

CAUSTIC SODA MICROPEARLS (MP)

SECTION 1. IDENTIFICATION

Product Identifier	CAUSTIC SODA MICROPEARLS (MP)
Other Means of Identification	CAUSTIC SODA MICROPEARLS -9, -16
Other Identification	Solid
Product Family	Additive
Recommended Use	Metal finishing, Cleaning Agent, Chemical processing.
Restrictions on Use	For Industrial Use Only. KEEP AWAY FROM CHILDREN.
Manufacturer/Supplier Identifier	Velocity Chemicals Ltd., Unit #1- 9515 190th Street, Surrey, B.C. CANADA, V4N3S1, 604-881-4700, www.velocitychemicals.com
Emergency Phone No.	Velocity Chemicals Ltd., 604-881-4700, M-F 7:00am to 2:30pm CANUTEC, 888-226-8832 (North America), 613-996-6666 (International), 24 hours/7 Days
SDS No.	0086
Date of Preparation	July 18, 2022

SECTION 2. HAZARD IDENTIFICATION

Classification

Corrosive to metals - Category 1; Skin corrosion - Category 1; Serious eye damage - Category 1; Specific target organ toxicity (single exposure) - Category 3

Label Elements



Danger

Causes severe skin burns and eye damage.
Causes respiratory irritation.
May be corrosive to metals.

Prevention:

Wear protective gloves/protective clothing/eye protection/face protection.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wear respiratory protection (NIOSH approved air-purifying respirator with N100, R100, or P100 filter).
Use only in a well-ventilated area.
Wash hands and skin thoroughly after handling.

Response:

Take off contaminated clothing and wash it before reuse.
IF ON SKIN: Wash with plenty of water for 60 minutes.

Product Identifier:	CAUSTIC SODA MICROPEARLS (MP) - Ver. 1
Date of Preparation:	July 18, 2022
Date of Last Revision:	October 11, 2019

SDS No.: 0086

Page 01 of 07

If skin irritation occurs: Get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for 60 minutes.

If eye irritation persists: Get medical advice/attention.

IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.

Storage:

Store in a cool, dry place away from incompatibles. Do not mix with any other chemicals. Keep container closed when not in use. Keep from freezing. Keep temperatures > 4 ° C and < 30 ° C.

Disposal:

Dispose of contents and container in accordance with local, regional, national and international regulations.

Other Hazards

Repeated exposure may cause skin dryness or cracking.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Sodium hydroxide	1310-73-2	95-100	Not applicable	

Notes

Concentrations are expressed in % weight/weight.

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move victim to fresh air. Apply artificial respiration if necessary. Get medical advice or attention if you feel unwell or are concerned.

Skin Contact

Immediately rinse skin with lukewarm, gently flowing water for at least 60 minutes. If skin irritation occurs, get medical advice or attention.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for at least 60 minutes, while holding the eyelid(s) open. If eye irritation persists, get medical advice or attention.

Ingestion

Give large amounts of water if conscious. Do not induce vomiting. Get medical advice or attention if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

At high concentrations if on skin: contact can cause pain, redness, burns, and blistering. Permanent scarring can result. The vapour also irritates or burns the skin. Permanent scarring can result. If in eyes: contact causes severe burns with redness, swelling, pain and blurred vision. Permanent damage including blindness can result. The vapour also irritates or burns the eyes. Permanent damage including blindness can result. If inhaled: can cause severe irritation of the nose and throat. Can cause severe lung injury. Symptoms may include coughing, shortness of breath, difficult breathing and tightness in the chest.

Immediate Medical Attention and Special Treatment

Target Organs

Skin, eyes, respiratory system.

Special Instructions

Not applicable.

Medical Conditions Aggravated by Exposure

Product Identifier: CAUSTIC SODA MICROPEARLS (MP) - Ver. 1

SDS No.: 0086

Date of Preparation: July 18, 2022

Date of Last Revision: October 11, 2019

Page 02 of 07

Asthma, dermatitis.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire. Use water to keep non-leaking, fire-exposed containers cool.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Product

Contact with water causes violent frothing and spattering. Reacts with metals (i.e. aluminum) to produce highly flammable hydrogen gas. Not sensitive to static discharge.

In a fire, the following hazardous materials may be generated: toxic, corrosive chemicals.

Special Protective Equipment and Precautions for Fire-fighters

Wear NIOSH/OSHA approved, self contained breathing apparatus for fire fighting situations. Use water spray to cool all nearby fire exposed surfaces.

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Remove or isolate incompatible materials as well as other hazardous materials.

Environmental Precautions

Concentrated product: it is good practice to prevent releases into the environment.

Methods and Materials for Containment and Cleaning Up

Review Section 7 (Handling) of this safety data sheet before proceeding with clean-up. Small spills or leaks: large spills or leaks: stop or reduce leak if safe to do so. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal. Avoid generating dust.

Reuse material if possible, or otherwise dispose in accordance with local regulations.

Other Information

Contact supplier, local fire and emergency services for help. Report spills to local health, safety and environmental authorities, as required.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Use good hygiene practices. It is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling.

Wear personal protective equipment to avoid direct contact with this chemical. Never add water to a corrosive. Always add corrosives slowly to COLD water. Do not get in eyes, on skin or on clothing. Avoid generating dusts. Avoid inhaling dust. Only use where there is adequate ventilation.

Conditions for Safe Storage

Store in an area that is: cool, ventilated, separate from incompatible materials (see Section 10: Stability and Reactivity). Keep temperatures $> 4^{\circ}\text{C}$ and $< 30^{\circ}\text{C}$. Empty containers may contain hazardous residue. Store separately. Keep closed. Follow all precautions given on this safety data sheet. Comply with all applicable health and safety regulations, fire and building codes.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product Identifier: CAUSTIC SODA MICROPEARLS (MP) - Ver. 1

SDS No.: 0086

Date of Preparation: July 18, 2022

Date of Last Revision: October 11, 2019

Page 03 of 07

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Sodium hydroxide	2 mg/m3 C		2 mg/m3 C			

ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. AIHA® = AIHA® Guideline Foundation. WEEL® = Workplace Environmental Exposure Limit. Short-term TWA = Time-Weighted Average with specified time limit. TWA = Time-Weighted Average. C = Ceiling limit.

Appropriate Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Suitable materials are: butyl rubber, natural rubber.

Respiratory Protection

Wear a NIOSH approved air-purifying respirator with N100, R100, or P100 filter(s).

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	White - Off white micropearls.
Odour	Odourless
Odour Threshold	Not available
pH	> 13.0 (1% solution)
Melting Point/Freezing Point	310 - 320 °C (melting); Not available (freezing)
Boiling Range	Not available
Flash Point	Not applicable
Evaporation Rate	Not available
Flammability (solid, gas)	Not applicable
Upper/Lower Flammability or Explosive Limit	Not applicable (upper); Not applicable (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	2.130 at 20 °C
Solubility	Soluble in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not applicable
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)

SECTION 10. STABILITY AND REACTIVITY

Reactivity

None known.

Chemical Stability

Product Identifier: CAUSTIC SODA MICROPEARLS (MP) - Ver. 1
Date of Preparation: July 18, 2022
Date of Last Revision: October 11, 2019

SDS No.: 0086

Page 04 of 07

Normally stable.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

Conditions to Avoid

Water, moisture or humidity. Generation of dust.

Incompatible Materials

Reacts with or incompatible with: strong acids (e.g. hydrochloric acid), strong oxidizing agents (e.g. perchloric acid), oxidizing agents (e.g. peroxides), halogenated compounds (e.g. trichloroethylene). Releases excessive heat on contact with: water. Forms flammable chemicals on contact with: metals (e.g. aluminum).

Corrosive to: aluminum alloys, zinc alloys, carbon steel, and other metals.

Hazardous Decomposition Products

Toxic, corrosive chemicals.

SECTION 11. TOXICOLOGICAL INFORMATION

Information presented below is for the entire product, unless otherwise specified.

Likely Routes of Exposure

Skin contact; eye contact; inhalation.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Sodium hydroxide	Not available	140-340 mg/kg (rat)	1350 mg/kg (rabbit)

Skin Corrosion/Irritation

Human experience and animal tests show skin corrosion. Contact can cause pain, redness, burns, and blistering. Permanent scarring can result. The vapour also irritates or burns the skin. Permanent scarring can result.

Serious Eye Damage/Irritation

Contact causes severe burns with redness, swelling, pain and blurred vision. Permanent damage including blindness can result. The vapour also irritates or burns the eyes. Permanent damage including blindness can result.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

At high concentrations causes severe nose and throat irritation, severe lung injury. Symptoms may include coughing, shortness of breath, difficult breathing and tightness in the chest.

Aspiration Hazard

Not known to be an aspiration hazard.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause dermatitis. Symptoms may include dry, red, cracked skin (dermatitis). Irritation of the respiratory system. May cause respiratory tract injury.

Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer. Not known to be a skin sensitizer.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Sodium hydroxide	Not Listed	Not Listed	Not Listed	Not Listed

None Known.

Reproductive Toxicity

Development of Offspring

Not known to harm the unborn child.

Sexual Function and Fertility

Not known to cause effects on sexual function or fertility.

Product Identifier: CAUSTIC SODA MICROPEARLS (MP) - Ver. 1

SDS No.: 0086

Date of Preparation: July 18, 2022

Date of Last Revision: October 11, 2019

Page 05 of 07

Germ Cell Mutagenicity

Not known to be a mutagen.

No information was located for: Effects on or via Lactation, Interactive Effects

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life, based on high pH of mixture. (Sodium hydroxide)

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Sodium hydroxide	0.24 mg/L (Lepomis macrochirus (bluegill); 96-hour)			

Persistence and Degradability

No ingredient of this product or its degradation products is known to be highly persistent.

Bioaccumulative Potential

This product and its degradation products are not expected to bioaccumulate.

Mobility in Soil

Studies are not available.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Recycle and reuse product, if possible. Recommended disposal methods are for the product, as sold. (Used material may contain other hazardous contaminants). The required hazard evaluation of the waste and compliance with the applicable hazardous waste laws are the responsibility of the user.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	1823	Sodium Hydroxide, Solid	8	II
Canadian TDG	1823	Sodium Hydroxide, Solid	8	II

Environmental Hazards Not applicable

Special Precautions Not applicable

Transport in Bulk according to International Maritime Organization Instruments

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Products Regulations.

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

Product Identifier: CAUSTIC SODA MICROPEARLS (MP) - Ver. 1

SDS No.: 0086

Date of Preparation: July 18, 2022

Date of Last Revision: October 11, 2019

Page 06 of 07

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

SECTION 16. OTHER INFORMATION

SDS Prepared By Technical Department

Phone No. 604-881-4700

Date of Preparation July 18, 2022

Date of Last Revision October 11, 2019

Disclaimer The information in the Material Safety Data Sheet is offered for your consideration and guidance when exposed to this product. Velocity Chemicals Ltd. expressly disclaims all expressed or implied warranties and assumes no responsibilities for the accuracy or completeness of the data contained herein. The data in this MSDS does not apply to use with any other product or in any other process.

Product Identifier: CAUSTIC SODA MICROPEARLS (MP) - Ver. 1

SDS No.: 0086

Date of Preparation: July 18, 2022

Date of Last Revision: October 11, 2019

Page 07 of 07