



PH Increaser

Safety Data Sheet

Emergency 24 Hour Telephone: **CHEMTREC 800.424.9300**



Corporate Headquarters: ORCA PACIFIC INC.
280 44th Street NW
Auburn, WA 98001
Ph. 253-867-0303
Fax. 253-867-5695

PH Increaser
Safety Data Sheet (SDS No. 208)

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1	Product Identification:	
1.1.1	Product Name:	PH Increaser
1.1.2	CAS #:	497-19-8
1.1.3	RTECS:	VZ4050000
1.1.4	EINECS:	207-838-8
1.1.5	Chemical Name:	Sodium Carbonate, Anhydrous
1.1.6	Chemical Formula:	Na ₂ CO ₃
1.1.7	Formula Weight:	106 g/mole (anhydrous)
1.1.8	Chemical Family:	Inorganic sodium salt.
1.1.9	Synonym:	Crystal Carbonate; Disodium Carbonate, Sal Soda; Washing Soda, carbonic acid, disodium salt.
1.2	Recommended Use:	It is commonly used for pH adjustment in water or wastewater.
1.3	Company Identification:	Orca Pacific Inc. 280 44th Street NW Auburn, WA 98001
1.4	Emergency Telephone Number:	CHEMTREC (24 Hour): 1-800-424-9300
1.5	Non-Emergency Assistance:	661-259-5848 (8 AM – 5 PM PST / PDT)

SECTION 2: HAZARD(S) IDENTIFICATION

Hazard Category	Acute Toxicity (Inhalation): Category 3 Eye Damage/Irritation: Category 2A
Symbol	 
Signal Word	Danger
Hazard Statements	Toxic if inhaled. Causes serious eye irritation.
Precautionary Statements	Prevention
	Avoid breathing dust. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Wear eye protection/face protection.
	Response
	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
	Storage
	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Precautionary Statements	Disposal
	Dispose of container/contents in accordance with local, regional, national, international regulations as specified.

SECTION 3: COMPOSITION INFORMATION ON INGREDIENTS

Ingredient	Synonym	CAS No.	Weight %
Sodium Carbonate, Anhydrous	Soda Ash	497-19-8	100%

SECTION 4: FIRST AID MEASURES

4.1	IF IN EYES	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
4.2	IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
4.3	IF INHALED	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
4.4	IF SWALLOWED	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5: FIRE FIGHTING MEASURES

5.1	Flammability:	Non-combustible.
5.2	Products of Combustion:	Emits sodium oxide (Na ₂ O) fumes when heated to decomposition.
5.3	Fire Hazards in Presence of Various Substances:	Sodium carbonate can ignite and burn fiercely in contact with fluoride. Sodium carbonate in contact with fluorine decomposed at ordinary temperature with incandescence.
5.4	Fire Fighting Media and Instructions:	Use any appropriate means of fire extinguishing for surrounding media.
5.5	Sensitivity to Mechanical Impact:	Not sensitive.
5.6	Sensitivity to Static Discharge:	Not sensitive.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1	Containment:	Prevent large quantities of this product from contacting vegetation or waterways. Cover with plastic sheet to prevent spreading Pick up and transfer to properly labeled containers Keep in suitable and closed containers for disposal
6.2	Cleanup:	Sweep or vacuum up spillage and return to container. Pick up and transfer to properly labeled containers. Keep in suitable and closed containers for disposal. Avoid breathing dust.

SECTION 7: HANDLING AND STORAGE

7.1	Handling:	Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as acids.
7.2	Storage:	Hygroscopic. Keep container tightly closed. Keep container in a cool, well ventilated area.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1	Engineering Controls:	Use local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
8.2	Personal Protection Equipment:	
	8.2.1 Eyes:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Recommended: safety glasses with side-shields or face shield.
	8.2.2 Respiratory:	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: dust respirator for daily operation and self contained breathing apparatus should be used during a spill.
	8.2.3 Skin:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: coverall.
	8.2.4 Hands:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Recommended: nitrile rubber.
8.3	Exposure Limits:	
	8.3.1 Federal OSHA Guidelines:	Federal guidelines treat the ingredient(s) in this product as a nuisance dust, as no product-specific guidelines have been issued for exposure. As with all nuisance dusts, worker breathing zone concentrations should be measured by validated sampling and analytical methods.
	8.3.2 Particulates Not Otherwise Regulated:	OSHA (PEL / TWA): <ul style="list-style-type: none"> ▪ 15 mg/m³ (total dust) ▪ 5 mg/m³ (resp fraction)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	Appearance:	White crystalline solid or granules.
9.2	Odor:	Odorless.
9.3	Odor Threshold:	No information available.
9.4	pH:	11.4 (1% solution)
9.5	Melting Point:	851°C (1563.8°F).
9.6	Freezing point:	No information available.
9.7	Boiling Point & Boiling Range:	No information available.
9.8	Flash Point:	No information available.
9.9	Evaporation Rate:	No information available.
9.10	Flammability (solid, gas):	Not flammable
9.11	Upper / Lower Flammability or Explosive Limits:	No information available.
9.12	Vapor Pressure:	Not applicable.
9.13	Vapor Density:	Not applicable.
9.14	Relative Density (Specific Gravity):	0.86 - 1.12 g/cm ³ (Dense grades) 53.7 - 70 pounds /cubic foot (Bulk density)
9.15	Solubility in Water:	212 g/L water at 20°C
9.16	Partition Coefficient: (n-octanol / water):	No information available.
9.17	Auto-ignition Temperature:	No information available.
9.18	Decomposition Temperature:	No information available.
9.19	Molecular Weight:	106 g/mole
9.20	Viscosity:	No information available.

SECTION 10: STABILITY AND REACTIVITY

10.1	Stability:	Soda Ash is stable.
10.2	Instability Temperature:	Not available.
10.3	Conditions of Instability:	Incompatible materials, moisture
10.4	Incompatibility with Various Substances:	Reactive with acids. Slightly reactive with moisture. Avoid powdered aluminum.
10.5	Corrosivity:	Non-corrosive in presence of glass. Hot concentrated solutions of sodium carbonate are mildly corrosive to steel.
10.6	Special Remarks on Reactivity:	Hygroscopic. Combines with water with evolution of heat. Incompatible with phosphorus pentoxide, lithium, fluorine, fluoride, ammonia + silver nitrate, 2, 4, 6 trinitrotoluene, ammonia, acids, sodium sulfide + water, hydrogen peroxide, red hot aluminum metal, sodium sulfide, zinc, calcium hydroxide. Sodium Carbonate is decomposed by acids with effervescence. Reacts violently with fluorine gas, lithium, and 2, 4, 6 – trinitrotoluene. Sodium carbonate begins to decompose at 400°C to evolve CO ₂ .
10.7	Hazardous Decomposition Products:	Sodium oxides.
10.8	Hazardous Polymerization:	Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Routes of Entry:	Inhalation, ingestion.
11.2	Animal Toxicity:	
	11.2.1 Oral (LD ₅₀):	2800 mg/kg [rat]
	11.2.2 Dermal (LD ₅₀):	> 2000 mg/kg [rabbit]
	11.2.3 Inhalation (LC ₅₀):	800 mg/m ³ [guinea pig]
	11.2.4 Toxicity dust (LC ₅₀):	1200 mg/m ³ 2 hours [Mouse]. Toxic if inhaled.
11.3	Special Remarks on Toxicity:	LDLo (lowest published lethal dose) [Man] – Route: Oral; 714 mg/kg.
11.4	Acute Human Health Effects from Overexposure: May cause damage to the upper respiratory tract, skin, and eyes. Hazardous in case of skin contact (irritant), of ingestion, of inhalation (lung irritant).	
	11.4.1 Eyes:	Causes eye irritation and possible burns. Concentrated solutions may cause permanent corneal injury (permanent corneal opacity).
	11.4.2 Inhalation:	Dust may cause respiratory tract and mucous membrane irritation with coughing and shortness of breath (dyspnea) pulmonary edema.
	11.4.3 Dermal:	Causes skin irritation with possible burns depending on the concentration, site (abraded or intact skin), and duration of exposure.
	11.4.4 Ingestion:	Sodium carbonate ingestion may cause irritation of the digestive tract resulting in nausea, vomiting, diarrhea, thirst, abdominal pain depending on concentration and amount ingested. May also affect the cardiovascular system.
11.5	Chronic Human Health Effects from Overexposure:	Chronic inhalation may result in decreased pulmonary function, nasal congestion, nosebleeds, perforation of the nasal septum. Other effects of chronic exposure are skin (dermatitis and ulceration), and gastrointestinal complaints. However, the effects of chronic exposure seem to be reversible if exposure is decreased.
11.6	Special Remarks on Chronic Effects on Humans:	May cause adverse reproductive effects based on animal test data.
11.7	Carcinogenic [Cancer Potential] Information:	
	11.7.1 NTP (National Toxicological Program 6 th Annual Report on Carcinogens)	Not Listed.
	11.7.2 IARC (International Agency for Research on Cancer Monographs, V. 1-100)	Not Listed.
	11.7.3 OSHA (Occupational Safety & Health Administration)	Not Listed.
	11.7.4 ACGIH (American Conference of Governmental Industrial Hygienists)	Not Listed.
	11.7.5 Proposition 65, California only:	See Section 15.2.1

SECTION 12: ECOLOGICAL INFORMATION

12.1	Ecotoxicity:	
	12.1.1 Fish:	LC ₅₀ = 300 mg/L <i>Lepomis macrochirus</i> 96 h LC ₅₀ <310-1220 mg/L <i>Pimephales promelas</i> 96 h
	12.1.2 Daphnia and other Aquatic Invertebrates:	EC ₅₀ = 265 mg/L 48 h
	12.1.3 Algae:	242 mg/L EC ₅₀ 120 h (<i>Nitzschia</i>)
12.2	BOD and COD:	Not available.
12.3	Products of Biodegradation:	Biodegradation does not pertain to inorganic substances.
12.4	Toxicity of the Products of Biodegradation:	The products of degradation are less toxic than the product itself.
12.5	Mobility:	Dissociates into ions.

SECTION 13: DISPOSAL CONSIDERATIONS

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

SECTION 14: TRANSPORT INFORMATION

14.1	US D.O.T.	Not regulated.
14.2	Canada TDG (Transportation of Dangerous Goods)	Not regulated.
14.3	ICAO (International Civil Aviation Organization):	Not regulated.
14.4	IMO (International Maritime Organization) IMDG (International Maritime Dangerous Goods) Code:	Not regulated.



SECTION 15: REGULATORY INFORMATION

15.1 U.S. Regulations:																											
15.1.1	OSHA HAZCOM (Hazard Communication)	This product is considered hazardous under the HAZCOM Standard (29 CFR 1910.1200)																									
15.1.2	OSHA PSM (Process Safety Management)	Not regulated under PSM Standard (29 CFR 1910.119)																									
15.1.3	EPA FIFRA (Federal Insecticide, Fungicide and Rodenticide Act)	Not regulated as a pesticide.																									
15.1.4	SARA (Superfund Amendments and Reauthorization Act) 311/312	Acute Health Hazard.																									
15.1.5	EPA CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)	Not regulated as hazardous substances. RQ – none.																									
15.1.6	EPA TSCA (Toxic Substance Control Act)	Listed on the inventory.																									
15.1.7	EPA RCRA (Resource Conservation and Recovery Act)	Not Hazardous waste. See Section 13.																									
15.1.8	EPA RMP (Risk Management Plan)	Not regulated. (40 CFR 68.130)																									
15.2 State of California Regulations:																											
15.2.1	<p>Prop 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): This product has been evaluated by one of the manufacturers for compliance with California's Proposition 65. Several sodium carbonate samples of various product grades have been evaluated. Results of these tests indicate that exposure to this sodium carbonate product does not pose a significant risk of causing cancer or reproductive toxicity. Even though the manufacturer is confident no significant risk is present in this product, you are notified that the following listed chemicals are contained at a detectable level. This will assist you in evaluating your products and any obligations you may have under the law. The impurities shown below contain the indicated concentrations of chemicals listed by California as a chemical known to cause cancer (A) or reproductive toxicity (B). Also enclosed below are Non Significant Risk Levels (NSRL) for Proposition 65 carcinogens in regulation (Sections 25705 and 25709), in units of micrograms per day (µg/day). These levels provide "safe harbor" for persons subject to the Act, and do not preclude the use of alternative levels that can be demonstrated by their users as being scientifically valid. NSRLs represent the daily intake level calculated to result in a cancer risk of one excess case of cancer in 100,000 individuals exposed over a lifetime.</p> <table border="1"> <thead> <tr> <th>Product</th> <th>Prop. 65 Chemical</th> <th>Avg. Concentration (ppm)</th> <th>Detectable Limit (ppm)</th> <th>Prop 65 NSRL (µg/day)</th> <th>Listed Effect</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Sodium Carbonate</td> <td>Chromium (Cr)</td> <td>0.16</td> <td>0.10</td> <td>0.001 (inhalation)</td> <td>A</td> </tr> <tr> <td>Lead (Pb)</td> <td>0.36</td> <td>0.20</td> <td>15 (oral)</td> <td>A&B</td> </tr> <tr> <td>Nickel refinery dust (Ni)</td> <td>0.25</td> <td>0.05</td> <td>0.8</td> <td>A</td> </tr> </tbody> </table>					Product	Prop. 65 Chemical	Avg. Concentration (ppm)	Detectable Limit (ppm)	Prop 65 NSRL (µg/day)	Listed Effect	Sodium Carbonate	Chromium (Cr)	0.16	0.10	0.001 (inhalation)	A	Lead (Pb)	0.36	0.20	15 (oral)	A&B	Nickel refinery dust (Ni)	0.25	0.05	0.8	A
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15.2.2	Cal ARP (California Accidental Release Prevention):	Not regulated.																									
15.2.3	CDPR (California Department of Pesticide Regulation):	10897-50009-AA (California only)																									
15.3 Canada Regulations:																											
15.3.1	WHMIS (Workplace Hazardous Materials Information System):																										
	15.3.1.1	WHMIS Classification:	D2B - Poisonous and infectious material - Other effects – Toxic E - Corrosive material																								
	15.3.1.2	WHMIS Health Effects Criteria Met by this Chemical:	D2B - Eye irritation - toxic - other																								
	15.3.2	DSL (Domestic Substances List):	The substance is specified on the DSL.																								
15.4 International Inventory:																											

SECTION 15: REGULATORY INFORMATION

15.4.1	AICS (Australian Inventory of Chemical Substances):	On inventory or in compliance with inventory.
15.4.2	KECI (Korean Existing Chemicals Inventory):	On inventory or in compliance with inventory.
15.4.3	PICCS (Philippine Inventory of Chemicals and Chemical Substances):	On inventory or in compliance with inventory.
15.4.4	IECSC (Inventory of Existing Chemical Substances in China):	On inventory or in compliance with inventory.
15.4.5	NZIoC (New Zealand Inventory of Chemicals):	On inventory or in compliance with inventory.

SECTION 16: OTHER INFORMATION

16.1	HMIS III (Hazardous Materials Identification System):		
16.1.1	HEALTH	2	
16.1.2	FLAMMABILITY	0	
16.1.3	PHYSICAL HAZARD	0	
16.1.4	PERSONAL PROTECTION	See Section 8.	
16.2	NFPA 704 (National Fire Protection Association):		
16.2.1	HEALTH	2	
16.2.2	FLAMMABILITY	0	
16.2.3	INSTABILITY	0	
16.2.4	SPECIAL	None	
16.3	International Fire Code / International Building Code:	No information.	
16.4	ANSI (American National Standards Institute):		
16.4.1	Hazardous Industrial Chemicals - MSDS-Preparation:	Complies with ANSI Z400.1 – 2004.	
16.4.2	Hazardous Industrial Chemicals - Precautionary Labeling:	Complies with ANSI Z129.1 – 2006.	

Note: The information contained herein, while not guaranteed, was prepared by competent technical personnel and is true and accurate to the best of our knowledge and belief. NO WARRANTY OR GUARANTEE, express or implied, is made regarding the product performance, product stability, or as to any other condition of use, handling, transportation, and storage. Customer use, handling, transportation, and storage may involve additional safety and/or performance considerations. Our technical personnel will be happy to respond to questions regarding safe handling, storage, transportation, and use procedures. The safe handling, storage, transportation, and use procedures remain the sole responsibility of the customer. No suggestions for handling, storage, transportation, or use are intended as or to be construed as recommendations which may infringe on any existing patents or violate any Federal, State, and/or local law and/or regulation, ordinance, standard, etc. This Safety Data Sheet has been prepared by HASA, Inc. staff from test reports and other information available in the public domain.