AGC

AGC VINYTHAI

SAFETY DATA SHEET

1. Identification of the substance or mixture and of the supplier

1.1 GHS product identifier **CAUSTIC SODA MICROPEARLS 99% min.**

1.2 Other means of identification

Common name(s), synonym(s)	Caustic Soda Beads ,Prill , Sodium hydroxide Solid, Sodium hydroxide 99%
SDS number	P-SDS-CA-05
CAS number	1310-73-2

1.3 Recommendations and restrictions on the use of substances or mixtures

Recommended use	General Chemicals Reagent, Neutralizing agent, Personal care, Food Industry, Industrial cleaner, Drain opener, Detergent textile , Pulp and paper, Digestion, Catalyst.
Recommended restrictions	Not available.

1.4 Supplier's details

Supplier's name	AGC Vinythai Public Company Limited
Address	2, I-3 Road, Map Ta Phut Industrial Estate, Map Ta Phut Subdistrict, Mueang, Rayong District, Rayong 21150 Thailand
Phone	+66 38 925 000
Fax	+66 38 683 048
E-mail	Avt.qhse.sdssupport@agc.com
Website	www.agcvinythai.com
Emergency telephon number	Verisk 3E (Access Code 335170) Asia Pacific (TH)+66 21056177 Europe (GB)+44 20 35147487 Americas (US)+1 760 476 3962 Middle East / Africa (US)+1 760 476 3959
Manufacturer's detail	
Manufacturer's name	AGC Vinythai Public Company Limited
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MTP2 Plant address	4 Soi G-12, Pakorn Songkrohrad Road, WHA Eastern Industrial Estate, Map Ta Phut Subdistrict, Mueang Rayong District, Rayong 21150
Phone	+66 38 683 573

2. Hazards identification

2.1 GHS classification of substance or mixture, and national or regional information

Physical hazards	Corrosive to metals	Category 1
Health hazards	Acute toxicity, dermal	Category 4
	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 3
	Hazardous to the ozone layer	Classification not possible

2.2 GHS label elements

Hazard symbol(s)

Signal word Danger

Hazard statement(s)

H290	May be corrosive to metals.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

Prevention

P234	Keep only in original container.
P261	Avoid breathing vapors.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.

Storage

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner liner.

Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards which do not result in GHS classification None known.

Supplemental information None.

3. Composition/information on ingredients

3.1 Substance

Chemical identity	Common name and synonym	CAS number and other unique identifiers	Concentration or concentration range
Sodium hydroxide	Caustic Soda Beads ,Prill , Sodium hydroxide Solid, Sodium hydroxide 99%	1310-73-2	≥99

4. First-aid measures

4.1 Description of first-aid measures

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a poison center or doctor/physician if you feel unwell.

Skin contact
Take off immediately all contaminated clothing.
Rinse skin with water/shower.
Call a physician or poison control center immediately.
Chemical burns must be treated by a physician.
Wash contaminated clothing before reuse.

Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes.
Remove contact lenses, if present and easy to do.
Continue rinsing.
Call a physician or poison control center immediately.

Ingestion
Call a physician or poison control center immediately.
Rinse mouth.
Do not induce vomiting.
If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

4.2 Most important symptoms/effects, acute and delayed
Burning pain and severe corrosive skin damage.
Causes serious eye damage.
Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
Permanent eye damage including blindness could result.
May cause respiratory irritation.

4.3 Indication of immediate medical considerations and important specific treatment that should be performed
Provide general supportive measures and treat symptomatically.
Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.
Keep victim warm.
Keep victim under observation.
Symptoms may be delayed.

General advice	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

5.1 Prohibited extinguishing media and suitable extinguishing media

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Not available.
5.2 Specific hazards arising from chemicals	During fire, gases hazardous to health may be formed.
5.3 Special protective equipment and precautions for fire-fighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
6.2 Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
6.3 Methods and materials for containment and cleaning up	Prevent entry into waterways, sewer, basements or confined areas. Large Spills: Stop the flow of material, if this is without risk. Absorb spillage to prevent material damage. Following product recovery, flush area with water. Small Spills: Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

7. Handling and storage

7.1 Precautions for safe handling, use and storage	Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.
7.2 Conditions for safe storage, including any incompatibilities	Store locked up. Store in a cool, dry place out of direct sunlight. Store in corrosive resistant container with a resistant inner liner. Store in tightly closed container. Keep only in the original container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Thailand. OELs. Notification of the Ministry of Interior, Re: Working Safety in Respect to Environmental Condition (Chemical)

Material	Type	Value
Sodium hydroxide (CAS 1310-73-2)	TWA	2 mg/m3

US. ACGIH Threshold Limit Values

Material	Type	Value
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3

Biological limit values No biological exposure limits noted for the ingredient(s).

8.2 Appropriate engineering controls Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Eye wash facilities and emergency shower must be available when handling this product.

8.3 Personal protective measures

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing.
Use of an impervious apron is recommended.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.
Wear respirator with dust filter.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

9.1 Appearance

Physical state Solid.

Form Not available.

Color White

9.2 Odor Odorless.

9.3 Odor threshold limit Not available.

9.4 pH > 13 (5% solution(25°C))

9.5 Melting point/freezing point 604.4 °F (318 °C)

9.6 Initial boiling point and boiling range 2530.4 °F (1388 °C)

9.7 Flash point Not available.

9.8 Evaporation rate Not available.

9.9 Flammability (solid, gas) Not available.

9.10 Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

9.11 Vapor pressure 100 mm Hg (1111°C)

9.12 Vapor density Not available.

9.13 Relative density 2.13 g/cm3 (20°C)

9.14 Solubility(ies)

Solubility (water) 111 g/100ml (20°C)

9.15 Partition coefficient: n-octanol/water Not available.

9.16 Auto-ignition temperature Not available.

9.17 Decomposition temperature Not available.

9.18 Viscosity Not available.

Other information

Dynamic viscosity 4 mPa.s (662 °F (350 °C))

Explosive properties Not explosive.

Molecular formula H-Na-O

Molecular weight 40 g/mol

Oxidizing properties Not oxidizing.

Surface tension 101.05 mN/m (64.4 °F (18 °C))

10. Stability and reactivity

10.1 Reactivity
Reacts with Ammonium salts, evolving Ammonia gas. In the presence of moisture, the material is corrosive to Aluminium, Lead, Zinc and Tin producing highly flammable Hydrogen gas. May react violently with acids and chlorinated hydrocarbons. Can react vigorously with water.

10.2 Chemical stability
Stable under normal ambient handling conditions. Rapidly absorbs Carbon dioxide from the air, forming Sodium carbonate. Absorbs moisture from the air

10.3 Possibility of hazardous reactions
It reacts violently with acid and is corrosive to metals such as aluminium, tin, lead and zinc. This produces a combustible/explosive gas (hydrogen). Reacts with ammonium salts. This produces ammonia.

10.4 Conditions to avoid
Moisture. Heat. Direct sunlight.

10.5 Incompatible materials
Ammonium salts, acids, Aluminium ,Zinc , Lead , Tin , and their alloys.

10.6 Hazardous decomposition products
Sodium oxide

11. Toxicological information

11.1 Information on likely routes of exposure

Inhalation
May cause irritation to the respiratory system.
Prolonged inhalation may be harmful.

Skin contact
Causes severe skin burns.
Harmful in contact with skin.

Eye contact
Causes serious eye damage.

Draize
Result: Index 63.2
Species: Rabbit

Ingestion
Causes digestive tract burns.

11.2 Symptoms related to physical, chemical and toxicological characteristics
Burning pain and severe corrosive skin damage.
Causes serious eye damage.
Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
Permanent eye damage including blindness could result.

May cause respiratory irritation.

11.3 Delayed and immediate effects, including chronic effects from short- and long-term exposure
Occupational exposure to the substance or mixture may cause adverse effects.

11.4 Numerical values of toxicity

Acute toxicity
In high concentrations, vapors are anesthetic and may cause headache, fatigue, dizziness and central nervous system effects. Harmful in contact with skin.

Skin corrosion/irritation
Causes severe skin burns and eye damage.

Corrosivity
Draize
Result: Index 2.5
Species: Rabbit

Serious eye damage/eye irritation
Causes serious eye damage.

Eye Contact
Draize
Result: Index 63.2
Species: Rabbit

Respiratory or skin sensitization

Respiratory sensitization
Not available.

Skin sensitization
This product is not expected to cause skin sensitization.

Germ cell mutagenicity
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity
Not available.

Reproductive toxicity
This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure
May cause respiratory irritation.

Specific target organ toxicity - repeated exposure
Not available.

Aspiration hazard
Not available.

12. Ecological information

12.1 Ecological toxicity
Harmful to aquatic life with long lasting effects.

Product		Species	Test Results
Sodium hydroxide (CAS 1310-73-2)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	>= 34.59 - <= 47.13 mg/l, 48 hours
Fish	LC50	Western mosquitofish (Gambusia affinis)	125 mg/l, 96 hours

12.2 Persistence and degradability No data is available on the degradability of this substance.

12.3 Bioaccumulative potential No data available.

12.4 Mobility in soil No data available

12.5 Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

ADR

14.1 UN number 1823
14.2 UN proper shipping name SODIUM HYDROXIDE, SOLID
14.3 Transport hazard class(es)
Class 8
Subsidiary risk -
Label(s) 8
Hazard No. (ADR) 80
Tunnel restriction code E
14.4 Packing group II
14.5 Environmental hazards No.
14.6 Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

RID

14.1 UN number 1823
14.2 UN proper shipping name SODIUM HYDROXIDE, SOLID
14.3 Transport hazard class(es)
Class 8
Subsidiary risk -
Label(s) 8
14.4 Packing group II
14.5 Environmental hazards No.
14.6 Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

14.1 UN number 1823
14.2 UN proper shipping name Sodium hydroxide, solid
14.3 Transport hazard class(es)
Class 8
Subsidiary risk -
14.4 Packing group II
14.5 Environmental hazards No.
ERG Code 8L
14.6 Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

14.1 UN number	1823
14.2 UN proper shipping name	SODIUM HYDROXIDE, SOLID
14.3 Transport hazard class(es)	
Class	8
Subsidiary risk	-
14.4 Packing group	II
14.5 Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
14.6 Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

ADR; IATA; IMDG; RID

15. Regulatory information

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

Hazardous substances in the work place (DLPW Notification Re: List of Hazardous Chemicals, Royal Gazette, Vol. 130 Part 185 Ngor, issued December 20, B.E.2556 (2013))

Sodium hydroxide (CAS 1310-73-2)

Thailand. Explosive Substances & Precursors (Ministry of Defense Notification Re: Arms Subject to Imports License)

Not regulated.

Thailand. Reportable Hazardous Substances (Notification of Ministry of Industry Re: Bases respecting report of quantity of hazardous materials under Department of Industrial Works, B.E. 2547)

Sodium hydroxide (CAS 1310-73-2)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	07-03-2022

Version #	01
Disclaimer	AGC Vinythai Public Company Limited cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.