

LAPONITE-S 482

Version 2

Revision Date 02/12/2025

Print Date 05/07/2026

SECTION 1. IDENTIFICATION

Product name : LAPONITE-S 482

Manufacturer or supplier's details

Company : BYK USA LLC
524 South Cherry Street
Wallingford CT 06492

Telephone : (203) 265-2086

Visit our web site : www.byk.com

E-mail address : BRIEF.BYK.NAFTA@altana.com

Emergency telephone number : 203-265-2086; CHEMTREC 1-800-424-9300 / +1 703-527-3887

Recommended use of the chemical and restrictions on use

Recommended use : Rheology Additive

Restrictions on use : Refer to Section 15 for any restrictions that may apply

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Synthetic (modified) phyllosilicate

Hazardous components

Component	CAS-No.	Concentration (%)
(1-hydroxyethylidene) bisphosphonic acid, sodium salt	29329-71-3	>= 5 - < 10

SECTION 4. FIRST AID MEASURES

General advice : Do not leave the victim unattended.

If inhaled : If breathed in, move person into fresh air.
If unconscious, place in recovery position and seek medical advice.

If symptoms persist, call a physician.

In case of skin contact : Remove contaminated clothing. Wash thoroughly with soap

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In case of eye contact	: and water. Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.
If swallowed	: Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	: No information available.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Alcohol-resistant foam Carbon dioxide (CO ₂) Dry chemical Foam Carbon dioxide (CO ₂) Dry chemical
Unsuitable extinguishing media	: No information available. High volume water jet
Specific hazards during firefighting	: Handle as an industrial chemical. Will not explode on mechanical impact. Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	: Carbon oxides Oxides of phosphorus
Further information	: Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Avoid breathing dust.
	: Avoid dust formation.
	: Keep people away from and upwind of spill/leak. Material can create slippery conditions. Only qualified personnel equipped with suitable protective equipment may intervene.

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- Environmental precautions : Prevent spilled material from entering the ground, water and/or air by using appropriate containment methods.
- Methods and materials for containment and cleaning up : Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).
- Pick up and arrange disposal without creating dust.
Sweep up and shovel.
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
- Conditions for safe storage : Electrical installations / working materials must comply with the technological safety standards.
Avoid dust formation.
Keep container tightly closed.
- Materials to avoid : No special restrictions on storage with other products.
- No materials to be especially mentioned.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.
Hazardous components without workplace control parameters

Further occupational exposure limits

Description	Value type	Control parameters	Basis
inert or nuisance dust	TWA	50 Million particles per cubic foot total dust	OSHA Z-3
	TWA	15 mg/m ³ total dust	OSHA Z-3
	TWA	5 mg/m ³ respirable fraction	OSHA Z-3
	TWA	15 Million particles per cubic foot respirable fraction	OSHA Z-3

Engineering measures : Use with local exhaust ventilation.

Personal protective equipment

Respiratory protection : If large quantities of dust are generated, wear a properly

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		fitted (NIOSH) dust respirator/mask during exposure. No personal respiratory protective equipment normally required.
Hand protection		
Material	:	Impervious gloves
Remarks	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	:	Safety glasses Wear safety glasses with side shields or goggles. If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles.
Skin and body protection	:	Work uniform or laboratory coat. Protective suit
Hygiene measures	:	General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	powder
Colour	:	white
Odour	:	odourless
Odour Threshold	:	No data available
pH	:	9.8, Concentration: 20 g/l(as a dispersion)
Melting point/ range	:	Not applicable
Boiling point/boiling range	:	Not applicable
Vapour pressure	:	Not applicable
Flash point	:	Not applicable
Upper explosion limit	:	Not applicable
Lower explosion limit	:	Not applicable
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	Not expected to form explosive dust-air mixtures.
Relative vapour density	:	Not applicable
Relative Density/Specific Gravity	:	No data available
Density	:	Not applicable
Bulk density	:	1,000 kg/m ³
Solubility(ies)		
Water solubility	:	partly soluble

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Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Ignition temperature	:	No data available
Auto-ignition temperature	:	Not applicable
Thermal decomposition	:	No data available
Viscosity	:	
Viscosity, dynamic	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Not classified as a reactivity hazard. No decomposition if stored and applied as directed.
Chemical stability	:	Stable; polymerization will not occur No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	No data available Stable under recommended storage conditions. No hazards to be specially mentioned. Dust may form explosive mixture in air.
Conditions to avoid	:	No data available
Incompatible materials	:	Strong acids and oxidizing agents
Hazardous decomposition products	:	No data available

SECTION 11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Acute toxicity****Product:**

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Components:**29329-71-3 (1-hydroxyethylidene) bisphosphonic acid, sodium salt:**

Acute oral toxicity : LD50 : > 300 - 2,000 mg/kg
Method: OECD Test Guideline 401

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Skin corrosion/irritation**Product:**

Remarks: No data available

Serious eye damage/eye irritation**Product:**

Remarks: No data available

Respiratory or skin sensitisation**Product:**

Remarks: No data available

Germ cell mutagenicity**Product:**

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Carcinogenicity**Product:**

Remarks: No data available

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity**Product:**

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

STOT - single exposure**Product:**

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Remarks: No data available

STOT - repeated exposure**Product:**

Remarks: No data available

Repeated dose toxicity**Product:**

Remarks: No known chronic health effects.

Aspiration toxicity**Product:**

No data available

Experience with human exposure**Product:**

Inhalation:

Symptoms:

Dust particles may cause irritation of the respiratory tract.

Skin contact:

Symptoms:

Contact may cause irritation.

Eye contact:

Symptoms:

Contact may cause irritation.

Ingestion:

Symptoms:

Ingestion will probably cause irritation of the digestive tract.

Further information**Product:**

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Product:**

Toxicity to fish

:

Remarks: No data available

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Toxicity to daphnia and other :
aquatic invertebrates Remarks: No data available

Persistence and degradability**Product:**

Biodegradability : Remarks: No data available

Bioaccumulative potential**Product:**

Bioaccumulation : Remarks: No data available

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of
Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a
Class I or Class II ODS as defined by the U.S. Clean Air Act
Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological : No data available
information

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

EPA Hazardous Waste : Not applicable.
Code(s)

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

SECTION 14. TRANSPORT INFORMATION**International Regulations****IATA-DGR**

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations**49 CFR**

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION**EPCRA - Emergency Planning and Community Right-to-Know Act****US. EPA CERCLA Hazardous Substances (40 CFR 302)**

This material does not contain any components with a CERCLA RQ.

SARA 304 - Emergency Release Notification

This material does not contain any components with a section 304 EHS RQ.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)

This material does not contain any components with a SARA 302 RQ.

SARA 311/312 Hazards : Per the June 13, 2016 Federal Register notice, EPA harmonized the EPCRA 311/312 hazard categories with the 2012 OSHA hazard communication standard for classifying and labeling of chemicals (i.e. GHS). Please refer to Section 2 of the SDS to identify the appropriate hazard categories for reporting purposes.

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

Non-volatile (Wt) : No data available

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Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

Synthetic phyllosilicate	53320-86-8
(1-hydroxyethylidene) bisphosphonic acid, sodium salt	29329-71-3

New Jersey Right To Know

New Jersey Trade Secret Registry Number for the product (NJ TSRN) : 800963-1096

California Prop. 65

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

The components of this product are reported in the following inventories:

TSCA	: All substances listed as active on the TSCA inventory
Section 5a	: No substances are subject to a Significant New Use Rule.
Section 4 / 12(b)	: No substances are subject to TSCA 12(b) export notification requirements.
DSL	: We certify that all of the components of this product are listed on the DSL.

SECTION 16. OTHER INFORMATION

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.