

BICAR ® FCC 0/13 FF

1. PRODUCT AND COMPANY IDENTIFICATION

1.1. Product identifiers

- Product name	: BICAR ® FCC 0/13 FF
- Chemical Name	: Sodium hydrogen carbonate
- Synonyms	: Sodium bicarbonate
- Molecular formula	: NaHCO ₃
- Type of product	: Mixture

1.2. Identified uses / Uses advised against

- Identified uses	: - Food additive
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1.3. Manufacturer or supplier's details

- Company	: SOLVAY CHEMICALS INTERNATIONAL SA
- Address	: RUE DE RANSBEEK, 310 B- 1120 BRUXELLES
- Telephone	: +3222642111
- Fax	: +3222641802
- E-mail address	: sdstracking@solvay.com

1.4. Emergency telephone number

- Emergency telephone number	+44(0)1235 239 670 [CareChem 24] (Europe)
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2. HAZARDS IDENTIFICATION

2.1. GHS Classification

2.1.1. European regulation (EC) 1272/2008, as amended

Not classified as hazardous according to the European regulation (EC) 1272/2008, as amended

2.1.2. European Directive 67/548/EEC or 1999/45/EC, as amended

Not classified as hazardous according to European Directive 67/548/EEC or 1999/45/EC, as amended

2.2. EC Label - According to Regulation (EC) 1272/2008, as amended

No labelling

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Concentration

Substance name:	Concentration
Sodium bicarbonate	>= 99 %
CAS-No.: 144-55-8 / EC-No.: 205-633-8 / Index-No.: - REACH Registration Number: 01-2119457606-32	
Calcium distearate	ca. 0.1 %
CAS-No.: 1592-23-0 / EC-No.: 216-472-8 / Index-No.: -	



4. FIRST AID MEASURES

4.1. Description of necessary first-aid measures

4.1.1. If inhaled

- Move to fresh air.
- If symptoms persist, call a physician.

4.1.2. In case of eye contact

- Rinse thoroughly with plenty of water, also under the eyelids.
- If eye irritation persists, consult a specialist.

4.1.3. In case of skin contact

- Wash off with soap and water.

4.1.4. If swallowed

- Rinse mouth with water.
- If symptoms persist, call a physician or Poison Control Centre immediately.

4.2. Most important symptoms/effects, acute and delayed

4.2.1. Inhalation

- No hazards to be specially mentioned.
- In case of higher concentrations: slight irritation

4.2.2. Skin contact

- No hazards to be specially mentioned.
- Repeated or prolonged exposure: Contact with dust can cause mechanical irritation or drying of the skin.

4.2.3. Eye contact

- Dust contact with the eyes can lead to mechanical irritation.

4.2.4. Ingestion

- Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

5.1.1. Suitable extinguishing media

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

5.1.2. Unsuitable extinguishing media

- None.

5.2. Specific hazards arising from the chemical

- Not combustible.

5.3. Special protective actions for fire-fighters

- No special precautions required.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. Advice for non-emergency personnel

- Avoid dust formation.

6.1.2. Advice for emergency responders

- Sweep up to prevent slipping hazard.

6.2. Environmental precautions

- Do not flush into surface water or sanitary sewer system.
- Prevent any mixture with an acid into the sewer/drain (gas formations).

6.3. Methods and materials for containment and cleaning up

- Sweep up and shovel into suitable containers for disposal.
- Keep in properly labelled containers.
- Keep in suitable, closed containers for disposal.



6.4. Reference to other sections

- Refer to protective measures listed in sections 7 and 8.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

- Ensure adequate ventilation.
- Keep away from Incompatible products.

7.2. Conditions for storage, including incompatibilities

7.2.1. Storage

- Store in original container.
- Keep in a dry place.
- Keep in properly labelled containers.
- Keep container closed.
- Keep away from Incompatible products.

7.2.2. Packaging material

7.2.2.1. *Suitable material*

- Paper + PE.
- Polyethylene

7.2.2.2. *Unsuitable material*

- no data available

7.3. Specific use(s)

- For further information, please contact: Supplier

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. Exposure Limit Values

Sodium bicarbonate

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

8.2. Exposure controls

8.2.1. Appropriate engineering controls

- Provide appropriate exhaust ventilation at places where dust is formed.
- Apply technical measures to comply with the occupational exposure limits.

8.2.2. Individual protection measures

8.2.2.1. *Respiratory protection*

- Use only respiratory protection that conforms to international/ national standards.
- Respirator with a dust filter
- Recommended Filter type: P2

8.2.2.2. *Hand protection*

- Wear suitable gloves.

8.2.2.3. *Eye protection*

- Safety goggles

8.2.2.4. *Skin and body protection*

- Dust impervious protective suit

8.2.2.5. *Hygiene measures*

- When using do not eat, drink or smoke.
- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.

8.2.3. Environmental exposure controls

- Dispose of rinse water in accordance with local and national regulations.



9. PHYSICAL AND CHEMICAL PROPERTIES**9.1. Physical and chemical properties****9.1.1. General Information**

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|---------------------|---------------------|
| ■ Appearance | crystalline, powder |
| ■ Colour | white |
| ■ Odour | odourless |

9.1.2. Important health safety and environmental information

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|---|---|
| ■ pH | 8.4; at 8.4 g/l, 25 °C (Sodium bicarbonate)
8.6; at 52 g/l (Sodium bicarbonate)
(as aqueous solution) |
| ■ pKa | pKa1= 6.33 |
| ■ Melting point/freezing point | Thermal decomposition |
| ■ Boiling point/boiling range | Thermal decomposition |
| ■ Flash point | not applicable, inorganic |
| ■ Evaporation rate | No data |
| ■ Flammability (solid, gas) | The product is not flammable. |
| ■ Flammability | not applicable |
| ■ Explosive properties | Not expected |
| ■ Vapour pressure | no data available, Thermal decomposition |
| ■ Vapour density | not applicable |
| ■ Density | no data available |
| ■ Relative density | no data available |
| ■ Bulk density | from 0.5 - 1.3 kg/dm ³ (Sodium bicarbonate) |
| ■ Solubility(ies) | 69 g/l (Water), at 0 °C
93 g/l (Water), at 20 °C
165 g/l (Water), at 60 °C
(Sodium bicarbonate) |
| ■ Solubility/qualitative | insoluble, Alcohol (Sodium bicarbonate) |
| ■ Partition coefficient: n-octanol/water | not applicable, inorganic |
| ■ Autoignition temperature | not applicable |
| ■ Decomposition temperature | > 50 °C |
| ■ Viscosity | not applicable |
| ■ Oxidizing properties | Not expected |

9.2. Other information

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|-----------------------|-------------------------------------|
| ■ Granulometry | >= 80 % < 200 µm
>= 35 % < 45 µm |
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10. STABILITY AND REACTIVITY**10.1. Reactivity**

- Incompatible with acids.
- Decomposes slowly on exposure to water.

10.2. Chemical stability

- Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

- none

10.4. Conditions to avoid

- Exposure to moisture.
- To avoid thermal decomposition, do not overheat.

10.5. Materials to avoid

- Acids

10.6. Hazardous decomposition products

- none

11. TOXICOLOGICAL INFORMATION**11.1. Acute toxicity****11.1.1. Acute oral toxicity**

- LD50, rat, > 4,000 mg/kg (Sodium bicarbonate)

11.1.2. Acute inhalation toxicity

- LC50, rat, > 4.74 mg/l (Sodium bicarbonate)

11.1.3. Acute dermal toxicity

- no data available

11.2. Skin corrosion/irritation

- rabbit, No skin irritation

11.3. Serious eye damage/eye irritation

- rabbit, No eye irritation

11.4. Respiratory or skin sensitization

- no data available (Sodium bicarbonate)

11.5. Mutagenicity

- Genotoxicity in vitro, Tests on bacterial or mammalian cell cultures did not show mutagenic effects. (Sodium bicarbonate)
- In vivo, , no data available

11.6. Carcinogenicity

- rat, Animal testing did not show any carcinogenic effects., (Sodium bicarbonate)

11.7. Toxicity for reproduction

- Oral route (gavage), 10 days, rabbit, 330 mg/kg, Did not show teratogenic effects in animal experiments., (Sodium bicarbonate)

11.8. Specific target organ toxicity - single exposure

- Remarks: no data available

11.9. Repeated dose toxicity

- no data available

11.10. Other information

- no data available

12. ECOLOGICAL INFORMATION**12.1. Toxicity**

- Fishes, *Oncorhynchus mykiss*, LC50, 96 h, 7,700 mg/l (Sodium bicarbonate)
- Fishes, *Oncorhynchus mykiss*, NOEC, 96 h, 2,300 mg/l (Sodium bicarbonate)



- Fishes, *Lepomis macrochirus*, LC50, 96 h, 7,100 mg/l (Sodium bicarbonate)
- Fishes, *Lepomis macrochirus*, NOEC, 96 h, 5,200 mg/l (Sodium bicarbonate)
- Crustaceans, *Daphnia magna*, EC50, 48 h, 4,100 mg/l (Sodium bicarbonate)
- Crustaceans, *Daphnia magna*, LOEC, 48 h, 3,100 mg/l (Sodium bicarbonate)
- Crustaceans, *Daphnia magna*, NOEC, 21 Days, > 576 mg/l, (Sodium bicarbonate)

12.2. Persistence and degradability

12.2.1. Abiotic degradation

- Water, hydrolyses
Result: acid/base equilibrium as a function of pH
Degradation products: carbonic acid/bicarbonate/carbonate (Sodium bicarbonate)

12.2.2. Biodegradation

- The methods for determining the biological degradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

- Does not bioaccumulate.

12.4. Mobility

- Water, Soil/sediments,
soluble (Sodium bicarbonate)
- Water, Soil/sediments,
high mobility. (Sodium bicarbonate)

12.5. Other adverse effects

- no data available

13. DISPOSAL CONSIDERATIONS

13.1. Waste disposal methods

- Contact waste disposal services.
- If recycling is not practicable, dispose of in compliance with local regulations.
- Dilute with plenty of water.
- Neutralise with acid.
- In accordance with local and national regulations.

13.2. Contaminated packaging

- Where possible recycling is preferred to disposal or incineration.
- Clean container with water.
- Dispose of rinse water in accordance with local and national regulations.
- Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.

14. TRANSPORT INFORMATION

14.1. International transport regulations

- Sea (IMO/IMDG)
- not regulated
- Air (ICAO/IATA)
- not regulated
- European Road/Rail (ADR/RID)
- not regulated
- Inland waterway transport
- not regulated

15. REGULATORY INFORMATION

15.1. Applicable Laws or Regulations

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), as amended
- Directive 1999/45/EC of the European Parliament and of the Council of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations, as amended
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, as amended



- Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste

15.2. Notification status

Inventory Information	Status
Australian Inventory of Chemical Substances (AICS)	- In compliance with inventory
Canadian Domestic Substances List (DSL)	- In compliance with inventory
Korean Existing Chemicals List (ECL)	- 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
Inventory of Existing Chemical Substances (China) (IECS)	- In compliance with inventory
Philippine Inventory of Chemicals and Chemical Substances (PICCS)	- In compliance with inventory
Toxic Substance Control Act list (TSCA)	- In compliance with inventory
New Zealand Inventory of Chemicals (NZIOC)	- In compliance with inventory

16. OTHER INFORMATION**16.1. Other information**

- New (MSDS)
- Distribute new edition to clients

This SDS is only intended for the indicated country to which it is applicable. The European SDS format compliant with the applicable European legislation is not intended for use nor distribution in countries outside the European Union with the exception of Norway and Switzerland. Safety datasheets applicable in other countries/regions are available upon request. The information given corresponds to the current state of our knowledge and experience of the product, and is not exhaustive. This applies to product which conforms to the specification, unless otherwise stated. In this case of combinations and mixtures one must make sure that no new dangers can arise. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and protection of human welfare and the environment.

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