

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture

1.1 Product identifier

- Trade name SODA SOLVAY® LIGHT
- CAS-No. 497-19-8

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

Uses of the Substance/Mixture

- Glass industry
- Detergent
- Chemical industry
- Metallurgy.
- Purifying flue gas

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification (UN)

Acute toxicity, Category 5
Eye irritation, Category 2A

H303: May be harmful if swallowed.
H319: Causes serious eye irritation.

2.2 Label elements

GHS label elements (UN)

Hazardous products which must be listed on the label

- CAS-No. 497-19-8 sodium carbonate

Pictogram



Signal word

- Warning

Hazard statements

- H303 May be harmful if swallowed.
- H319 Causes serious eye irritation.

Precautionary statements

General

- None

Prevention

- P264 Wash skin thoroughly after handling.
- P280 Wear eye protection/ face protection.

Response

- P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P312 Call a POISON CENTER/doctor if you feel unwell.
- P337 + P313 If eye irritation persists: Get medical advice/ attention.

Storage

- None

Disposal

- None

2.3 Other hazards which do not result in classification

None known.

SECTION 3: Composition/information on ingredients

3.1 Substance

- Chemical name Sodium carbonate
- Synonyms Light Sodium Carbonate/Soda Ash
- Formula Na₂CO₃

Information on Components and Impurities

Chemical name	CAS-No. 497-	Concentration [%]
sodium carbonate	19-8	>= 95 - < 99

3.2 Mixture

- Not applicable, this product is a substance.

SECTION 4: First aid measures

4.1 Description of first aid measures

In case of inhalation

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

In case of skin contact

- Wash off with soap and water.
- If symptoms persist, call a physician.

In case of eye contact

- In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- If eye irritation persists, consult a specialist.

In case of ingestion

- Rinse mouth with water.
- Do NOT induce vomiting.
- If symptoms persist, call a physician or Poison Control Centre immediately.

4.2 Most important symptoms and effects, both acute and delayed

In case of inhalation

Symptoms

- At high concentrations:
- Cough

Effects

- May cause nose, throat, and lung irritation.

Repeated or prolonged exposure

- Risk of sore throat, nose bleeds

In case of skin contact

Effects

- Prolonged skin contact may cause skin irritation.

In case of eye contact

Symptoms

- Redness
- Lachrymation
- Swelling of tissue

Effects

- Severe eye irritation

In case of ingestion

Symptoms

- Severe irritation
- Nausea
- Abdominal pain
- Vomiting
- Diarrhoea

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician

- If accidentally swallowed obtain immediate medical attention.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

- None

5.2 Special hazards arising from the substance or mixture

- Not combustible.

5.3 Advice for firefighters

Special protective equipment for firefighters

- In the event of fire, wear self-contained breathing apparatus.
- Use personal protective equipment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel

- Evacuate personnel to safe areas.
- Avoid dust formation.

Advice for emergency responders

- Use personal protective equipment.
- Sweep up to prevent slipping hazard.

6.2 Environmental precautions

- Should not be released into the environment.
- Do not flush into surface water or sanitary sewer system.
- Prevent any mixture with an acid into the sewer/drain (gas formations).
- Local authorities should be advised if significant spillages cannot be contained.

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.
- Treat recovered material as described in the section "Disposal considerations".

6.4 Reference to other sections

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Ensure adequate ventilation.
- Minimize dust generation and accumulation.
- Avoid contact with skin and eyes.
- Keep away from incompatible products

Hygiene measures

- When using do not eat, drink or smoke.
- Keep away from food and drink.
- Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye wash bottles or eye wash stations in compliance with applicable standards.
- Handle in accordance with good industrial hygiene and safety practice.
- Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

- Store in original container.
- Keep in a dry place.
- Keep in properly labelled containers.
- Keep container closed.

- Keep away from:
 - Incompatible products

Packaging material

Suitable material

- Polyethylene
- Woven plastic material.

Unsuitable material

- Material moisture permeable

7.3 Specific end use(s)

- Contact your supplier for additional information
- This grade of the product is not intended for pharmaceutical, feed or food applications.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with other occupational exposure limits

Components	Value type	Value	Basis
Sodium carbonate	TWA	10 mg/m ³	Solvay Acceptable Exposure Limit

8.2 Exposure controls

Control measures

Engineering measures

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

Individual protection measures

Respiratory protection

- Self-contained breathing apparatus in confined spaces/insufficient oxygen/in case of large uncontrolled emissions/in all circumstances when the mask and cartridge do not give adequate protection.
- Use only respiratory protection that conforms to international/ national standards.
- Respirator with a particle filter (EN 143)
- P2 filter

Hand protection

- Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
- Impervious gloves

Suitable material

- Nitrile rubber
- Break through time: 480 min
- Natural Rubber
- Break through time: 480 min

Eye protection

- Eye wash bottles or eye wash stations in compliance with applicable standards.
- Tightly fitting safety goggles

Skin and body protection

- Dust impervious protective suit
- Contaminated work clothing should not be allowed out of the workplace.
- Change working clothes after each work shift.

Hygiene measures

- When using do not eat, drink or smoke.
- Keep away from food and drink.
- Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye wash bottles or eye wash stations in compliance with applicable standards.
- Handle in accordance with good industrial hygiene and safety practice.
- Wash hands before breaks and at the end of workday.

Environmental exposure controls

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

<u>Appearance</u>	<u>Form:</u> powder <u>Physical state:</u> solid <u>Colour:</u> white <u>Particle size:</u> < 125 µm (60 - 70 %)
<u>Odour</u>	odourless
<u>Odour Threshold</u>	No data available
<u>Molecular weight</u>	106 g/mol
<u>pH</u>	11.2 (4 g/l) (25 °C) 11.3 (10 g/l) (25 °C) <u>pKa:</u> 6.4 - 10.3
<u>Melting point/freezing point</u>	<u>Melting point/range:</u> 851 °C
<u>Initial boiling point and boiling range</u>	<u>Boiling point/boiling range:</u> Not applicable
<u>Flash point</u>	Not applicable
<u>Evaporation rate (Butylacetate = 1)</u>	Not applicable
<u>Flammability (solid, gas)</u>	Not applicable
<u>Flammability/Explosive limit</u>	<u>Explosiveness:</u> Not applicable
<u>Auto-ignition temperature</u>	Not applicable
<u>Vapour pressure</u>	negligible
<u>Vapour density</u>	Not applicable
<u>Density</u>	<u>Bulk density:</u> 0.5 - 0.6 kg/dm ³ Method: Free flow
<u>Relative density</u>	2.53 (20 °C)
<u>Solubility</u>	<u>Water solubility:</u> 71 g/l (0 °C) 212.5 g/l (20 °C)
<u>Partition coefficient: n-octanol/water</u>	Not applicable
<u>Decomposition temperature</u>	> 400 °C
<u>Viscosity</u>	<u>Viscosity, dynamic:</u> Not applicable
<u>Explosive properties</u>	No data available
<u>Oxidizing properties</u>	Not considered as oxidizing

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

- Decomposes by reaction with strong acids.

10.2 Chemical stability

- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

- no data available

10.4 Conditions to avoid

- Exposure to moisture

10.5 Incompatible materials

- Finely divided aluminium

10.6 Hazardous decomposition products

- none

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity

LD50 : 2,800 mg/kg - Rat , male and female
The product has a low acute toxicity
Unpublished reports

Acute inhalation toxicity

No data available

Acute dermal toxicity

LD50 : > 2,000 mg/kg - Rabbit
Method: according to a standardised method
Not classified as hazardous for acute dermal toxicity according to GHS.
No mortality observed at this concentration.
Unpublished reports

Acute toxicity (other routes of administration)

No data available

Skin corrosion/irritation

Rabbit
Not classified as irritating to skin
Method: OECD Test Guideline 404
Unpublished reports

Serious eye damage/eye irritation

Rabbit
Irritating to eyes.
Method: according to a standardised method
Unpublished reports

Respiratory or skin sensitisation

No data available

Mutagenicity

Genotoxicity in vitro

By analogy

Ames test
with metabolic activation
Product is not considered to be genotoxic
Published data

Strain: Escherichia coli
without metabolic activation

negative
Product is not considered to be genotoxic
Published data

Genotoxicity in vivo

No data available

Carcinogenicity

No data available

Toxicity for reproduction and development

Toxicity to reproduction/Fertility

No data available

Developmental Toxicity/Teratogenicity

Mouse, female, Oral
General Toxicity Maternal NOAEL: ≥ 580 mg/kg
Teratogenicity NOAEL: ≥ 580 mg/kg
Method: according to a standardised method
no embryotoxic or teratogenic effects have been observed, Unpublished reports

STOT

STOT - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure according to GHS criteria.
internal evaluation

STOT - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure according to GHS criteria.
internal evaluation

Experience with human exposure

No data available

Aspiration toxicity

No data available

SECTION 12: Ecological information

12.1 Toxicity

Aquatic Compartment

Acute toxicity to fish

LC50 - 96 h : 300 mg/l - Lepomis macrochirus (Bluegill sunfish)
static test
Analytical monitoring: no

Method: according to a standardised method
Not harmful to fish (LC/LL50 > 100 mg/L)
Published data

Acute toxicity to daphnia and other aquatic invertebrates

EC50 - 48 h : 200 - 227 mg/l - Ceriodaphnia dubia (water flea)
semi-static test
Method: according to a standardised method
Not harmful to aquatic invertebrates. (EC/EL50 > 100 mg/L)
Published data

Toxicity to aquatic plants

No data available

Toxicity to microorganisms

No data available

Chronic toxicity to fish

No data available

Chronic toxicity to daphnia and other aquatic invertebrates

No data available

12.2 Persistence and degradability

Abiotic degradation

Photodegradation

hydrolyses
Test substance: Water
carbonic acid/bicarbonate/carbonate
acid/base equilibrium as a function of pH

Physical- and photo-chemical elimination

No data available

Biodegradation

Biodegradability

Not applicable (inorganic substance)

Degradability assessment

The product is not considered to be rapidly degradable in the environment

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water No data available

Bioconcentration factor (BCF) Not applicable (inorganic substance)

12.4 Mobility in soil

Adsorption potential (Koc)

Air
Not applicable

Solubility(ies)
Water

Mobility
Water

Soil/sediments
not significant

Known distribution to environmental compartments No data available

12.5 Results of PBT and vPvB assessment

Not applicable (inorganic substance)

12.6 Other adverse effects

Ecotoxicity assessment

Short-term (acute) aquatic hazard

Not harmful to aquatic life (LC/LL50, EC/EL50 > 100 mg/L)

Long-term (chronic) aquatic hazard

Not classified due to data which are conclusive although insufficient for classification.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product Disposal

- 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.

Advice on cleaning and disposal of 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.

SECTION 14: Transport information

ADR: not regulated

RID: not regulated

IMDG: not regulated

IATA: not regulated

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transport regulations for hazardous materials, it would be advisable to check their validity with your sales office.

SECTION 15: Regulatory information

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

Local regulations

No data available

Notification status

Inventory Information	Status
United States TSCA Inventory	- Listed on Inventory
Mexico INSQ (INSQ)	- Listed on Inventory
Canadian Domestic Substances List (DSL)	- Listed on Inventory
New Zealand. Inventory of Chemical Substances	- Listed on Inventory
Australia Inventory of Chemical Substances (AICS)	- Listed on Inventory
Japan. CSCL - Inventory of Existing and New Chemical Substances	- Listed on Inventory
Korea. Korean Existing Chemicals Inventory (KECI)	- Listed on Inventory
China. Inventory of Existing Chemical Substances in China (IECSC)	- Listed on Inventory
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	- Listed on Inventory
EU. European Registration, Evaluation, Authorisation and Restriction of Chemical (REACH)	- When purchased from a European Solvay legal entity, this product is compliant with the registration provisions of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt, and/or registered. When purchased from a legal entity outside of Europe, please contact your local representative for additional information.

SECTION 16: Other information

Full text of H-Statements

- H303 May be harmful if swallowed.
- H319 Causes serious eye irritation.

Further information

- Update
- See section 2
- Distribute new edition to clients

Disclaimer: As the users' condition of work is not known, the information contained in this Material Safety Data Sheet is accurate to the best of our knowledge and is based on the national community regulations. The product must not be employed for uses other than those specified without having previously obtained written handling instructions. Users are responsible for taking all necessary to comply with the requirements of the law and local regulations. The information contained in this sheet should be regarded as the description of the safety requirements relating to our products and not as a guarantee of its properties.