POWER SI BLOOM

SAFETY DATA SHEET

Date of Compilation: 03.02.2021 Revision No.: 00 Version: EN/01

SECTION 1: Identification of the mixture and of the company/undertaking

1.1. Product identifier

Product / Trade name: POWER SI BLOOM

1.2. Relevant identified uses of the mixture and uses advised against

Relevant identified uses:

Used as Multi-nutrient Fertilizer

Uses advised against:

No information available

1.3. Details of the supplier of the safety data sheet

Manufacturer:

Canopy-Crop Management

Canopy-Crop Management 930 W. 7th Ave., Suite A Denver, CO 80204

1.4. Emergency telephone number:

Company Phone Number: +91-(022)-3304-3500

+91-99302-62705 (IST 09.30AM- 5.30PM) (Language: English)

SECTION 2: Hazards identification

2.1. Classification of the mixture

WHMIS GHS Classification:

Serious Eye Damage Cat. 1

Severe Skin Burns Cat. 1B

HHNOC Respiratory Damage Cat. 1

Reproductive Toxicity Cat. 1B

STOT SE Respiratory Irritation Cat. 3

2.2. Label elements

Labeling according to GHS	
Hazard pictogram:	
Signal word:	Danger
Hazard statements:	CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. CAUSES SERIOUS RESPIRATORY TRACT DAMAGE. MAY CAUSE RESPIRATORY IRRITATION MAY DAMAGE FERTILITY OR THE UNBORN CHILD.
Precautionary statements:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe fume, mist, vapours or spray. Wash exposed areas thoroughly after handling. Wear protective gloves, protective clothing and eye and face protection.

Use only outdoors or in a well-ventilated area. Call a POISON CENTER or doctor if you feel unwell.

Store locked up. Dispose of contents in accordance with applicable regulations.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or obtain emergency medical attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy
to do. Continue rinsing. Immediately obtain emergency medical attention.

2.3. Other hazards

Not known

SECTION 3: Composition/information on ingredients

3.1. Mixture

CAS number	Name	Weight % content	Classification according to WHMIS GHS
1312-76-1	Potassium silicate liquid	16.31 % w/w	Serious Eye Damage Cat. 1 Severe Skin Burns Cat. 1B STOT SE Respiratory Irritation Cat. 3
57-13-6	Urea Prills	16.31% w/w	Not classified
7664-38-2	Phosphoric Acid	9.44 % w/w	Serious Eye Damage Cat. 1 Severe Skin Burns Cat. 1B HHNOC Respiratory Damage Cat. 1 Corrosive to Metals Cat. 1 Acute Oral Toxicity Cat. 4
84775-78-0	Seaweed Extract powder	4.29 % w/w	Not classified
7446-19-7	Zinc Sulfate	1.72 % w/w	Serious Eye Damage Cat. 1 STOT SE Respiratory Irritation Cat. 3 Acute Oral Toxicity Cat. 4
10043-35-3	Boric Acid	0.43% w/w	Reproductive Toxicity Cat. 1B STOT SE Respiratory Tract Cat. 3 Acute Inhalation Toxicity Cat. 4

SECTION 4: First aid measures

4.1. Description of first aid measures

following inhalation:

Immediately remove casualty to fresh air and keep them warm. If breathing has stopped, and if safe to do so, apply artificial resuscitation using a barrier device. Seek medical attention if symptoms persist or develop

following skin contact:

Immediately remove any contaminated clothing, including jewellery, and rinse affected area with plenty of water, or soap and water, for at least 15 minutes. Seek medical attention if symptoms persist or develop

following eye contact:

Immediately rinse the affected eye with plenty of water or eye wash fluid for at least 15 minutes while separating the eyelids. Remove contact lenses if safe and easy to do so and continue rinsing. Avoid contaminated water coming into contact with the other eye or face. Seek medical attention if symptoms persist or develop

following ingestion:

Do NOT induce vomiting. Rinse out mouth with water if casualty is fully conscious. Seek medical attention if symptoms persist or develop

Self-protection of the first aider:

Ensure that medical personnel / first aiders are aware of the material involved, take precautions to protect themselves and prevent spread of contamination

notes for the doctor:

Treat symptomatically

4.2. Most important symptoms and effects, both acute and delayed

May cause skin and eye irritation

4.3. Indication of any immediate medical attention and special treatment needed

No information available

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media: Water spray or fog, Foam, Dry chemical powder, Carbon dioxide.
Unsuitable extinguishing media: No information available

5.2. Special hazards arising from the substance

Carbon monoxide and other harmful gases may be formed upon combustion.

5.3. Advice for fire-fighters

Self-contained breathing equipment. Individual protective equipment (gloves, boots (chemical resistant) and suitable clothing). Seek emplacement with your back against the wind.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with the eyes, skin and clothing. Do not act without appropriate protective equipment.

6.2. Environmental precautions

Use appropriate containment to avoid environmental contamination.

6.3. Methods and material for containment and cleaning up

Small spillage: Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations.
Large spillage: Large spills should be collected mechanically (remove by pumping) for disposal.

Finish cleaning by spreading water on the contaminated surface and allow evacuating through the sanitary system

6.4. Reference to other sections

Please see Section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not ingest. Wear suitable protective clothing.
If ingested, seek medical advice immediately. Keep away from incompatibles such as oxidizing agents.

Hygiene Measures:
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed and sealed until ready for use. Store in original containers. Store in a well-ventilated area. Store away from incompatible materials. Protect containers against physical damage and check regularly for leaks.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values:

No data available for the product (i.e. mixture) as a whole
Available data on ingredients are as follows:

Substance	Zinc and its compounds, inorganic, inhalable aerosol
CAS No.	7440-66-6
Remarks	as Zn

	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
Germany (DFG)		2 (1)		4 (1)(2)
				2 (1)(2)(3)

	Remarks
Germany (DFG)	(1) Inhalable fraction (2) 15 minutes average value (3) Zinc chloride

Substance	Zinc and its compounds, inorganic, respirable aerosol
CAS No.	7440-66-6
Remarks	as Zn

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People's Republic of	1	3 (1)

Remarks	as B

Switzerland	1.8 (1)	1.8 (1)(2)

8.2. Exposure controls

Appropriate engineering controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of ingredients below the occupational exposure limits indicated above. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Individual protection measures:

Eye/face protection:

Use tight-fitting goggles, face shield or safety glasses (Conforming to law/standard of the country in which the product is being handled or used) with side shields if eye contact might occur.

Skin/Hand protection:

Avoid skin contact. Use chemically resistant gloves (of material: Natural rubber, Neoprene, Butyl, PVC, Nitrile or Viton) tested or conforming according to law/standard of the country in which the product is being handled or used. Also wear boots, and apron if risk of splashing.
Minimum Thickness of Gloves material preferred: 0.3 mm
When prolonged or frequently repeated contact may occur, a glove with breakthrough time greater than 240 minutes is recommended.
When only brief contact is expected, a glove with breakthrough time greater than 60 minutes is recommended

Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure, an approved, properly fitted respirator (for Inorganic vapours and Particulates) should be used

Thermal Hazards:

No information available

Environmental exposure controls:

Do not allow run-off from fire fighting to enter drains or water courses

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Clear & Viscous Liquid

Colour	Translucent, amber colour
Odour	Characteristic
Odour Threshold	No data available
pH (1% soln/water)	2.0 – 3.0
Melting point / Freezing point	No data available
Boiling point	No data available
Flash point	>190°C
Evaporation rate	No data available
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Relative Density	1.0825 – 1.1500 (Water = 1)
Solubility	Soluble in water
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	Non-explosive
Oxidizing properties	Non-oxidising

9.2. Other information

Not available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal temperatures and pressures. The product is reactive with the incompatible materials (please refer section 10.5).

10.2. Chemical stability

Stable under normal temperatures and pressures

10.3. Possibility of hazardous reactions

Hazardous polymerization cannot occur.

10.4. Conditions to avoid

No information available

10.5. Incompatible materials

Strong oxidizing agents, bases

10.6. Hazardous decomposition products

Carbon monoxide and other harmful gases may get released upon combustion.

SECTION 11: Toxicological information

The product has not been tested for its toxicological properties. The toxicological information / data provided below is publicly available.

11.1. Information on toxicological effects

Acute toxicity:

No animal test data is available for the Mixture as a whole

Information on the ingredients:

Ingredient	Route of Exposure	Effect Dose	Value	Species	Method
Zinc Sulfate	Oral	LD50	LD50 (Oral rat): 2150 mg/kg	Rat	OECD Guideline 401, with some deviations
Zinc Sulfate	Eye		OECD 405-rabbit eye: serious damage		
Phosphoric Acid	Oral	LD50	1530 mg/kg	Rat	No information available
Zinc Sulfate	Dermal	LD50	> 2000 mg/kg bw	Rat	OECD Guideline 402, with some deviations
Phosphoric Acid	Dermal	LD50	2740 mg/kg bw	Rabbit	No information available
Zinc Sulfate	Inhalation	LC50	No data available		
Phosphoric Acid	Inhalation (4hr)	LC50	0.9615 mg/L (Source: SIDS 2011), rat		
Seaweed Extract	Oral	LD50	No Data available	Rat	No Data available
Seaweed Extract	Dermal	LD50	No Data available	Rat	No Data available
Potassium silicate	Oral	LD50	(Oral rat): >5000 mg/kg		
Potassium silicate	Dermal	LD50	(Dermal rat): >5000 mg/kg		
Boric Acid	Oral	LD50	2660 mg/kg bw	Rat	No information available
Boric Acid	Dermal	LD50	> 2000 mg/kg bw	Rabbit	FIFRA (40 CFR 163)
Boric Acid	Inhalation (4hr)	LC50	> 2.03 mg/L	Rat	OECD Guideline 403
Urea prills	Oral	LD50	(Oral rat): 8471 mg/kg		

Acute Oral Toxicity Estimate for the product (ie Mixture): 13420.6 mg/kg bw
4.29% of the mixture consists of an ingredient of unknown oral toxicity

Acute Dermal Toxicity Estimate for the product (ie Mixture): 23046.5 mg/kg bw
20.6% of the mixture consists of an ingredient of unknown dermal toxicity

Acute Inhalation Toxicity Estimate for the product (ie Mixture): > 2 mg/kg bw
90.13% of the mixture consists of an ingredient of unknown inhalation toxicity

Skin corrosion/irritation:

No animal test data is available for the Mixture as a whole

Data on phosphoric acid:
In one of the study conducted in accordance with or similar to 1500.41 in the Federal Register Vol. 38, No. 187, S. 26019 from 1973-09-27, 80% phosphoric acid was found corrosive to Rabbit skin

Serious eye damage/irritation:

No animal test data is available for the Mixture as a whole

Data on Zinc Sulphate:
In a well-performed eye irritation/corrosion study, conducted according to Directive 92/69/EEC B.5 and OECD guideline 405, three male New Zealand White rabbits were treated by instillation of approximately 98.1 mg of zinc sulphate (ZnSO4.7H2O) into the conjuctival sac of one eye. Corneal

injury was seen as slight dulling of the normal lustre (opacity grade 0) and/or epithelial damage (10% of the corneal area) in two animals. This injury had resolved within 24 hours in one animal and within 72 hours in the other animal. Irritation of the conjuctivae was seen as redness (mean scores over 24-72 hours 2, 2.7 and 2.7), chemosis (mean scores 2, 2.7 and 3.7) and discharge.

Respiratory or skin sensitization:

No reliable data available or the data is conclusive but not meeting the criteria of classification

Germ cell mutagenicity:

No reliable data available or the data is conclusive but not meeting the criteria of classification

Carcinogenicity:

No reliable data available or the data is conclusive but not meeting the criteria of classification

Reproductive toxicity:

No animal test data is available for the Mixture as a whole

A multigeneration study with the test substance 'Boric acid' in the rat (Weir, 1966) on gave a NOAEL for fertility in males of 17.5 mg B/kg/day. Rats exposed to the high dose of 336 mg/kg bw boric acid (corresponding to a level of 58.5 mg B/kg bw) were sterile. Microscopic examination of the atrophied testes of all males in this group showed no viable sperm. The authors also reported evidence of decreased ovulation in about half of the ovaries examined from the females exposed to 58.5 mg B/kg bw and only 1/16 matings produced a litter from these high dose females when mated with control male animals. There were no adverse effects on reproduction reported at exposures of 34 and 100 mg/kg bw boric acid (5.9 and 17.5 mg B/kg bw).

Developmental toxicity / teratogenicity of Boric Acid:
A benchmark dose developed by Allen et al. (1996) was based on the studies of Heindel et al. (1992), Price, Marr & Myers (1994) and Price et al. (1996). The benchmark dose is defined as the 95 % lower bound on the dose corresponding to a 5 % decrease in the mean fetal weight (BMDL05). The BMDL05 of 10.3 mg/kg body weight per day as boron is close to the Price et al. (1996) NOAEL of 9.6 mg/kg body weight per day.

STOT-single exposure: No reliable data available or the data is conclusive but not meeting the criteria of classification

STOT-repeated exposure: No reliable data available or the data is conclusive but not meeting the criteria of classification

Aspiration hazard: The data is conclusive but not meeting the criteria of classification

SECTION 12: Ecological information

The product has not been tested for its ecological properties. The ecological information / data provided below is publicly available and from reliable sources of information.

12.1. Toxicity

No test data is available for the Mixture as a whole. None of the ingredients are toxic or harmful to aquatic organisms

12.2. Persistence and degradability

The material is expected to be readily biodegradable

12.3. Bioaccumulative potential

The material is expected to have either no or low bioaccumulative potential.

12.4. Mobility in soil

The product is water soluble, and may spread in water systems Will likely be mobile in the soil due to

its water solubility.

12.5. Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of contents/container in accordance with local/regional/national regulation. Incineration should only be considered when recycling is not feasible

Contaminated Packaging: Dispose of this container to hazardous or Chemical waste collection point

Do not empty into drains. Do not dispose of waste into sewer. Large amounts will affect pH and harm aquatic organisms

For the safety of persons conducting disposal, recycling or reclamation activities, please refer to Section 8

SECTION 14: Transport information

The material is regulated by ADR/RID/ADN/IATA/IMDG

Regulation	ADR/RID/AND/ ICAO-TI/IATA-DGR	IMDG Code
14.1. UN Number	1760	1760
14.2. UN proper shipping name	CORROSIVE LIQUID, N.O.S. (Contains phosphoric acid solution)	CORROSIVE LIQUID, N.O.S. (Contains phosphoric acid solution)
14.3. Transport hazard class(es)	8	8
14.4. Packing group	II	II
14.5. Environmental hazards	No	No
14.6. Special precaution for users	Keep containers upright	Keep containers upright
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC code	No information available	No information available

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the Mixture

No information available

SECTION 16: Other information

Key literature references and sources for data:

eChemPortal

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