Polymers for Better Living™
Revision number: HCS2012 2.3
Revision date: 25 April 2022

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

Product identifier

Product name Itaconix® TSI® 322 Q

Product CAS number 1052620-22-0

Other identification Poly (itaconic co AMPS, sodium salt)

Relevant identified uses of the substance or mixture and uses advised against

Recommended use Scale inhibitor for use in detergent and cleaner formulations

Uses advised against No information available

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 Number

+1 (603) 775-4400 (Monday – Friday 09:00 – 17:00 US EST)

SECTION 2: Hazards identification

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 labelled

Hazard 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 co AMPS, sodium salt)	1052620-22-0	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 measures

Extinguishing media

Suitable 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

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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 rubber 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 b) Color Off-white c) Odor and odor threshold No odor - no threshold d) Melting point/freezing point No data available e) Boiling point No data available f) Flammability (solid, gas) No data available g) Upper/Lower flammability or explosive limits No data available h) Flash point Not applicable h) Evaporation Rate No data available i) Auto ignition temperature No data available j) Decomposition temperature No data available

k) pH

I) Kinematic Viscosity

m) Solubility

n) Partition coefficient: n-octanol/water

o) Vapor pressure p) Density

q) Vapor density

r) Particle characteristic

* Internal test protocol

Solid granules

5.2 (@10% aq. solution)*

Not applicable

Highly water soluble No data available No data available Bulk 0.7g/cm³* No data available

Typical weight average particle size ~ 400 to

500 microns

Other safety information

Explosive properties

Oxidizing properties

Weakly explosive (St-1) Based on experimental data for the specific particle size distribution of the "Q" grade product with concentrations greater than 1000 g/m³.

No ingredients have these properties

SECTION 10: Stability and reactivity

Reactivity

No data available.

Chemical stability

Stable product under recommended storage and handling conditions.

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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 Cat 5 – potentially harmful if swallowed (Human Cell-based

screen, non-regulatory test). Inhalation potential: not considered toxic by inhalation (Human EpiAirway model,

non-regulatory).

(b) skin corrosion/irritation No skin irritation (OECD 439). (c) serious eye damage/irritation No eye irritation (OECD 492).

(d) respiratory or skin sensitisation Skin: non sensitiser (OECD 442 C and D). (e) germ cell mutagenicity Not mutagenic (OECD 471 – AMES test).

(f) carcinogenicity
(g) reproductive toxicity
(h) STOT-single exposure
(i) STOT-repeated exposure
(j) aspiration hazard
No data available.
No data available.
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

Toxicity

OECD 201: Algae growth EC50 = 198 mg/l (72 hr)

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OECD 202: Daphnia growth EC50 >100 mg/l (48hr) OECD 249: Fish Cell EC50 = 1095 mg/L (24hrs) Not classified as hazardous to aquatic life.

Persistence and degradability

OECD 302B: Inherently biodegradable. 68% ultimate biodegradation at 28 days.

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

UN proper shipping name

Transport hazard class(es)

Packing group

Not regulated as a dangerous good

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code) Not applicable

Special precautions for user Not regulated as a dangerous good



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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 HCS 201 2.3 Revision date 25 April 2022 Supersedes Version HCS2012 2.2

Nature of revision Updated aquatic toxicity data. Updated format.

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.