

HPI SMP-1000

Safety Data Sheet C001014

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 07/07/2020

Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : HPI SMP-1000
Product code : C001014-000-CUD

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Industrial use

1.3. Supplier

HPI Processes Inc
1030 Revenue Drive
Telford, PA 18969 - USA
T 215-799-0450

1.4. Emergency telephone number

Emergency number : 800-535-5053

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Acute Tox. 5 (Oral)	H303	May be harmful if swallowed
Acute Tox. 4 (Dermal)	H312	Harmful in contact with skin
Eye Irrit. 2A	H319	Causes serious eye irritation

Full text of hazard classes and H-statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



: Warning

Signal word (GHS US) :

Hazard statements (GHS US) :

H312 - Harmful in contact with skin
H303 - May be harmful if swallowed
H319 - Causes serious eye irritation

Precautionary statements (GHS US) :

P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - If on skin: Wash with plenty of water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 - Call a poison center or doctor if you feel unwell.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P363 - Wash contaminated clothing before reuse.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
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Sodium Carbonate	(CAS-No.) 497-19-8	27	Acute Tox. 4 (Inhalation:dust,mist), H332
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HPI SMP-1000

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	GHS US classification
Sodium Metasilicate	(CAS-No.) 6834-92-0	34	Skin Corr. 1, H314 Eye Dam. 1, H318
2-Butoxyethanol	(CAS-No.) 111-76-2	3	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302
Sodium Nitrite	(CAS-No.) 7632-00-0	2	Ox. Sol. 2, H272 Acute Tox. 3 (Oral), H301 Eye Irrit. 2A, H319 Aquatic Acute 1, H400

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : Call a physician immediately. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove from exposure and get fresh air. Keep warm and at rest. Get medical attention immediately if artificial respiration is required.
- First-aid measures after skin contact : Remove contaminated clothing, jewelry and shoes immediately. Flush affected areas with large amounts of water, then use soap or mild detergent and large amounts of water for 15-20 minutes to cleanse area. If skin is irritated, get medical attention immediately.
- First-aid measures after eye contact : Immediately flush eyes with large amounts of water, occasionally lifting upper lids for at least 15 minutes. Get immediate medical attention.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. If injured party is conscious, give 2 glasses of water. Seek medical attention.

4.2. Most important symptoms and effects (acute and delayed)

- Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.
- Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.
- Symptoms/effects after skin contact : Burns. May cause an allergic skin reaction.
- Symptoms/effects after eye contact : Serious damage to eyes.
- Symptoms/effects after ingestion : Burns.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Use any standard agent - choose the one most appropriate for the type of surrounding fire.

5.2. Specific hazards arising from the chemical

- Fire hazard : May intensify fire; oxidizer.
- Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Wear self-contained breathing apparatus and other protective clothing.

HPI SMP-1000

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

8.2. Appropriate engineering controls

Appropriate engineering controls : Normal room ventilation is satisfactory for limited use.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment: HMIS PP, B

Safety glasses, gloves

Hand protection:

Protective gloves. Wear protective gloves.

Eye protection:

Safety glasses. Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate mask

Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Color	: Yellow
Odor	: lemon-like
Odor threshold	: No data available
pH	: 11.9 (1% solution)
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Solubility	: Soluble

HPI SMP-1000

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Exposure to fire may liberate carbon dioxide, organic acids and other decomposition products from this product or its packaging.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified.
Acute toxicity (dermal)	: Harmful in contact with skin.
Acute toxicity (inhalation)	: Not classified

ATE US (dermal)	1100 mg/kg body weight
Tetrasodium Pyrophosphate (Tsp) (7722-88-5)	
LD50 oral rat	300 – 2000 mg/kg body weight (OECD 420: Acute Oral toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral)
ATE US (oral)	300 mg/kg body weight
2-Butoxyethanol (111-76-2)	
LD50 oral rat	1746 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral)
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, Rat, Male/female, Experimental value, Dermal, 14 day(s))
LC50 inhalation rat (ppm)	450 ppm (Equivalent or similar to OECD 403, 4 h, Rat, Female, Experimental value, Inhalation (vapours))
ATE US (oral)	1746 mg/kg body weight
Sodium Carbonate (497-19-8)	
LD50 oral rat	2800 mg/kg (Rat, Male/female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 2000 mg/kg (16 CFR 1500. 40, 24 h, Rabbit, Experimental value, Dermal)
LC50 inhalation rat (mg/l)	2.3 mg/l (2 h, Rat, Male, Experimental value, Inhalation (aerosol))
ATE US (oral)	2800 mg/kg body weight
ATE US (vapors)	2.3 mg/l/4h
ATE US (dust, mist)	2.3 mg/l/4h
Sodium Metasilicate (6834-92-0)	
LD50 dermal rat	> 5000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male/female, Read-across, Dermal)

HPI SMP-1000

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Sodium Metasilicate (6834-92-0)	
LC50 inhalation rat (mg/l)	> 2.06 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male/female, Read-across, Inhalation (vapours))
Sodium Nitrite (7632-00-0)	
LD50 oral rat	180 mg/kg (Rat; Other; Experimental value)
LC50 inhalation rat (mg/l)	5.5 mg/l/4h (Rat; Literature study)
ATE US (oral)	180 mg/kg body weight
ATE US (vapors)	5.5 mg/l/4h
ATE US (dust, mist)	5.5 mg/l/4h

2-Butoxyethanol (111-76-2)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after skin contact : Burns. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Tetrasodium Pyrophosphate (Tsp) (7722-88-5)	
LC50 fish 1	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Read-across, GLP)
EC50 Daphnia 1	> 100 mg/l (EPA OTS 797.1300, 48 h, Daphnia magna, Static system, Fresh water, Read-across, GLP)
ErC50 (algae)	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Read-across, GLP)
2-Butoxyethanol (111-76-2)	
LC50 fish 1	1474 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Nominal concentration)

HPI SMP-1000

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2-Butoxyethanol (111-76-2)	
EC50 Daphnia 1	1550 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)
Sodium Carbonate (497-19-8)	
LC50 fish 1	300 mg/l (Other, 96 h, Lepomis macrochirus, Static system, Fresh water, Experimental value)
EC50 Daphnia 1	200 – 227 mg/l (Other, 48 h, Ceriodaphnia sp., Semi-static system, Fresh water, Experimental value)
Sodium Metasilicate (6834-92-0)	
LC50 fish 1	210 mg/l (Equivalent or similar to OECD 203, 96 h, Brachydanio rerio, Semi-static system, Fresh water, Experimental value)
EC50 Daphnia 1	1700 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Read-across, GLP)

12.2. Persistence and degradability

HPI SMP-1000	
Persistence and degradability	Not established.
Tetrasodium Pyrophosphate (Tsp) (7722-88-5)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
2-Butoxyethanol (111-76-2)	
Persistence and degradability	Readily biodegradable in water.
Sodium Carbonate (497-19-8)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable (inorganic)
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)
Sodium Metasilicate (6834-92-0)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
Sodium Nitrite (7632-00-0)	
Persistence and degradability	Biodegradable in water. Autooxidation in water. No (test)data on mobility of the substance available.

12.3. Bioaccumulative potential

HPI SMP-1000	
Bioaccumulative potential	Not established.
Tetrasodium Pyrophosphate (Tsp) (7722-88-5)	
Bioaccumulative potential	No bioaccumulation data available.
2-Butoxyethanol (111-76-2)	
Partition coefficient n-octanol/water (Log Pow)	0.81 (Test data, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

HPI SMP-1000

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Sodium Carbonate (497-19-8)	
Partition coefficient n-octanol/water (Log Pow)	-6.19 (Estimated value)
Bioaccumulative potential	Not bioaccumulative.
Sodium Metasilicate (6834-92-0)	
Bioaccumulative potential	Bioaccumulation: not applicable.
Sodium Nitrite (7632-00-0)	
Partition coefficient n-octanol/water (Log Pow)	-3.7 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

Tetrasodium Pyrophosphate (Tsp) (7722-88-5)	
Partition coefficient n-octanol/water (Log Koc)	2.17 (log Koc, Experimental value)
Ecology - soil	Low potential for adsorption in soil.
2-Butoxyethanol (111-76-2)	
Surface tension	65.03 mN/m (20 °C, 2 g/l)
Ecology - soil	Low potential for adsorption in soil.
Sodium Carbonate (497-19-8)	
Ecology - soil	Low potential for adsorption in soil.
Sodium Metasilicate (6834-92-0)	
Ecology - soil	No (test)data on mobility of the substance available.

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods, product/packaging : Recommendation: Consult with the disposal agency and the relevant authorities. Empty containers
Disposal recommendations may be cleaned with water.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

2-Butoxyethanol (111-76-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

HPI SMP-1000

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Sodium Carbonate (497-19-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Sodium Metasilicate (6834-92-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Sodium Nitrite (7632-00-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb

15.2. International regulations

CANADA

2-Butoxyethanol (111-76-2)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

Component	State or local regulations
Tetrasodium Pyrophosphate (Tsp)(7722-88-5)	U.S. - New Jersey - Right to Know Hazardous Substance List
2-Butoxyethanol(111-76-2)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
Sodium Nitrite(7632-00-0)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Other information	: None.

HPI SMP-1000

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-phrases:

Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 4	Flammable liquids Category 4
Ox. Sol. 2	Oxidizing solids Category 2
Skin Corr. 1	Skin corrosion/irritation Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization, Category 1
H227	Combustible liquid
H272	May intensify fire; oxidizer
H301	Toxic if swallowed
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.