

An ISO-9001:2008 Certified Company Quality

(CODE) DOCUMENT: WI

(CODE) SECTION: WI/SM

(DATE): 01.04.2013

Rev.: 00

Issue: 02

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Assurance Department

Title: MATERIAL SAFETY DATA SHEET (MSDS): SODIUM BICARBONATE

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: Sodium bi carbonate

Catalog Numbers: S042, S043

Synonyms: Sodium hydrogen Carbonate

CAS-No.: 144-55-8

Company Information:

LEONID CHEMICALS Pvt Ltd,

62/A2, 1st Stage, Yeshwanthpur Industrial Suburb, Ashokpuram School Road, Bangalore -22, Karnataka, INDIA

Ph- +91-80-23378354

Fax: +918023378354/23377126 Email: <u>lab@leonidchemicals.net</u>

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. This substance is **not classified as dangerous according** to Directive 67/548/EEC.

2.2 Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

2.3 Other hazards - none

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Molecular Weight : 84,01 g/mol CAS-No. : 144-55-8 EC-No. : 205-633-8

No components need to be disclosed according to the applicable regulations.

SECTION 4: FIRST AID MEASURES

Description of first aid measures 4.1

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General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

- 4.2 Most important symptoms and effects, both acute and delayed
 The most important known symptoms and effects are described in the labelling
 (see section 2.2) and/or in section 11
- 4.3 Indication of any immediate medical attention and special treatment needed no data available

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

- 5.2 Special hazards arising from the substance or mixture Carbon oxides, Sodium oxides
- 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing
vapours, mist or gas. Avoid breathing dust.
For personal protection see section 8.

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6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)

A part from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

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The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form : solid

b) Odour : no data available

c) Odour Threshold : no data available

d) pH : no data available

e) Melting point/freezing

point : 300 °C

f) Initial boiling point and

boiling range : no data available

g) Flash point : no data available

h) Evapouration rate : no data available

i) Flammability (solid, gas): no data available

j) Upper/lower

flammability or

explosive limits : no data available

k) Vapour pressure : no data available



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I) Vapour density : no data available

m) Relative density : 2,160 g/cm3

n) Water solubility : 50 g/l

o) Partition coefficient:

n-octanol/water : no data available

p) Auto-ignition

temperature : no data available

q) Decomposition

temperature : no data available

r) Viscosity : no data available

s) Explosive properties : no data available

t) Oxidizing properties : no data available

9.2 Other safety information

no data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Strong acids, Strong oxidizing agents

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects



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Acute toxicity

LD50 Oral - rat - 4.220 mg/kg

Skin corrosion/irritation

Skin - Human

Result: Mild skin irritation - 3 d

Serious eye damage/eye irritation

Eyes - rabbit

Result: Mild eye irritation - 30 s

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

RTECS: Not available

Exposure to large amounts can cause:, Gastrointestinal disturbance, Heavy or prolonged skin exposure may result in the absorption of harmful amounts of material.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

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12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

ADR/RID: -IMDG: -IATA: -

14.2 UN proper shipping name

ADR/RID : Not dangerous goods : Not dangerous goods IMDG IATA : Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: -

14.4 Packaging group

ADR/RID: -IMDG: -IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

no data available



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SECTION 15: REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture no data available
- 15.2 Chemical Safety Assessment For this product a chemical safety assessment was not carried out

SECTION 16 - ADDITIONAL INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Leonid Chemicals Pvt. Ltd. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Leonid Chemicals Pvt. Ltd. has been advised of the possibility of such damages.





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Quality Assurance Department

Title: SPECIFICATION MANUAL - SODIUM HYDROGEN CARBONATE LR

Specification manual - Sodium hydrogen Carbonate (Sodium bi carbonate)

NaHCO₃ MW: 84.01

Product : Sodium hydrogen Carbonate LR

Description : White crystalline powder

Cat No. : S042
Cas No. : 144-55-8
Prepared Date : 07.03.2005
Approved Date : 07.03.2005

REVISION HISTORY							
Issue/Rev	Description of Change			Author	Effective Date		
01/00	Initial Release			S. Paul Joshua	07.03.2005		
02/00	Reviewed no changes			S. Paul Joshua	01.04.2011		
02/01	Included "Description" in the Tests			S. Paul Joshua	12.02.2014		
Next Review Due :		02.04.2015					
To be reviewed by:		Head-QC/QA					

CI No	Tests	Specification	Protocol
Sl. No.	Tests	LR	
1	Description	White crystalline powder	LCPL
2	Assay (acidimetric)	99-101%	LCPL
3	pH(50mg/ml in H ₂ O @25°C)	8.0-8.5	2/4/05
4	Chloride	0.01%	2/3-1-09
5	Sulphate	0.02%	2/3-1-14