

SAFETY DATA SHEET

according to US Regulation 29 CFR 1910.1200 and the Canadian HPA

GLB ALKALINITY UP

Version 1.2

Revision Date 2019.02.18

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SECTION 1. IDENTIFICATION

Product name : GLB ALKALINITY UP

Manufacturer or supplier's detailsCompany : Arch Chemicals, Inc.
1200 Bluegrass Lakes Parkway
Alpharetta, GA
30004
United States of America (USA)E-mail address : sds@lonza.com
Emergency telephone number : In case of emergency call CHEMTREC US: 1-800-424-9300,
CHEMTREC WORLD-WIDE: +1-703-527-3887.**Recommended use of the chemical and restrictions on use**

Recommended use : Water treatment chemical

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Acute toxicity (Inhalation) : Category 4

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H332 Harmful if inhaled.

Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P271 Use only outdoors or in a well-ventilated area.
Response:
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.**Other hazards**

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

GLB ALKALINITY UP

Chemical nature : Substance

Hazardous components

| Chemical name / Synonyms | CAS-No. | Concentration (% w/w) |
|--|----------|-----------------------|
| Sodium hydrogencarbonate ;Sodium bicarbonate | 144-55-8 | 100 |

SECTION 4. FIRST AID MEASURES

- If inhaled : IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops.
- In case of skin contact : IF ON SKIN: Flush skin with water for 15 minutes. Take off all contaminated clothing. Seek medical attention if irritation develops.
- In case of eye contact : IF IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention immediately.
- If swallowed : IF SWALLOWED: Immediately drink water to dilute. Seek medical attention if symptoms develop. Never give anything by mouth to an unconscious person.
- Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Specific hazards during firefighting : Material will not ignite or burn.
- Further information : Use water spray to cool unopened containers. In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus. Prevent further leakage or spillage if safe to do so. Use personal protective equipment as required. Evacuate personnel to safe areas.
- Environmental precautions : If the product contaminates rivers and lakes or drains inform respective authorities.

GLB ALKALINITY UP

Methods and materials for containment and cleaning up : Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Do not take internally. Avoid contact with skin, eyes and clothing. If in eyes or on skin, rinse well with water. Avoid breathing dust.

Conditions for safe storage : Store in a cool, dry and well ventilated place. Isolate from incompatible materials.

Materials to avoid : Refer to Section 10, "Incompatible Materials."

Recommended storage temperature : 185 °F / 85 °C

Further information on storage stability : Do not store at temperatures above:

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Local exhaust ventilation is recommended if significant dusting occurs. Otherwise use general exhaust ventilation.

Personal protective equipment

Respiratory protection : Respiratory protection not normally needed. If dusting occurs, wear a NIOSH approved N95 dust respirator.

Hand protection

Remarks : Impervious gloves

Eye protection : Safety glasses with side-shields

Skin and body protection : Impervious clothing

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder

Colour : no data available

Odour : no data available

GLB ALKALINITY UP

| | | |
|--|---|---|
| Odour Threshold | : | no data available |
| pH | : | 8.5 Concentration: 10 g/l (as aqueous solution) |
| Melting point/freezing point | : | Not applicable |
| Boiling point/boiling range | : | Not applicable |
| Flash point | : | Not applicable |
| Evaporation rate | : | Not applicable |
| Flammability (solid, gas) | : | Product is not known to be flammable, combustible, pyrophoric or explosive. |
| Flammability (liquids) | : | no data available |
| Upper explosion limit | : | no data available |
| Lower explosion limit | : | no data available |
| Vapour pressure | : | Not applicable |
| Relative vapour density | : | Not applicable |
| Relative density | : | no data available |
| Density | : | 0.993 g/cm ³ |
| Bulk density | : | no data available |
| Water solubility | : | 95 g/l (68 °F / 20 °C) |
| Partition coefficient: n-octanol/water | : | Not applicable |
| Auto-ignition temperature | : | no data available |
| Decomposition temperature | : | no data available |
| Viscosity, dynamic | : | no data available |
| Viscosity, kinematic | : | no data available |
| Molecular weight | : | 84 g/mol |

SECTION 10. STABILITY AND REACTIVITY

| | | |
|------------------------------------|---|---|
| Possibility of hazardous reactions | : | Stable under normal conditions. Product will not undergo hazardous polymerization. |
| Conditions to avoid | : | Heat |
| Incompatible materials | : | Acids |
| Hazardous decomposition products | : | Carbon dioxide (CO ₂) |

GLB ALKALINITY UP

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure :
sure

Inhalation, skin, eyes, ingestion

Acute toxicity

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 4.74 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Remarks: (Whole-body)
Test atmosphere assumed based on available information.

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Acute toxicity (other routes of administration) :
Remarks: There are no known or reported target organ effects from acute exposure.

Skin corrosion/irritation

Remarks: Not expected to cause irritation.

Respiratory or skin sensitisation

Remarks: Not believed to be sensitising to skin.

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.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

ACGIH No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Repeated dose toxicity

Remarks: Not known or reported to cause subchronic or chronic toxicity.

Further information

Remarks: no data available

GLB ALKALINITY UP

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

Components:

Sodium hydrogencarbonate:

Partition coefficient: n-octanol/water : Remarks: Not applicable

Mobility in soil

no data available

Other adverse effects

Ozone-Depletion Potential : Regulation: US. EPA Clean Air Act (CAA) Section 602 Ozone-Depleting Substances (40 CFR 82, Subpt. A, App A & B)
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : Practically non- toxic to fish and other aquatic organisms.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : If this product becomes a waste, it will be a nonhazardous waste.
As a nonhazardous solid waste it should be disposed of in accordance with local, state and federal regulations.

SECTION 14. TRANSPORT INFORMATION

DOT : Not dangerous goods

UN number : Not applicable

Proper shipping name : Not applicable

Transport hazard class : Not applicable

Packing group : Not applicable

GLB ALKALINITY UP

| | | |
|---|---|---------------------|
| TDG | : | Not dangerous goods |
| UN number | : | Not applicable |
| Proper shipping name | : | Not applicable |
| Transport hazard class | : | Not applicable |
| Packing group | : | Not applicable |
| IATA | : | Not dangerous goods |
| UN number | : | Not applicable |
| Proper shipping name | : | Not applicable |
| Transport hazard class | : | Not applicable |
| Packing group | : | Not applicable |
| IMDG | : | Not dangerous goods |
| UN number | : | Not applicable |
| Proper shipping name | : | Not applicable |
| Transport hazard class | : | Not applicable |
| Packing group | : | Not applicable |
| ADR | : | Not dangerous goods |
| UN number | : | Not applicable |
| Proper shipping name | : | Not applicable |
| Transport hazard class | : | Not applicable |
| Packing group | : | Not applicable |
| RID | : | Not dangerous goods |
| UN number | : | Not applicable |
| Proper shipping name | : | Not applicable |
| Transport hazard class | : | Not applicable |
| Packing group | : | Not applicable |
| Special precautions for user | : | none |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | : | Not applicable |

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards

GLB ALKALINITY UP

See above: SECTION 2. Hazard Identification-GHS Classification

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450.

Clean Water Act

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

| Components | CAS-No. |
|--------------------------|----------|
| Sodium hydrogencarbonate | 144-55-8 |

New Jersey Right To Know

| Components | CAS-No. |
|--------------------------|----------|
| Sodium hydrogencarbonate | 144-55-8 |

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

GLB ALKALINITY UP

Canadian lists

NPRI

Canadian National Pollutant Release Inventory (NPRI): No component is listed on NPRI.

The components of this product are reported in the following inventories:

TSCA : The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

1

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid

GLB ALKALINITY UP

for such material used in combination with any other materials or in any process, unless specified in the text.

Date format : yyyy/mm/dd

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