

Material Safety Data Sheet

Version No.: 3.0 (Rev. date: 2022-09-27)

20X SSC

1. Product and company identification

A. Product Name: 20X SSC

B. Recommended Use: Research Use Only

C. Supply Information

O Company: Bioneer

O Address: 8-11, Munpyeongseo-ro, Daedeok-gu, Daejeon 306-220, Republic of Korea

○ Emergency telephone number: +82-42-930-8777

2. Hazards identification

A. Classification of the substance or mixture

Skin corrosion/irritation, Category 1 H314

Serious eye damage/eye irritation, Category 1 H318

- B. Label elements
 - Hazard pictograms



Signal word

Danger

Hazard statements

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

O Precautionary statements

Precaution:

P260 Do not breathe gas, mist, dust, spray, vapors, fume.

P264 Wash hands thoroughly after handling.

P280 Wear eye protection, protective clothing, protective gloves.

Treatment:

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.



P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P304+P340 IF INHALED: Remove person to fresh air and keep 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 medical institutions, a doctor, a POISON CENTER.

P321 Take dry extinguishing powder treatment.

P363 Wash contaminated clothing before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents and container according to waste related regulations.

C. Hazards - Other hazards which do not result in classification - Hazard Risk

Not applicable

3. Composition/information on ingredients

Chemical name	Synonyms	CAS No.	Weight (%)
Sodium chloride		7440-23-5	< 25%
Sodium citrate		6132-04-3	< 15%

4. First aid measures

A. First-aid measures after eye contact

Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Call a physician immediately.

B. First-aid measures after skin contact

Rinse skin with water/shower.

Take off immediately all contaminated clothing.

Call a physician immediately.

C. First-aid measures after inhalation

Remove person to fresh air and keep comfortable for breathing.

D. First-aid measures after ingestion

Rinse mouth.

Do not induce vomiting.

Call a physician immediately.

E. Other medical advice or treatment

Treat symptomatically.



5. Fire-fighting measures

A. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Water spray, dry powder, foam, carbon dioxide.

Unsuitable extinguishing media: No data available

B. Special hazards arising from the substance or mixture

No data available

C. Special protective equipment and precautions for fire-fighters

Protection during firefighting:

Do not attempt to take action without suitable protective equipment.

Self-contained breathing apparatus.

Complete protective clothing.

6. Accidental release measures

A. Personal precautions, protective equipment and emergency procedures

Ventilate spillage area.

Avoid contact with skin and eyes.

Do not breathe gas, mist, dust, spray, vapors, fume.

Do not attempt to take action without suitable protective equipment.

Dispose of materials or solid residues at an authorized site.

B. Environmental precautions and protective procedures

Avoid release to the environment.

C. Methods and material for containment and cleaning up

Take up liquid spill into absorbent material.

7. Handling and storage

	Α.	Precautions	for	safe	handlin
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O Precautions for safe handling

Ensure good ventilation of the work station.

Avoid contact with skin and eyes.

Do not breathe gas, mist, dust, spray, vapors, fume.

Wear personal protective equipment.

Hygiene measures

Wash contaminated clothing before reuse.

Do not eat, drink or smoke when using this product.

Always wash hands after handling the product.

B. Conditions for safe storage

Storage conditions



Store locked up.

Store in a well-ventilated place.

Keep cool.

8. Exposure controls / personal protection

A. Occupational Exposure Limits

No data available

B. Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the work station.

Environmental exposure controls: Avoid release to the environment.

C. Personal protection

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment

Eye protection: Safety glasses
Hand protection: Protective gloves

Skin and body protection: Wear suitable protective clothing

9. Physical and chemical properties

A. Appearance: Liquid

B. Odor: No data available

C. Odor threshold: No data available

D. pH: No data available

E. Melting / freezing point: Not applicable / No data available

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): Not applicable

J. Upper / lower flammability or explosive limits: No data available

K. Vapor pressure: No data available

L. Solubility: No data available

M. Vapor density: No data available

N. Relative density: No data available

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. Molecular mass: No data available

10. Stability and Reactivity



A. Chemical stability and Possibility of hazardous reactions

The product is non-reactive under normal conditions of use, storage and transport.

Stable under normal conditions.

No dangerous reactions known under normal conditions of use.

B. Conditions to avoid

None under recommended storage and handling conditions.

C. Incompatible materials

No data available

D. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

A. Information on exposure routes

Oral: Not classified

Skin and eyes contact: Causes severe skin burns. Causes serious eye damage.

Inhalation: Not classified

B. Health hazards

Acute toxicity (oral): Not classified

Acute toxicity (dermal): Not classified

Acute toxicity (inhalation): Not classified

Skin corrosion/irritation: Causes severe skin burns

Serious eye damage/irritation: Causes serious eye damage

Respiratory sensitization: Not classified

Skin sensitization: Not classified

Carcinogenicity: Not classified

Mutagenicity: Not classified

Reproductive toxicity: Not classified

STOT-single exposure: Not classified

STOT-repeated exposure: Not classified

Aspiration hazard: Not classified

12. Ecological information



A. Exotoxicity

Ecology – general: Before neutralization, the product may represent a danger to aquatic organisms.

Hazardous to the aquatic environment, short-term (acute): Not classified

Hazardous to the aquatic environment, long-term (chronic): Not classified

B. Persistence and degradability

No data available

C. Bioaccumulative potential

No data available

D. Mobility in soil

No data available

E. Other adverse effects

Ozone: Not classified

Other adverse effects: No additional information available

13. Disposal considerations

A. Disposal method

Dispose of contents/container in accordance with licensed collector's sorting instructions.

B. Disposal precaution

No data available

14. Transport information

UN RTDG	ADR	IMDG	IATA				
A. UN number							
1428	Not applicable	1428	1428				
B. UN proper shipping	B. UN proper shipping name						
SODIUM	Not applicable	SODIUM	SODIUM				
C. Transport hazard class(es)							
4.3	Not applicable	4.3	4.3				
D. Packaging group							
I	Not applicable	I	I				
E. Marine pollutant							
Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the				
environment: No	environment: No	environment: No	environment: No				
		Marine pollutant: No					
No supplementary information available							

A. Special precautions for user: No data available



15. Regulatory information

A. Occupational Safety and Health Act

Hazardous Substances Prohibited for Manufacturing: Not applicable

Hazardous Substances Requiring Permission: Not applicable

Threshold Limit Values Chemicals: Not applicable

Hazardous Substances Below Permissible Level: Not applicable

Hazardous Substances Subject to Working Environment Measurement: Not applicable Hazardous Substances Subject to Workers Requiring Health Examination: Not applicable

Hazardous Substances Subject to Control: Not applicable Substance Subject to PSM Submission: Not applicable

B. Chemicals Control Act

Toxic Chemicals: Not applicable
Prohibited Chemicals: Not applicable
Restricted Chemicals: Not applicable

Substance requiring preparation for accidents: Not applicable

C. ACT ON REGISTRATION, EVALUATION, ETC. OF CHEMICALS (K-REACH)

Korea Existing Chemicals Inventory (KECI): Applicable

Priority Existing Chemical ('PEC') - subject to registration: Applicable

Priority Control Substances (Korea): Not applicable

CMR Substances (Korea): Not applicable

D. Safety Control of Dangerous Substances Act

Safety Control of Dangerous Substances Act: Applicable

E. Wastes Control Act

Hazardous Substances in Designated wastes: Not applicable

Types of wastes: No data available

- F. Other Domestic and International Regulatory Information
 - Domestic

Persistent Organic Pollutants(POPs) Control Act: Not applicable

Ozone Depleting Substances(ODS): Not applicable

International (EU Regulatory Information)

EU Candidate list (SVHC): Contains no substance on the REACH candidate list

EU authorization list (REACH Annex XIV): Contains no REACH Annex XIV substances

EU restriction list (REACH Annex XVII): Not applicable

O US Regulatory Information

CERCLA Section 103 (40CFR302.4): Contains listed substances

EPCRA Section 302 (40CFR355.30): Not applicable





EPCRA Section 304 (40CFR355.40): Not applicable EPCRA Section 313 (40CFR372.65): Not applicable

International agreements
 No data available

16. Other information

Bioneer Corporation makes no warranty or representation to its completeness, accuracy or currency. This material is intended for use by persons with pertinent technical skills and at their discretion and risk. It is the responsibility of the user to determine the product's suitability for its intended use, the product's safe use, and the product's proper disposal. Disposal of hazardous material may be subject to federal, state or local laws or regulations.