

Itaconix® ONZ™ 405

Revision number: HCS2023 1.1
Revision date: 18 November 2023

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

Product identifier

Product name	Itaconix® ONZ™ 405
Product CAS number	2220235-78-7
Other identification	Poly(itaconic acid-co-AMPS) sodium, zinc salt; Butanedioic acid, 2-methylene-, polymer with 2-methyl-2-[(1-oxo-2-propen-1-yl)amino]-1-propanesulfonic acid, sodium zinc salt

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

Recommended use	Odor absorbing agent in personal care 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)

Acute (oral) toxicity	Category 4 - Harmful if swallowed
Acute aquatic toxicity	Category 2 - Toxic to aquatic life

Combustible Dust

MAY FORM COMBUSTIBLE DUST CONCENTRATIONS IN AIR

GHS Label elements

Labelling (29 CFR 1910.1200)

Hazard pictograms



Signal word

Warning

Hazard statements

H302 Harmful if swallowed

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Precautionary statements

H401 Toxic to aquatic life

Combustible dust**P264 Wash hands thoroughly after handling****P270 Do not eat, drink or smoke when using this product****P273 Avoid release to the environment****P301 + 307 If swallowed: Get medical help****P330 Rinse mouth****P501: Dispose of content/container to landfill according to local, state and federal regulations****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, zinc salt)	2220235-78-7	Acute Oral 4 Acute aquatic 2	~88 wt.%
Water	7732-18-5	None	~7.5 wt.%
Citric acid (pH adjuster)	77-92-9		~3 wt.%
Potassium sorbate	24634-61-5		~1.5 wt.%
Sodium salts of itaconic acid	50976-31-3		~1.5 wt.%,

SECTION 4: First aid**Description of first aid measures**

If inhaled If breathed in, 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. Call a physician.

First aid responders shall wear standard personal protective equipment (safety glasses, medical examination gloves, dust mask if dust present)

Most important symptoms and effects, both acute and delayed

Symptoms None known

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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. May form combustible dust concentrations in air.

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 and protective equipment

Wear suitable protective clothing to avoid contamination, including a OSHA/NIOSH approved dusk mask, gloves, eye protection, labcoat/overalls, dust mask). Ensure adequate ventilation. Do not inhale dust.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Use filtered vacuum, broom, or shovel to sweep up and shovel into suitable containers. Dispose of properly.

SECTION 7: Handling and storage

Precautions for safe handling

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Normal measures as prevention against fire. Minimize exposure to dust in accordance with good industrial practices. Wear appropriate PPE including an OSHA/NIOSH approved dust mask. Wash hands thoroughly after handling. Do not eat, drink or smoke in work areas. Wash hands before breaks and at the end of workday.

Conditions for safe storage

Keep container tightly closed. Containers which are opened must be carefully resealed to avoid contamination. Store in a cool place below 45C.

SECTION 8: Exposure controls/personal protection

Control parameters

Ensure that dust-handling systems (exhaust ducts, etc.) are designed to prevent the escape of dust into the work area. Do not inhale dust.

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

Exposure controls

Appropriate engineering controls: Ensure good ventilation. Minimize exposure to dust. If dust is present use an OSHA/NIOSH approved dust mask. Arrange for eye wash (recommended). Handle in accordance with good industrial hygiene and safety practice.

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

Respiratory protection: If dust is present, wear OSHA/NIOSH approved dust mask.

Eye/face protection: Safety glasses with side-shields conforming to OSHA 29 CFR 1910.133, NIOSH (US) or EN166 are recommended.

Hand protection: Handle with gloves. Nitrile or butyl gloves are suitable. Gloves should satisfy the specifications of 29 CFR 1910.138 or European Standard EN 374. Change gloves regularly.

Skin protection: Laboratory coats or overalls are recommended.

Environmental exposure control: do not release material to drains, ground or surface water.

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SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

- | | |
|-------------------|-------------|
| a) Physical state | Fine powder |
| b) Color | Yellow |

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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	5.0-7.5*
l) Kinematic Viscosity	Not applicable
m) Solubility	Highly water soluble
n) Partition coefficient: n-octanol/water	No data available
o) Vapor pressure	No data available
p) Relative Density	No data available
q) Vapor density	No data available
r) Particle size	D50~50 microns
s) Combustible dust St1**	
t) Oxidizing properties	No ingredients have these properties

* Internal test protocol

** Additional information is available upon request

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.

Incompatible materials

Avoid strong oxidizing agents.

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Hazardous decomposition products

Hazardous decomposition products may be formed under fire conditions such as carbon oxides and zinc oxide. May form combustible dust concentrations in air.

SECTION 11: Toxicological information

Information on toxicological effects

Data derived from analog product are shown below:

(a) acute oral toxicity	Category 4 (in-vitro cytotoxicity test): [300-2000 mg/L].
(b) skin corrosion/irritation	Not expected to be a skin irritant (OECD 439).
(c) serious eye damage/irritation	Not tested.
(d) respiratory or skin sensitization	No data available.
(e) germ cell mutagenicity	No data available.
(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, and inhalation of dust.

Information on other hazards

None

SECTION 12: Ecological information

Information on ecological effects

Data derived from analog product are shown below:

Toxicity

OECD 201: Algae growth EC50 = 1.1 mg/l (72 hr)

OECD 202: Daphnia growth EC50= 77 mg/l (48hr)

Persistence and degradability

OECD 302B: Inherently biodegradable. Reaches 70% biodegradation within 10 days.

Bio accumulative potential

No data available.

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Mobility in soil

No data available.

PBT and vPvB assessment

This substance/mixture contains no known components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).

Endocrine disrupting properties

None known.

Other adverse effects

None known.

SECTION 13: Disposal considerations

Waste treatment methods

Product: Dispose of in accordance with local, state and federal regulations. Treat as non-hazardous waste. Contact a licensed professional waste disposal service to dispose of this material. Avoid release to the environment. Avoid disposal to sewer.

Contaminated packaging: Dispose of as unused product.

SECTION 14: Transportation information

UN number	Not regulated
UN proper shipping name	Not regulated
Transport hazard class(es)	Not regulated
Packing group	Not regulated
Environmental hazards	Not regulated
Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)	Not applicable
Special precautions for user	Not regulated

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation for the mixture

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EU-REACH	Polymer exemption. All the raw materials above 2 wt.% are registered by Itaconix or by its suppliers.
US-EPA	All chemical substances in this product are listed on the TSCA Inventory.

Chemical Safety Assessment

A Chemical Safety Assessment has been carried out on an analog mixture (including CAS# 2220235-78-7) by the US-EPA.

Based on US-EPA's assessment, which includes analogue data, EPA has concluded that prolonged or repeated ingestion to the analog may cause reproductive toxicity or immunotoxicity, and may damage organs such as the gastrointestinal tract. EPA has also concluded that chronic exposure to the analog may be harmful to aquatic organisms.

The analog is subject to a Significant New Use Rule [SNUR - TSCA section 12(b)] for any release of a manufacturing, processing, or use stream associated with any of the analog into the waters of the United States exceeding a surface water concentration of 143 ppb.

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.

SECTION 16: Other information

Hazardous Material Information (HMIS)		National Fire Protection Association (NFPA)	
Health	1	0	Health
Flammability	0	0	Fire
Physical	1	1	Instability
Personal Protection	B		NA

Health	4 Deadly	3 Extreme Danger	2 Dangerous	1 Slight hazard	0 No hazard
Flammability/Fire	4 < 73 °F	3 < 100 °F	2 < 200 °F	1 >200 °F	0 Will not burn
Physical/Instability	4 - May detonate	3 Explosive	2 Unstable	1 Normally stable	0 Stable



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Supersedes Version	1.0
Nature of revision	Update on dust

This SDS is based on HCS 2012 GHS 29 CFR 1910.1200

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.