

MATERIAL SAFETY DATA SHEET

Aminoguanidine Bicarbonate



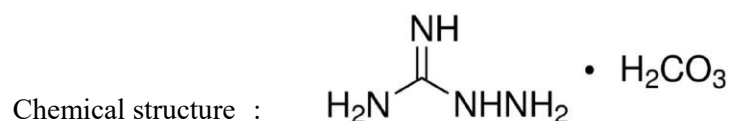
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Aminoguanidine Bicarbonate

CAS-No . : 2582-30-1

Molecular formula : CH₆N₄H₂CO₃



Molecular weight : 136.11g/mor

Appearance : White powder

Details of the supplier of the material safety data sheet

1.2 Details of the supplier of the safety data sheet

Company	SHAANXI DAYU CHEMICAL CO., LTD.
Address	Building NO.8, XiShi Jiajun, , XiShi 2nd Road, Lianhu District, Xi'an, Shaanxi, China
Telephone	0086-29-88643345
Email	info@dayuchemical.com
Website	www.hidayuchemical.com

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin sensitisation (Category 1), H317

Chronic aquatic toxicity (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Warning

Hazard statement(s)

H317

May cause an allergic skin reaction.

H411

Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P273

Avoid release to the environment.

P280

Wear protective gloves.

Supplemental Hazard Statements

none

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Formula : $\text{CH}_6\text{N}_4 \cdot \text{H}_2\text{CO}_3$

Molecular weight : 136.11 g/mol

CAS-No. : 2582-30-1

EC-No. : 219-956-7

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
Aminoguanidinium hydrogen carbonate		
CAS-No.	2582-30-1	Skin Sens. 1; Aquatic Chronic 2; H317, H411 <= 100 %
EC-No.	219-956-7	

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

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, Nitrogen oxides (NO_x)

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting 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. Ensure adequate ventilation. Avoid breathing dust.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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 contact with skin and eyes. 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.
Storage class (TRGS 510): Non Combustible Solids

7.3 Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1 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

Face shield and safety glasses 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.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle r (US) or type ABEKP2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- | | |
|--|--|
| a) Appearance | Form: powder
Colour: beige |
| b) Odour | odourless |
| c) Odour Threshold | No data available |
| d) pH | 8.9 at 5 g/l at 20 °C |
| e) Melting point/freezing point | Melting point/range: 170 - 172 °C - dec. |
| f) Initial boiling point and boiling range | No data available |
| g) Flash point | No data available |
| h) Evaporation 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
l)	Vapour density	No data available
m)	Relative density	1.56 g/cm ³ at 20 °C
n)	Water solubility	3.3 g/l at 30 °C 2.7 g/l at 20 °C
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

Heat Exposure to light. hygroscopic

10.5 Incompatible materials

Strong oxidizing agents, Nitric acid, Nitrites

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO_x)

Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - > 5,000 mg/kg(Aminoguanidinium hydrogen carbonate)

LD50 Intraperitoneal - Rat - 1,160 mg/kg(Aminoguanidinium hydrogen carbonate)

Skin corrosion/irritation

Skin - Rabbit(Aminoguanidinium hydrogen carbonate)

Result: No skin irritation

Serious eye damage/eye irritation

Eyes - Rabbit(Aminoguanidinium hydrogen carbonate)

Result: No eye irritation

Respiratory or skin sensitisation

-Rabbit(Aminoguanidinium hydrogen carbonate)
May cause allergic skin reaction.

Germ cell mutagenicity

No data available(Aminoguanidinium hydrogen carbonate)

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(Aminoguanidinium hydrogen carbonate)

Specific target organ toxicity - single exposure

No data available(Aminoguanidinium hydrogen carbonate)

Specific target organ toxicity - repeated exposure

Ingestion - Liver

Aspiration hazard

No data available(Aminoguanidinium hydrogen carbonate)

Additional Information

RTECS: FG1772000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(Aminoguanidinium hydrogen carbonate)

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish

Toxicity to daphnia and other aquatic invertebrates

Toxicity to algae

LC50 - Danio rerio (zebra fish) - 1,585 mg/l - 96 h(Aminoguanidinium hydrogen carbonate)

LC50 - Danio rerio (zebra fish) - 1,000 mg/l - 96 h(Aminoguanidinium hydrogen carbonate)

Remarks: No data available(Aminoguanidinium hydrogen carbonate)

IC50 - Desmodesmus subspicatus (green algae) - 10 mg/l - 72 h(Aminoguanidinium hydrogen carbonate)

12.2 Persistence and degradability

Biodegradability Chemical oxygen demand - Exposure time 28 d(Aminoguanidinium hydrogen carbonate)

Result: 0 % - Not readily biodegradable.
(OECD Test Guideline 301)

aerobic Chemical oxygen demand - Exposure time 28 d(Aminoguanidinium hydrogen carbonate)

Result: 38 % - Not readily biodegradable.
(OECD Test Guideline 302)

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available(Aminoguanidinium hydrogen carbonate)

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and

toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Toxic to aquatic life with long lasting effects.

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 chem scrubber.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

ADR/RID: 3077

IMDG: 3077

IATA: 3077

14.2 UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Aminoguanidinium hydrogen carbonate)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Aminoguanidinium hydrogen carbonate)

IATA: Environmentally hazardous substance, solid, n.o.s. (Aminoguanidinium hydrogen carbonate)

14.3 Transport hazard class(es)

ADR/RID: 9

IMDG: 9

IATA: 9

14.4 Packaging group

ADR/RID: III

IMDG: III

IATA: III

14.5 Environmental hazards

ADR/RID: yes

IMDG Marine pollutant: no

IATA: yes

14.6 Special precautions for user

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

SECTION 15: Regulatory information

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

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

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. SHAANXI DAYU CHEMICAL CO., LTD. shall not be held liable for any damage resulting from handling or from contact with the above product. Please see additional terms and conditions for reference.