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

Product identifier			
Product name	Itaconix [®] DSP 2K [®]		
	Itaconix [®] DSP 2K [®] G, Itaconix [®] DSP 2K [®] Q, Itaconix [®] DSP 2K [®] U		
Product CAS number	26099-89-8		
Other identification	Poly (sodium itaconate), Poly (itaconic acid, sodium salt), Sodium polyitaconate,		
	Butanedioic acid, 2-methylene-, homopolymer, sodium salt		
Relevant identified uses of	f the substance or mixture and uses advised against		
Recommended use	Water conditioning. Metal chelant. Calcium chelant. Scale inhibitor. For		
	use in detergent and cleaner formulations		
Uses advised against	None – assess for suitability before use		
Details of the supplier of the safety datasheet			
Company	Itaconix Corporation		
Address	2 Marin Way, Stratham, NH 03885, USA		
Telephone	+1 (603) 775-4400		
E-mail	info@itaconix.com		
Emergency Telephone Nur	nber		
	+1 (603) 775-4400 (Monday – Friday 09:00 – 17:00 US EST)		
SECTION 2: Hazards identi	fication		
GHS Classification of the substance or mixture			
Classification (29 CFR 1910.1200)			
Not classified as hazardous			
GHS Label elements			

Labelling (29 CFR 1910.1200)The product does not need to be labelledHazard pictogramsNoneSignal wordNoneHazard statements Precautionary statementsNone

Other hazards

The mixture contains <0.1% of unknown impurities

SECTION 3: Composition/information on ingredients

Mixtures

Chemical name	CAS number	Classification	Concentration
Poly (itaconic, sodium salt)	26099-89-8	None	~85%
Water	7732-18-5	None	~15%

SECTION 4: First aid

Description of first aid measures

If inhaled	Move person to fresh air. If respiratory symptoms develop, call a physician.	
In case of skin contact	Flush skin with water.	
In case of eye contact	Rinse immediately with plenty of water and seek medical advice.	
If ingested	Do not induce vomiting, rinse mouth with water. If large quantities of this material are swallowed, call a physician.	
First aid responders shall	wear standard personal protective equipment (safety glasses, medical examination gloves)	
Most important symptoms and effects, both acute and delayed		
Symptoms None known		
Indication of any immediate medical attention and special treatment needed		
Treatment	Treat symptomatically.	
SECTION 5: Firefighting meas	sures	
Extinguishing media Suitable extinguishing me	dia Use extinguishing measures that are appropriate to local	

ble extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

Specific hazards during firefighting: decomposition products may be produced such as carbon oxides

Advice for firefighters

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.



SECTION 6: Accidental release measures

Personal precautions protective equipment and emergency procedures

Use personal protective equipment in accordance with good industrial practices (gloves, eye protection, labcoat/overalls, dust mask). Provide sufficient ventilation and control dust.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain/absorb with non-combustible absorbent material (e.g., sand, earth, vermiculite, chemical absorbent). Vacuum, or sweep up and shovel into suitable containers for disposal.

SECTION 7: Handling and storage

Precautions for safe handling

Normal measures as prevention against fire. Minimize exposure to dust in accordance with good industrial practices. Wear appropriate PPE. Wash hands thoroughly after handling. Do not eat, drink nor smoke in work areas. Wash hands before breaks and at the end of workday.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed to avoid contamination. Store in a cool place below 45C. No special restrictions on storage with other products.

SECTION 8: Exposure controls/personal protection

Control parameters

Contains no substances with occupational exposure limit values (No OSHA and no ACGHIH TLV).

Exposure controls

Appropriate engineering controls: Ensure good ventilation. Arrange for eye wash (recommended). Handle in accordance with good industrial hygiene and safety practice.

Personal protective equipment: Eye and hand protection, laboratory lab coat or overalls are recommended.

Respiratory protection: In case of dust, wear dust mask (N95 or equivalent or better).



Eye/face protection: Safety glasses with side-shields conforming to NIOSH (US) or EN166 are recommended.

Hand protection: Handling with gloves is recommended. Nitrile gloves are suitable.

Skin protection: Laboratory coat or overalls are recommended.

Environmental exposure control: minimize release of material to drains, ground or surface water.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

	a) Physical state	S
	b) Color	C
	c) Odor and odor threshold	Ν
	d) Melting point/freezing point	Ν
	e) Boiling point	Ν
	f) Flammability (solid, gas)	Ν
	g) Upper/Lower flammability or explosive limits	Ν
	h) Flash point	Ν
	h) Evaporation Rate	Ν
	i) Auto ignition temperature	Ν
	j) Decomposition temperature	Ν
	k) pH	5
	l) Kinematic Viscosity	Ν
	m) Solubility	F
	n) Partition coefficient: n-octanol/water	Ν
	o) Vapor pressure	Ν
	p) Density	B
	q) Vapor density	Ν
	r) Particle characteristic	Т
		5
	* Internal test protocol	
Ot	her safety information	

Solid granules Off-white No odor – no threshold No data available No data available No data available No data available Not applicable No data available No data available No data available 5.2 (@10% ag. solution)* Not applicable Highly water soluble No data available No data available Bulk 0.7g/cm^{3*} No data available Typical weight average particle size ~ 400 to 500 microns

Explosive propertiesNot explosive (St-0)Oxidizing propertiesNo ingredients have these properties

SECTION 10: Stability and reactivity

Reactivity

No data available.

Chemical stability

Stable product under recommended storage and handling conditions.

Possibility of hazardous reactions

None known under normal processing.

Conditions to avoid Heat above 90°C, flames.

Incompatible materials Avoid strong oxidising agents.

Hazardous decomposition products

Hazardous decomposition products may be formed under fire conditions such as carbon oxides.

SECTION 11: Toxicological information

Information on toxicological effects

Some data available on mixture. Where not tested, data derived from or based on individual components are shown below:

(a) acute toxicity	NOEL > 2000 mg/kg (Oral).
(b) skin corrosion/irritation	No skin irritation (OECD 439).
(c) serious eye damage/irritation	No eye irritation (Chorioallantoic membrane assay).
(d) respiratory or skin sensitization	Skin: non sensitizer (HRIPT).
(e) germ cell mutagenicity	Not mutagenic (OECD 471 – AMES test).
(f) carcinogenicity	No data available.
(g) reproductive toxicity	No data available.
(h) STOT-single exposure	No data available.
(i) STOT-repeated exposure	No data available.
(j) aspiration hazard	No data available.

Likely routes of exposure: Contact with skin and eyes or by inhalation of dust.

Information on other hazards

None known

SECTION 12: Ecological information

For Nature with Nature Revision number: HCS2012 1.5 Revision date: 1 November 2022

Toxicity

OECD 201: Algae growth IC50 = 153 mg/l (96 hr) OECD 202: Daphnia growth EC50 >1000 mg/l (48hr) Not classified as hazardous to aquatic life.

Persistence and degradability

OECD 301A: Readily biodegradable.

Bio accumulative potential

No data available.

Mobility in soil

No data available.

PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Endocrine disrupting properties

No data available. None known.

Other adverse effects

None known.

SECTION 13: Disposal considerations

Waste treatment methods

Product: Treat as non-hazardous waste. Dispose to landfill. Avoid and minimize disposal to sewage. Dispose of in accordance with local regulations.

Contaminated packaging: Empty remaining contents. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transportation information

UN number	Not regulated as a dangerous good
UN proper shipping name	Not regulated as a dangerous good
Transport hazard class(es)	Not regulated as a dangerous good
Packing group	Not regulated as a dangerous good



Environmental hazardsNot regulated as a dangerous goodTransport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)Not applicableSpecial precautions for userNot regulated as a dangerous good

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation for the mixture

The components of this product are reported in the following inventories:		
US-EPA	All chemical substances in this product are listed on the TSCA Inventory.	
EU-REACH	Polymer exemption. All the raw materials above 2 wt.% are registered by	
	Itaconix or by its suppliers.	
Canada	On DSL inventory.	

California Prop. 65

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

Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out on this mixture.

SECTION 16: Other information

Revision number	HCS2012 1.5
Revision date	1 November 2022
Supersedes Version	HCS2012 1.4
Nature of revision	Update of trademark to register.

This SDS is a non-mandated SDS and is based on GHS HCS2012

The above information is believed to be correct at the time of preparation but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.