

Sodium Benzoate

Version number: 1.0

SECTION 1: Identification

1.1 Product identifier

Identification of the substance	sodium benzoate
Trade name	<u>Sodium Benzoate</u>
CAS number	532-32-1

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

Relevant identified uses	Food additive Pharmaceutical Additive Industrial uses
Uses advised against	Do not use for private purposes (household)

1.3 Details of the supplier of the safety data sheet

Valudor Products, LLC 179 Calle Magdalena Suite 100 Encinitas, California CA 92024 United States	Telephone: +1 (760) 635 8500 e-mail: info@valudor.com Website: www.valudor.com
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1.4 Emergency telephone number

Emergency information	800-535-5053 (Infotrac)
As above or nearest toxicological information centre.	

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Classification				
Section	Hazard class	Category	Hazard class and category	Hazard statement
A.3	serious eye damage/eye irritation	2A	Eye Irrit. 2A	H319
B,cD	combustible dust	Comb. Dust	cD	OSHA003

For full text of abbreviations: see SECTION 16

2.2 Label elements

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Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Signal word warning

Pictograms

GHS07



Hazard statements

H319 Causes serious eye irritation.

OSHA003 May form combustible dust concentrations in air.

Precautionary statements

P264 Wash face and hands thoroughly after handling.

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

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

2.3 Other hazards

Dust explosion hazards.

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance	sodium benzoate
Identifiers	
CAS No	532-32-1
Molecular formula	C ₇ H ₅ O ₂ Na
Molar mass	144.1 g/mol
Purity	98 - 100 %

SECTION 4: First-aid measures

4.1 Description of first-aid measures

General notes

Take off immediately all contaminated clothing.

In all cases of doubt, or when symptoms persist, seek medical advice.

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Following inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions.

Following skin contact

Wash with plenty of soap and water.

Wash contaminated clothing before reuse.

Following eye contact

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Remove contact lenses, if present and easy to do. Continue rinsing.

Following ingestion

Rinse mouth immediately and drink plenty of water.

Do NOT induce vomiting.

In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Get medical advice/attention.

Notes for the doctor

None.

4.2 Most important symptoms and effects, both acute and delayed

Cough, pain, choking, and breathing difficulties.

Irritation.

4.3 Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

water, foam, alcohol resistant foam, fire extinguishing powder

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Section 10.

Danger of dust explosion.

Deposited combustible dust has considerable explosion potential.

Hazardous combustion products

carbon monoxide (CO), carbon dioxide (CO₂), gas/ vapor, toxic, irritant vapors / gases, sodium oxide

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5.3 Advice for firefighters

Keep containers cool with water spray.
In case of fire and/or explosion do not breathe fumes.
Coordinate firefighting measures to the fire surroundings.
Do not allow firefighting water to enter drains or water courses.
Collect contaminated firefighting water separately.
Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

chemical protection suit, self-contained breathing apparatus (SCBA)

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.
Ventilate affected area.
Control of dust.
Do not breathe dust.
Do not get in eyes, on skin, or on clothing.
Eliminate all ignition sources if safe to do so.
Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Knock down dust with water spray.
Keep away from drains, surface and ground water.
Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Take up mechanically.

Advice on how to clean up a spill

Take up mechanically.
Collect spillage.

Other information relating to spills and releases

Place in appropriate containers for disposal.
Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5.
Personal protective equipment: see section 8.
Incompatible materials: see section 10.

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Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation.
Keep away from sources of ignition - No smoking.
Take precautionary measures against static discharge.
Only vacuum cleaners containing no ignition sources may be used for combustible dusts.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.

Specific notes/details

Layers, deposits and heaps of combustible dust must be considered, like any other source which can form a hazardous explosive atmosphere.
Dust deposits may accumulate on all deposition surfaces in a technical room.
Danger of dust explosion.

Measures to protect the environment

Avoid release to the environment.

Advice on general occupational hygiene

Do not eat, drink and smoke in work areas.
Wash hands after use.
Remove contaminated clothing and protective equipment before entering eating areas.
Do not breathe dust.
Do not get in eyes, on skin, or on clothing.
Wash face and hands thoroughly after handling.
Preventive skin protection (barrier creams/ointments) is recommended.

7.2 Conditions for safe storage, including any incompatibilities

Explosive atmospheres

Removal of dust deposits.
Only vacuum cleaners containing no ignition sources may be used for combustible dusts.

Flammability hazards

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Take precautionary measures against static discharge.
Ground/bond container and receiving equipment.

Incompatible substances or mixtures

Incompatible materials: see section 10.
Store away from oxidizing agents.
Store away from acids.

Protect against external exposure, such as

heat, humidity

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Consideration of other advice

These information are not available.

Ventilation requirements

Provision of sufficient ventilation.

Specific designs for storage rooms or vessels

Store in a dry place.

Packaging compatibilities

Keep only in original container.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

This information is not available

8.2 Exposure controls

Appropriate engineering controls

Use local and general ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Hand protection

Protective gloves		
Material	Material thickness	Breakthrough times of the glove material
NBR: acrylonitrile-butadiene rubber	≥ 0,4 mm	no information available
IIR: isobutene-isoprene (butyl) rubber	this information is not available	this information is not available
FKM: fluoro-elastomer	this information is not available	this information is not available
PVC: polyvinyl chloride	this information is not available	this information is not available

Wear suitable gloves.

Chemical protection gloves are suitable, which are tested according to EN 374.

Check leak-tightness/impermeability prior to use.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Body protection

Protective clothing for use against solid particulates.

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Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Particulate filter device (EN 143).

Type: A-P2 (combined filters against particles and organic gases and vapors, color code: Brown/White).

Environmental exposure controls

Use appropriate container to avoid environmental contamination.

Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state

solid

Form

granulate
pellets
powder

Color

not determined

Odor

odorless

Other safety parameters

pH (value)

8 (in aqueous solution: 10 wt%)

Melting point/freezing point

436 °C

Boiling point or initial boiling point and boiling range

not determined

Flash point

not applicable

Evaporation rate

not determined

Flammability (solid, gas)

this material is combustible, but will not ignite readily

Explosive limits

Vapor pressure

not determined

Density

1.5 g/cm³ at 20 °C

Relative density

1.5 at 20 °C (water = 1)

Relative vapour density

information on this property is not available

Solubility(ies)

Water solubility

556 g/l at 20 °C

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Partition coefficient

n-octanol/water (log KOW) 1.88
(read-across)

Auto-ignition temperature not determined

Decomposition temperature 450 – 475 °C

Viscosity not relevant
(solid)

Explosive properties dust explosion hazards

Oxidizing properties none

Information for relevant hazard classes according to GHS there is no additional information

9.2 Other information

Surface tension 72.9 mN/m (20 °C, 1 g/l)

SECTION 10: Stability and reactivity

10.1 Reactivity

Hygroscopic substance.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

Danger of dust explosion.

Dangerous/dangerous reactions with Oxidizer, Acids.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Take precautionary measures against static discharge.

Control of dust.

Humidity.

10.5 Incompatible materials

acids, bases, oxidizers, keep away from metal salts (iron)

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known.

Hazardous combustion products: see section 5.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

If not otherwise specified the classification is based on:

Animal studies; Evidence from any other toxicity tests; Expert judgment (weight of evidence determination).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Shall not be classified as acutely toxic (dermal).

Shall not be classified as acutely toxic (inhalation).

May be harmful if inhaled.

Oral.

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Exposure route	Endpoint	Value	Species	Method	Notes
inhalation: dust/ mist	LDO	>12,200 mg/m ³ /4h	rat	-	read-across
dermal	LDO	>2,000 mg/kg	rabbit	-	read-across

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

(ECHA, OECD Guideline 404)

Serious eye damage/eye irritation

Causes serious eye irritation.

(ECHA, OECD Guideline 405)

Respiratory or skin sensitization

Skin sensitization

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Respiratory sensitization

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

(ECHA, OECD Guideline 471, OECD Guideline 475)

Carcinogenicity

Shall not be classified as carcinogenic.

(ECHA)

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IARC Monographs

not listed

National Toxicology Program (United States)

not listed

OSHA Carcinogens

Not listed.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

(ECHA, OECD Guideline 414)

Specific target organ toxicity - single exposure

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

(ECHA)

Chronic toxicity				
Exposure route	Endpoint	Value	Species	Method
oral	NOAEL	1,000 mg/kg bw/day	rat	
dermal	NOAEL	>2,500 mg/kg	rabbit	EPA OPP 82-2
inhalation: dust/mist	NOAEC	≤25 mg/m ³	rat	OECD Guideline 412
inhalation: dust/mist	NOAEL	250 mg/m ³	rat	OECD Guideline 412

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Other information

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity (acute)

Based on available data, the classification criteria are not met.

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Endpoint	Exposure time	Value	Species	Method
LC50	96 h	484 mg/l	fathead minnow (Pimephales promelas)	EPA OPP 72-1
LC50	96 h	>100 mg/l	daphnia magna	-
ErC50	72 h	>30.5 mg/l	algae (pseudokirchneriella subcapitata)	OECD Guideline 201

Aquatic toxicity (chronic)

Based on available data, the classification criteria are not met.

Endpoint	Exposure time	Value	Species	Method
NOEC	144 h	10 mg/l	zebra fish (Danio rerio)	-
NOEC	168 h	>100 mg/l	Achromobacter sp.	-
LOEC	144 h	100 mg/l	zebra fish (Danio rerio)	-
growth rate (ErCx) 10%	72 h	6.5 mg/l	algae (pseudokirchneriella subcapitata)	OECD Guideline 201

12.2 Persistence and degradability

Biodegradation

The substance is readily biodegradable.

Process of degradability			
Process	Degradation rate	Time	Method
carbon dioxide generation	85 %	28 d	-

Persistence

No data available.

12.3 Bioaccumulative potential

n-octanol/water (log KOW) 1.88

BCF 3.16

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

12.6 Other adverse effects

Not listed.

This information is not available.

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Remarks

None.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packages

Completely emptied packages can be recycled.
Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1	UN number	not assigned
14.2	UN proper shipping name	-
14.3	Transport hazard class(es)	-
14.4	Packing group	-
14.5	Environmental hazards	-
14.6	Special precautions for user	-
14.7	Transport in bulk according to IMO instruments	-

14.8 Information for each of the UN Model Regulations

Transport of dangerous goods by road or rail (49 CFR US DOT) Additional information

Not subject to transport regulations.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Toxic Substance Control Act (TSCA)	Substance is listed as "ACTIVE"
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Superfund Amendment and Reauthorization Act (SARA TITLE III)

The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

Not listed

Specific Toxic Chemical Listings (EPCRA Section 313)

Not listed

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Not listed

Clean Air Act

Not listed

Right to Know Hazardous Substance List

Cleaning Product Right to Know Act Substance List (CA-RTK)

Not listed

Toxic or Hazardous Substance List (MA-TURA)

Not listed

Hazardous Substances List (MN-ERTK)

Not listed

Hazardous Substance List (NJ-RTK)

Not listed

Hazardous Substance List (Chapter 323) (PA-RTK)

Not listed

Hazardous Substance List (RI-RTK)

Not listed

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

Not listed

Drug precursors, Chemicals designated within the Controlled Substances Act, 21 U.S.C. § 802, paragraphs 34 (list I) and 35 (list II)

Not listed

VOC content

Regulated Volatile Organic Compounds (VOC-EPA) 0 %

Regulated Volatile Organic Compounds (VOC-Cal ARB) 0 %

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Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System.
American Coatings Association.

Category	Rating	Description
Chronic	/	none
Health	2	temporary or minor injury may occur
Flammability	2	material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	-

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	2	material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur
Health	1	material that, under emergency conditions, can cause significant irritation
Instability	0	material that is normally stable, even under fire conditions
Special hazard	-	-

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance by the supplier.

SECTION 16: Other information, including date of preparation or last revision

Date of preparation: 2023-01-27

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
49 CFR US DOT	49 CFR U.S. Department of Transportation
BCF	Bioconcentration factor
Cal ARB	California Air Resources Board
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)

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Abbr.	Descriptions of used abbreviations
DGR	Dangerous Goods Regulations (see IATA/DGR)
EPA	Environmental Protection Agency. An agency of the federal government of the United States charged with protecting human health and the environment
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IARC	International Agency for Research on Cancer
IARC Mono-graphs	IARC Monographs on the Evaluation of Carcinogenic Risks to Humans
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
IMDG	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LOEC	Lowest Observed Effect Concentration
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT).

International Maritime Dangerous Goods Code (IMDG).

Dangerous Goods Regulations (DGR) for the air transport (IATA).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H319	Causes serious eye irritation.
OSHA003	May form combustible dust concentrations in air.

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Responsible for the safety data sheet

Chemical Regulatory Compliance Company Telephone: +1 (630) 410-1660
Jasper, GA e-Mail: GHS@crc-us.com
USA Website: www.crc-us.com

Disclaimer

This information is based upon the present state of our knowledge.
This SDS has been compiled and is solely intended for this product.