

SAFETY DATA SHEET

North American Version

FB® SODIUM PERCARBONATE

1. PRODUCT AND COMPANY IDENTIFICATION

1.1. Identification of the substance or preparation

Product name : FB® SODIUM PERCARBONATE
Product grade(s) : FB® 400
FB® 400C
FB® 700C
Molecular Weight : 314.06 g/mol

1.2. Use of the Substance/Preparation

Recommended use : - Bleaching agent
- Cleaning agent
- Oxidizing agents

1.3. Company/Undertaking Identification

Address : SOLVAY CHEMICALS, INC.
3333 RICHMOND AVENUE
HOUSTON TX 77098-3099
United States

1.4. Emergency and contact telephone numbers

Emergency telephone : 1 (800) 424-9300 CHEMTREC ® (USA & Canada)
01-800-00-214-00 (MEX. REPUBLIC)

Contact telephone number : US: +1-800-765-8292 (Product information)
(product information): US: +1-713-525-6500 (Product information)

2. HAZARDS IDENTIFICATION

2.1. Emergency Overview:

NFPA : H= 2 F= 0 I= 1 S= OX
HMIS : H= 2 F= 0 R= 1 PPE = Supplied by User; dependent on local conditions

General Information

Appearance : powder
Colour : white
Odour : odourless

Main effects

- Oxidising
- Contact with combustible material may cause fire.
- Harmful if swallowed.
- Risk of serious damage to eyes.

2.2. Potential Health Effects:

Inhalation

- irritation of the upper respiratory tract
- Irritating to mucous membranes
- Repeated or prolonged exposure: Risk of sore throat, nose bleeds.
- (in case of higher concentration): Cough.

Eye contact

- Severe eye irritation
- Lachrymation
- Redness
- Swelling of tissue
- Risk of serious damage to eyes.

Skin contact

- When in contact with damp skin, irritation.
- Itching
- Repeated exposure may cause skin dryness or cracking.

Ingestion

- Severe irritation
- Irritation of the mouth and throat.
- Symptoms: Nausea, Abdominal pain, Vomiting, Diarrhoea.

Other toxicity effects

- See section 11: Toxicological Information

2.3. Environmental Effects:

- See section 12: Ecological Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Sodium carbonate peroxyhydrate

CAS-No. : 15630-89-4
Concentration : > 85.0 %

Sodium carbonate

CAS-No. : 497-19-8
Concentration : appr. 13.0 %

Sodium silicate SiO₂/Na₂O : >1,6 - >=2,6

CAS-No. : 1344-09-8
Concentration : appr. 1.5 %

4. FIRST AID MEASURES

4.1. Inhalation

- Remove the subject from dusty environment and let him blow his nose.
- If symptoms persist, call a physician.

4.2. Eye contact

- Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- In the case of difficulty of opening the lids, administer an analgesic eye wash (oxybuprocaine).
- Consult with an ophthalmologist immediately in all cases.

4.3. Skin contact

- Remove and wash contaminated clothing before re-use.

- Wash off with plenty of water.
- If symptoms persist, call a physician.

4.4. Ingestion

- Call a physician immediately.

If victim is conscious:

- If swallowed, rinse mouth with water (only if the person is conscious).
- Do NOT induce vomiting.

If victim is unconscious but breathing:

- Artificial respiration and/or oxygen may be necessary.

5. FIRE-FIGHTING MEASURES

5.1. Suitable extinguishing media

- Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2. Extinguishing media which shall not be used for safety reasons

- Water may be ineffective.

5.3. Special exposure hazards in a fire

- Oxidising
- Oxygen released in thermal decomposition may support combustion
- Contact with combustible material may cause fire.
- Contact with flammables may cause fire or explosions.
- Risk of explosion if heated under confinement.

5.4. Hazardous decomposition products

- Oxygen

5.5. Special protective equipment for fire-fighters

- In the event of fire, wear self-contained breathing apparatus.
- Fire fighters must wear fire resistant personnel protective equipment.

5.6. Other information

- Keep product and empty container away from heat and sources of ignition.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions

- Refer to protective measures listed in sections 7 and 8.
- Keep away from incompatible products
- Keep away from water.

6.2. Environmental precautions

- Limited quantity
- Flush into sewer with plenty of water.
- If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods for cleaning up

- Do not add chemical products.
- Pick up and arrange disposal without creating dust.
- All receiving equipment should be clean, vented, dry, labelled and made of material that is compatible with the product.
- Flush with plenty of water.
- Treat recovered material as described in the section "Disposal considerations".

7. HANDLING AND STORAGE

7.1. Handling

- Clean and dry piping circuits and equipment before any operations.
- Never return unused material to storage receptacle.
- Containers and equipment used to handle the product should be used exclusively for that product.
- Keep away from heat and sources of ignition.
- Keep away from water.
- Protect from moisture.
- Keep away from Incompatible products.

7.2. Storage

- Keep in a dry place.
- Keep in a cool, well-ventilated place.
- Keep away from direct sunlight.
- Keep away from heat.
- Keep away from Incompatible products.
- The container must be used exclusively for the product.
- Keep in container fitted with safety valve or vent.

7.3. Packaging material

- Stainless steel
- Polyethylene
- Paper + PE coating.
- glass

7.4. Other information

- Avoid dust formation.
- Refer to protective measures listed in sections 7 and 8.
- In industrial installations, apply the rules for the prevention of major accidents (consult an expert).
- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- To avoid thermal decomposition, do not overheat.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Exposure Limit Values

Sodium carbonate peroxyhydrate

- SAEL (Solvay Acceptable Exposure Limit) 2007
TWA = 5 mg/m³
- US. ACGIH Threshold Limit Values
Remarks: none established

Sodium carbonate

- SAEL (Solvay Acceptable Exposure Limit) 2007
TWA = 10 mg/m³

Particles not otherwise specified (PNOS)

- US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) 02 2006
Permissible exposure limit = 5 mg/m³
Remarks: respirable dust fraction, All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by the Particulates Not Otherwise Regulated (PNOR) limit which is the same as the inert or nuisance dust limit of Table Z-3.
- US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) 02 2006
Permissible exposure limit = 15 mg/m³

Remarks: Total dust, All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by the Particulates Not Otherwise Regulated (PNOR) limit which is the same as the inert or nuisance dust limit of Table Z-3.

- US. OSHA Table Z-3 (29 CFR 1910.1000) 2000
time weighted average = 15 millions of particles per cubic foot of air
Remarks: respirable dust fraction
- US. OSHA Table Z-3 (29 CFR 1910.1000) 2000
time weighted average = 50 millions of particles per cubic foot of air
Remarks: Total dust
- US. OSHA Table Z-3 (29 CFR 1910.1000) 2000
time weighted average = 5 mg/m³
Remarks: respirable dust fraction
- US. OSHA Table Z-3 (29 CFR 1910.1000) 2000
time weighted average = 15 mg/m³
Remarks: Total dust
- US. OSHA Table Z-1-A (29 CFR 1910.1000) 1989
time weighted average = 5 mg/m³
Remarks: respirable dust fraction
- US. OSHA Table Z-1-A (29 CFR 1910.1000) 1989
time weighted average = 15 mg/m³
Remarks: Total dust
- US. ACGIH Threshold Limit Values 2008
time weighted average = 10 mg/m³
Remarks: Inhalable particles.

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SAEL = Solvay Acceptable Exposure Limit, Time Weighted Average for 8 hour workdays. No Specific TLV STEL (Short Term Exposure Level) has been set. Excursions in exposure level may exceed 3 times the TLV TWA for no more than a total of 30 minutes during a workday and under no circumstances should they exceed 5 times the TLV TWA.

8.2. Engineering controls

- Ensure adequate ventilation.
- Refer to protective measures listed in sections 7 and 8.
- Apply technical measures to comply with the occupational exposure limits.

8.3. Personal protective equipment

8.3.1. Respiratory protection

- Use only respiratory protection that conforms to international/ national standards.
- Recommended Filter type:

8.3.2. Hand protection

- Wear suitable gloves.

8.3.3. Eye protection

- Chemical resistant goggles must be worn.

8.3.4. Skin and body protection

- Protective suit

8.3.5. Hygiene measures

- Use only in an area equipped with a safety shower.
- Eye wash bottle with pure water
- Handle in accordance with good industrial hygiene and safety practice for diagnostics.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. General Information

Appearance : powder
Colour : white
Odour : odourless

9.2. Important health safety and environmental information

pH : from 10.4 - 10.6
Concentration: 10.1 g/l

Boiling point/boiling range : *Remarks: not applicable*

Flash point : *Remarks: not applicable*

Flammability : *Remarks: The product is not flammable.*

Explosive properties : *Explosion danger:
Remarks: Not explosive*

Oxidizing properties : *Remarks: Oxidising*

Vapour pressure : *Remarks: not applicable*

Relative density / Density : *Remarks: no data available*

Bulk density : 950 - 1,200 kg/m³

Solubility : Water
150 g/l
Temperature: 20 °C (68 °F)

**Partition coefficient:
n-octanol/water** : *Remarks: not applicable*

Viscosity : *Remarks: not applicable*

Vapour density : *Remarks: not applicable*

9.3. Other data

Decomposition temperature : *Remarks: Self-Accelerating decomposition temperature (SADT)*
: > 55 °C (131 °F)
Remarks: 50 kg

10. STABILITY AND REACTIVITY

10.1. Stability

- Potential for exothermic hazard
- Stable under recommended storage conditions.

10.2. Conditions to avoid

- Exposure to moisture.
- To avoid thermal decomposition, do not overheat.
- Keep at temperature not exceeding: 55 °C (131 °F)

10.3. Materials to avoid

- Water, Acids, Bases, Heavy metal salts, Reducing agents, Organic materials, Flammable materials

10.4. Hazardous decomposition products

- Oxygen

11. TOXICOLOGICAL INFORMATION

Toxicological data

Acute oral toxicity

- LD50, rat, 1,034 mg/kg

Acute inhalation toxicity

- LC0, 1 h, rat, > 4,580 mg/m³

Acute dermal irritation/corrosion

- LD 10, rabbit, > 2,000 mg/kg

Skin irritation

- rabbit, slight irritation

Eye irritation

- rabbit, Risk of serious damage to eyes.

Chronic toxicity

- no data available

Remarks

- Harmful if swallowed.
- Risk of serious damage to eyes.
- Irritating to respiratory system and skin.

12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity effects

Acute toxicity

- Fishes, Pimephales promelas, LC50, 71 mg/l
- Fishes, Pimephales promelas, NOEC, 96 h, 7.4 mg/l
- Crustaceans, Daphnia pulex, EC50, 4.9 mg/l
- Crustaceans, Daphnia pulex, NOEC, 48 h, 2 mg/l

12.2. Mobility

- Air
- Air
Remarks: not applicable
- Water
Remarks: considerable solubility and mobility
- Soil/sediments
Remarks: non-significant adsorption

12.3. Persistence and degradability

Abiotic degradation

- Result: not applicable
- Water/soil
Result: significant hydrolysis

Biodegradation

- Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

12.4. Bioaccumulative potential

- Remarks: not applicable

12.5. Other adverse effects

- no data available

12.6. Remarks

- Hazard for the environment is limited due to product properties:
- . weak persistence of degradation products.
- Does not bioaccumulate.

13. DISPOSAL CONSIDERATIONS

13.1. Waste from residues / unused products

- Dilute with plenty of water.
- Dispose of wastes in an approved waste disposal facility.
- Can be landfilled, when in compliance with local regulations.
- In accordance with local and national regulations.

13.2. Packaging treatment

- Clean container with water.
- Empty containers should be taken to an approved waste handling site for recycling or disposal.
- Uncleaned empty packaging
- Dispose of as unused product.
- In accordance with local and national regulations.

13.3. RCRA Hazardous Waste

- Listed RCRA Hazardous Waste (40 CFR 302) - No
- Unlisted RCRA Hazardous Waste (40 CFR 302) - Yes
- D001 (ignitable waste)

14. TRANSPORT INFORMATION

UN-Number	3378
IATA-DGR	
Class	5.1
Packing group	III
ICAO-Labels	Oxidizer
IMDG	
Class	5.1
Packing group	III
ICAO-Labels	Oxidising agent
HI/UN No.	3378
U.S. Dept of Transportation	
Class (Subsidiary)	5.1
Packing group	III
Label (Subsidiary)	Oxidising agent
Marine pollutant:	no
Emergency info:	ERG: 140
Canada (TDG)	
Class (Subsidiary)	5.1
Packing group	III

Label (Subsidiary)
Marine pollutant:
Emergency info:

Oxidizer
no
ERG: 140

15. REGULATORY INFORMATION

15.1. Inventory Information

Toxic Substance Control Act list (TSCA)	: -	In compliance with inventory.
Australian Inventory of Chemical Substances (AICS)	: -	In compliance with inventory.
Canadian Domestic Substances List (DSL)	: -	In compliance with inventory.
Inventory of Existing Chemical Substances (China) (IECS)	: -	In compliance with inventory.
Korea Existing Chemicals Inv. (KECI) (KECI (KR))	: -	In compliance with inventory.
EU list of existing chemical substances (EINECS)	: -	In compliance with inventory.
Japanese Existing and New Chemical Substances (MITI List) (ENCS)	: -	In compliance with inventory.
Philippine Inventory of Chemicals and Chemical Substances (PICCS)	: -	In compliance with inventory.
New Zealand Inventory (in preparation) (NZ)	: -	In compliance with inventory.

15.2. Other regulations

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)

- not regulated.

SARA Hazard Designation (SARA 311/312)

- Fire Hazard: Yes.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

- not regulated.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

- not regulated.

US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

- yes.

US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

- not regulated.

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)

- not regulated.

15.3. Classification and labelling

Canada. Canadian Environmental Protection Act (CEPA). WHMIS Ingredient Disclosure List (Can. Gaz., Part II, Vol. 122, No. 2)

- C Oxidizing Material
- D2B Toxic Material Causing Other Toxic Effects

Remarks: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

EC Label

- Classification and labelling according to Directive 67/548/EEC.

Symbol(s)	O Xn	Oxidising Harmful
R-phrase(s)	R 8 R22 R41	Contact with combustible material may cause fire. Harmful if swallowed. Risk of serious damage to eyes.
S-phrase(s)	S 8 S15 S17 S25 S26 S39	Keep container dry. Keep away from heat. Keep away from combustible material. Avoid contact with eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection.

16. OTHER INFORMATION

Ratings :

NFPA (National Fire Protection Association)

Health = 2 Flammability = 0 Instability = 1 Special =OX

HMIS (Hazardous Material Information System)

Health = 2 Fire = 0 Reactivity = 1 PPE : Supplied by User; dependent on local conditions

Further information

- General revision
- Distribute new edition to clients

Material Safety Data Sheets contain country specific regulatory information; therefore, the MSDS's provided are for use only by customers of the company mentioned in section 1 in North America. If you are located in a country other than Canada, Mexico or the United States, please contact the Solvay Group company in your country for MSDS information applicable to your location. The previous information is based upon our current knowledge and experience of our product and is not exhaustive. It applies to the product as defined by the specifications. In case of combinations or mixtures, one must confirm that no new hazards are likely to exist. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and integrity of the work environment. (Unless noted to the contrary, the technical information applies only to pure product). To our actual knowledge, the information contained herein is accurate as of the date of this document. However, neither the company mentioned in section 1 nor any of its affiliates makes any warranty, express or implied, including merchantability or

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