SAFETY DATA SHEET

1. Chemical Product and Company Identification

Description:	Buffer Powder Pillows pH 10.01 ± 0.02 @ 25 °C
Product Code:	3821-9910, 3-0700.390
Product Type:	Crystalline Solid
Application:	Calibration of pH sensors

Manufacturer/Supplier Information
Manufactured for and SDS prepared by:
Georg Fischer Signet LLC
3401 Aero Jet Ave.
El Monte, California 91731

Date Prepared: 11/26/2018
For additional health, safety or regulatory information, call (626) 571-2770

For Chemical Emergency
Spill Leak Fire Exposure or Accident
Call CHEMTREC Day or Night

DOMESTIC NORTH AMERICA 800-424-9300

INTERNATIONAL, REFER TO THE INFORMATION CONTAINED HEREIN AND CALL YOUR LOCAL GF OFFICE

2. Hazard(s) Identification

GHS Classification:
Hazard Categories:

Acute Toxicity:	Serious
Eye Damage/Eye Irritation:	Eye Irrit. 2

GHS Label Elements:
Pictogram:

Signal Word:	**WARNING**
Hazard Statements:	Harmful if inhaled. Causes serious eye irritation.
Precautionary Statements:	Use only outdoors or in a well-ventilated area. Wear protective gloves / protective clothing /eye protection / face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear eye protection. If inhaled: Remove victim/person to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. 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 advice/attention.

HMIS

Health	Flammability	Reactivity
1	0	0

Protective Equipment: X - See protective equipment, Section 8.

NFPA

Health	Flammability	Reactivity
1	0	0

Symbol: Not applicable
WHMIS Hazard Classification: Class D, Division 2, Subdivision B – Toxic material
WHMIS Symbols: Other Toxic Effects

3. Composition/Information on Ingredients

Hazardous Components according to GHS:

Sodium Carbonate

CAS Number: 497-19-8
Chemical Formula: Na_2CO_3
GHS Classification: Eye Irrit. 2, H319; Acute Tox. Inh. 4, H332; Acute Tox. Orl. 5, H303
Percent Range: 50.0-60.0
Percent Range Units: weight / weight
PEL: Not established
TLV: Not established

WHMIS Symbols: Other Toxic Effects

Sodium Bicarbonate

CAS Number: 144-55-8
Chemical Formula: NaHCO3
GHS Classification:
Percent Range: 40.0 - 50.0
Percent Range Units: weight / weight
PEL: 15 mg/m^3 as inhalable dust; 5 mg/m^3 as respirable dust
TLV: 10 mg/m^3 as inhalable dust; 3 mg/m^3 as respirable dust

WHMIS Symbols: Not applicable

Dye, Turquoise Blue Pylaklor S-400

CAS Number: 1330-38-7
Chemical Formula: $C_{32}H_{14}CuN_8O_6S_2.2Na$
GHS Classification: Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335; Aquatic Chronic 3, H412
Percent Range: < 1
Percent Range Units: weight / weight
PEL: Not established
TLV: Not established

WHMIS Symbols: Acute Poison Flammable/Combustible

4. First Aid Measures

General Information:	In the event of exposure, show this Material Safety Data Sheet and label (where possible) to a doctor.
Notes to Physician:	Treat symptomatically.
Eye Contact:	Immediately flush eyes with water for 15 minutes. Call physician.
Skin Contact:	Remove contaminated clothing. Wash skin with soap and plenty of water. Call physician if irritation develops.
Inhalation:	Remove to fresh air.
Ingestion:	Do not induce vomiting. Give large quantities of water. Call physician immediately. Never give anything by mouth to an unconscious person.

5. Fire Fighting Measures

Flammable Properties:	During a fire, corrosive and toxic gases may be generated by thermal decomposition.
Fire Fighting Instruction:	As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.
Extinguishing Media:	Use media appropriate to surrounding fire conditions.
Extinguishing Media NOT To Be Used:	Not applicable
Fire / Explosion Hazards:	None reported
Hazardous Combustion Products:	Toxic fumes of: sodium monoxide, carbon monoxide, carbon dioxide.

6. Accidental Release Measures

Spill Response Notice:	Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance.
Containment Technique:	Stop spilled material from being released to the environment.
Clean-up Technique:	Sweep up material. Dilute with a large excess of water. Flush the spilled material to the drain with a large excess of water.
Evacuation Procedure:	Evacuate as needed to perform spill clean-up. If conditions warrant, increase the size of the evacuation.
D.O.T. Emergency Response Guide Number:	Not applicable

7. Handling and Storage

Handling:	Avoid contact with eyes and skin. Do not breathe dust. Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.
Storage:	Store at 10 – 30 °C. Protect from moisture.
Flammability Class:	Not applicable

8. Exposure Controls / Personal Protection

Engineering Measures:	Have an eyewash station nearby. Maintain general industrial hygiene practices when using this product.

Personal Protective Equipment

Eye/Face Protection:	Safety glasses with top and side shields
Skin and Body Protection:	Disposable latex gloves, lab coat
Inhalation Protection:	Adequate ventilation
Precautionary Measures:	Avoid contact with eyes and skin. Do not breathe dust. Wash thoroughly after handling. Protect from moisture.
TLV:	Not established
PEL:	Not established

For Occupational Exposure Limits (OEL) for ingredients, see section 3 - Composition/Information on Ingredients.

9. Physical and Chemical Properties

Appearance:	Light blue powder
Physical State:	Solid
Molecular Weight:	Not applicable
Odor:	Odorless
pH:	1% solution = 10.0
Vapor Pressure:	Not applicable
Vapor Density (air = 1):	Not applicable
Boiling Point:	Not applicable
Melting Point:	160 °C (decomposes)
Specific Gravity/Relative Density (water = 1; air = 1):	2.35
Evaporation Rate (water = 1):	Not applicable
Volatile Organic Compounds Content:	Not applicable
Partition Coefficient (n-octanol / water):	Not applicable
Solubility:	
Water:	Soluble
Acid:	Soluble
Other:	Not determined
Metal Corrosivity:	
Corrosivity Classification:	Not classified as corrosive to metals according to GHS criteria.
Steel:	Not determined
Aluminum:	Not determined
Coefficient of Water / Oil:	Not applicable
Flammable Properties:	During a fire, corrosive and toxic gases may be generated by thermal decomposition.
Flash Point:	Not applicable
Method:	Not applicable
Flammability Limits:	
Lower Explosion Limits:	Not applicable
Upper Explosion Limits:	Not applicable
Autoignition Temperature:	Not applicable
Explosive Properties:	Not classified according to GHS criteria.
Oxidizing Properties:	Not classified according to GHS criteria.
Reactivity Properties:	Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.
Gas under Pressure:	Not classified according to GHS criteria.

10. Stability and Reactivity

Chemical Stability: Stable when stored under proper conditions.
Conditions to Avoid: Excess moisture, heat
Reactivity / Incompatibility: Incompatible with lithium oxidizers, strong acids
Hazardous Decomposition: Heating to decomposition releases toxic fumes of carbon monoxide and carbon dioxide.
Hazardous Polymerization: Will not occur

11. Toxicological Information

Toxicokinetics, Metabolism and Distribution: No information available for mixture.
Toxicologically Synergistic Products: None reported
Acute Toxicity: Acute Toxicity Estimate (ATE) - Calculated from Ingredient Toxicity Data

ATE(Mix) Oral LD50 = 3741mg/kg
ATE(Mix) Inhalation LD50 = 1.73mg/L

Specific Target Organ Toxicity – Single Exposure (STOT-SE): Based on classification principles, the classification criteria are not met.
Specific Target Organ Toxicity – Repeat Exposure (STOT-RE): Based on classification principles, the classification criteria are not met.
Skin Corrosion/Irritation: Irritating to skin
Eye Damage: Irritating to eyes
Sensitization: Based on classification principles, the classification criteria are not met.

CMR Effects/Properties (carcinogenic, mutagenic or toxic to reproduction):
No germ cell mutagenicity, carcinogenicity or reproductive toxicity data found.
This product does NOT contain any IARC listed chemicals.
This product does NOT contain any NTP listed chemicals.
This product does NOT contain any OSHA listed carcinogens.

Symptoms/Effects:
Ingestion: May cause gastrointestinal tract irritation, nausea, vomiting, and/or diarrhea. Very large doses may cause: alkalosis which causes abnormally high alkali reserve of the blood and other body fluids
Inhalation: May cause respiratory tract irritation
Skin Absorption: No effects anticipated
Chronic Effects: None reported
Medical Conditions Aggravated: Pre-existing: Eye conditions, Skin conditions, Respiratory conditions

12. Ecological Information

Product Ecological Information: No ecological data available for this product.
Ingredient Ecological Information:
Sodium Carbonate: Lepomis macrochirus 96 hr LC50 = 300 mg/L; Daphnia magna 48hr EC50 = 265mg/L;
Sodium Bicarbonate: 96 hr Lepomis macrochirus LC50 = 7100 mg/L; 96 hr Oncorhynchus mykiss LC50 = 7700 mg/L; 48 hr Daphnia magna EC50 = 4100 mg/L
CEPA Statement: Sodium Carbonate, Sodium Bicarbonate, Turquoise Blue Pylaklor S-400 Dye: Persistent, not bio accumulative or inherently toxic to aquatic organisms.

13. Disposal Considerations

EPA Waste ID Number: Not applicable

Special Instructions (Disposal): Dilute material with excess water making a weaker than 5% solution. Adjust to a pH between 6 and 9 with an acid, such as sulfuric or citric. Open cold water tap completely, slowly pour the reacted material to the drain. Allow cold water to run for 5 minutes to completely flush the system.

Empty Containers: Rinse three times with an appropriate solvent. Dispose of empty container as normal trash.

NOTICE (Disposal): These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information. In Europe: Chemical and analysis solutions must be disposed of in compliance with the respective national regulations. Product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

14. Transport Information

D.O.T.:

D.O.T. Proper Shipping Name: Not Currently Regulated
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DOT Hazard Class: Not applicable
DOT Subsidiary Risk: Not applicable
DOT ID Number: Not applicable
DOT Packing Group: Not applicable

I.C.A.O.:

I.C.A.O. Proper Shipping Name: Not Currently Regulated
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ICAO Hazard Class: Not applicable
ICAO Subsidiary Risk: Not applicable
ICAO ID Number: Not applicable
ICAO Packing Group: Not applicable

I.M.O.:

I.M.O. Proper Shipping Name: Not Currently Regulated
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I.M.O. Hazard Class: Not applicable
I.M.O. Subsidiary Risk: Not applicable
I.M.O. ID Number: Not applicable
I.M.O. Packing Group: Not applicable

T.D.G.:

Proper Shipping Name: Not Currently Regulated
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Hazard Class: Not applicable
Subsidiary Risk: Not applicable
ID Number: Not applicable
Packing Group: Not applicable

Additional Information: There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

15. Regulatory Information

U.S. Federal Regulations:

O.S.H.A.: This product meets the criteria for a hazardous substance as defined in the Hazard Communication Standard. (29 CFR 1910.1200)

E.P.A.:

S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370): Immediate (Acute) Health Hazard

S.A.R.A. Title III Section 313 (40 CFR 372): This product does NOT contain any chemical subject to the reporting requirements of Section 313 of Title III of SARA.

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302 (EHS) TPQ (40 CFR 355): Not applicable
304 CERCLA RQ (40 CFR 302.4): Not applicable
304 EHS RQ (40 CFR 355): Not applicable
Clean Water Act (40 CFR 116.4): Not applicable
RCRA: Contains no RCRA regulated substances.

State Regulations:

California Prop. 65: No Prop. 65 listed chemicals are present in this product.
Identification of Prop. 65 Ingredient(s): None
California Perchlorate Rule CCR Title 22 Chap 33: Not applicable
Trade Secret Registry: Not applicable

National Inventories:

U.S. Inventory Status: All ingredients in this product are listed on the TSCA 8(b) Inventory (40 CFR 710).
CAS Number: Not applicable

16. Disclaimer

It is the responsibility of the Distributor, Dealer, or Agent to provide a current copy of the SDS to the Consumers of Georg Fischer Piping Systems products. The information contained herein is presented in good faith and has been compiled from sources believed to be reliable. It represents the best information currently available to us. No warranty express or implied, or merchantability, fitness or otherwise is made and we assume no liability resulting from its use. This information is offered for your consideration and users should make their own investigation and verification to determine the suitability of the information for their particular purposes. In no event shall Georg Fischer Piping Systems, the parent company or its subsidiaries be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Georg Fischer Piping Systems has been advised of the possibility of such damages. This information relates to the material designated and may not be valid for such material used in combination with any other materials nor in any process.

Revision

Date of latest revision:	11/26/2018
Responsibility for SDS:	S.K. Wells

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