fixing an occupational exposure limit.

Engineering controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

Personal protection equipment (PPE)
Wear suitable protective clothing. When handling with chemical substances, protective clothing must be worn.

Eye/face protection
Eye glasses with side protection

Skin protection
Wear suitable gloves. When handling with chemical substances, protective gloves must be worn. In the case of wanting to use the gloves again, clean them before taking off and air them well. Check leak tightness/impermeability prior to use.

By short-term hand contact	
Suitable material:	NBR (Nitrile rubber)
Thickness of the glove material:	0,12 mm
Breakthrough time	> 480 min

By long-term hand contact	
Suitable material:	NBR (Nitrile rubber)
Thickness of the glove material:	0,12 mm
Breakthrough time	> 480 min

Respiratory protection
Usually no personal respirative protection necessary. Required when dusts are generated. Wear respiratory protection.

Additional information
Wash hands before breaks and after work. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

Environmental exposure controls
no data available

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

(a) Appearance	
Physical state:	solid
Color:	white
(b) Odor:	no data available
(c) Odor threshold:	no data available

Safety relevant basic data

(d) pH:	11.5 (50 g/l; H2O; 20 °C)
(e) Melting point/freezing point:	107.85 °C
(f) Initial boiling point and boiling range:	no data available
(g) Flash point:	no data available
(h) Evaporation rate:	no data available
(i) Flammability (solid, gas):	Not applicable
(j) Flammability or explosive limits	
Lower explosion limit:	no data available
Upper explosion limit:	no data available
(k) Vapor pressure:	no data available
(l) Vapor density:	no data available
(m) Density:	2.25 g/cm³ (20 °C)
(n) Solubility(ies)	
Water solubility:	210 g/l (20 °C)
Soluble (g/L) in Ethanol:	no data available
(o) Partition coefficient: n-octanol/water:	no data available
(p) Auto-ignition temperature:	no data available
(q) Decomposition temperature:	Not applicable
(r) Viscosity	
Kinematic viscosity:	no data available
Dynamic viscosity:	no data available
(s) Explosive properties:	Not applicable
(t) Oxidising properties:	Not applicable

Other information

Bulk density:	no data available
Refraction index:	no data available
Dissociation constant:	no data available
Surface tension:	no data available
Henry's Law Constant:	no data available

SECTION 10: Stability and reactivity

Reactivity

This material is non-reactive under normal conditions.

Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).
The substance decomposes on heating (see decomposition temperature).

Possibility of hazardous reactions

Reaction with:
Acids.

Conditions to avoid

To avoid thermal decomposition, do not overheat.

Incompatible materials:

No further relevant information available.

Hazardous decomposition products

Decomposition products in case of fire: see section 5.

SECTION 11: Toxicological information

Information on toxicological effects

Acute effects

Acute oral toxicity:
LD50: > 4090 mg/kg - Rat - (IUCLID)

LDLo: > 714 mg/kg - Human - (RTECS)

Acute dermal toxicity:
no data available

Acute inhalation toxicity:
no data available

Irritant and corrosive effects:

Primary irritation to the skin:
Not applicable

Irritation to eyes:
Causes serious eye irritation.

Irritation to respiratory tract:
Not applicable

Respiratory or skin sensitization

In case of skin contact: not sensitizing
In case of inhalation: not sensitizing

STOT-single exposure

Not applicable

STOT-repeated exposure

Not applicable

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

No indication of human carcinogenicity.

IARC Monographs on the Identification of Carcinogenic Hazards to Humans:

Not listed

Germ cell mutagenicity
No indications of human germ cell mutagenicity exist.

Reproductive toxicity
No indications of human reproductive toxicity exist.

Aspiration hazard
Not applicable

Other adverse effects
no data available

SECTION 12: Ecological information

Ecotoxicity

Fish toxicity:
LC50: 300 mg/l (96 h) - Cairns, J.Jr., and A. Scheier 1959. The Relationship of Bluegill Sunfish Body Size to Tolerance for Some Common Chemicals. Proc.13th Ind.Waste Conf., Purdue Univ.Eng.Bull 96:243-252

Daphnia toxicity:
LC50: 176 - 1640 mg/l (48 h) - Dowden, B.F., and H.J. Bennett 1965. Toxicity of Selected Chemicals to Certain Animals. J.Water Pollut.Control Fed. 37(9):1308-1316

EC50: 200 mg/l (48 h) - Warne, M.S.J., and A.D. Schifko 1999. Toxicity of Laundry Detergent Components to a Freshwater Cladoceran and Their Contribution to Detergent Toxicity. Ecotoxicol.Environ.Saf. 44(2):196-206

Algae toxicity:
no data available

Bacteria toxicity:
no data available

Persistence and degradability
no data available

Bioaccumulative potential
Partition coefficient: n-octanol/water: no data available

Mobility in soil:
no data available

Other adverse effects
no data available

SECTION 13: Disposal considerations

Waste treatment methods

Appropriate disposal / Product
Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package
Dispose according to legislation. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (DOT)

UN number or ID number:	No dangerous good in sense of this transport regulation.
UN proper shipping name:	not assigned
Transport hazard class(es):	none
Packing group:	not assigned
Environmental hazards**:**	none
Special precautions for user:	none

Sea transport (IMDG)

UN number or ID number:	No dangerous good in sense of this transport regulation.
UN proper shipping name:	not assigned
Transport hazard class(es):	none
Packing group:	not assigned
Environmental hazards**:**	none
Special precautions for user:	none
Maritime transport in bulk according to IMO instruments:	not relevant

Air transport (ICAO-TI / IATA-DGR)

UN number or ID number:	No dangerous good in sense of this transport regulation.
UN proper shipping name:	not assigned
Transport hazard class(es):	none
Packing group:	not assigned
Special precautions for user:	none

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Toxic Substances Control Act (TSCA)
Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

SARA 313 Components

Not listed.

US State Regulations

Massachusetts Right To Know Components

Not listed.

Pennsylvania Right To Know Components

Not listed.

New Jersey Right To Know Components

Not listed.

California Prop. 65 Components

Not listed.

SECTION 16: Other information

Abbreviations and acronyms

ACGIH - American Conference of Governmental Industrial Hygiensts
DOT - Department of Transportation
IARC - International Agency for Research on Cancer
IATA-DGR - International Air Transport Association-Dangerous Goods Regulations
ICAO-TI - International Civil Aviation Organization-Technical Instructions
IMDG - International Maritime Code for Dangerous Goods
LTV - Long Term Value
NIOSH - National Institute for Occupational Safety and Health
NTP - National Toxicology Program
OSHA - Occupational Safety & Health Administration
PBT - Persistent, Bioaccumulative and Toxic
PEL - Permissible Exposure Limit
STV - Short Term Value
SVHC - Substances of Very High Concern
TDG - Transport of Dangerous Goods
TLV - Threshold Limit Value
vPvB - very Persistent, very Bioaccumulative

Key literature references and sources for data

This Safety Data Sheet has been prepared based on information available for public as TOXNET information, European Chemicals Agency (ECHA) substance dossier, papers from international cancer research institutes (IARC Monographs), U.S. National Toxicology Program data, U.S. Agency for Toxic Substances and Disease Control (ATSDR), PubChem websites and SDS from our raw material manufacturers.

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13.09.2024	1.0	2024-09-13

Additional information

Indication of changes:	general update If you need an explanation of the change, contact the supplier (SDS@avantorsciences.com).

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