LAPONITE-XL 21 XR

Version 2 | Revision Date 05/17/2026 | Print Date 08/06/2026

SECTION 1. IDENTIFICATION

Product name : LAPONITE-XL 21 XR

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

Contaminated surfaces will be extremely slippery.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance
Chemical nature : Synthetic (modified) phyllosilicate

Hazardous components

No hazardous ingredients

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 and water.
In case of eye contact : 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 (CO2)
Dry chemical
Water mist
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : No information available.

Specific hazards during firefighting : Handle as an industrial chemical.
Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : No hazardous combustion products are known

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.

Environmental precautions : Prevent spilled material from entering the ground, water and/or air by using appropriate containment methods.

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 : Avoid dust formation.
Keep container tightly closed.
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : 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.

Further occupational exposure limits

Description	Value type	Control parameters	Basis
inert or nuisance dust	TWA	50Million particles per cubic foot total dust	OSHA Z-3
	TWA	15 mg/m3 total dust	OSHA Z-3
	TWA	5 mg/m3 respirable fraction	OSHA Z-3
	TWA	15Million 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 fitted (NIOSH) dust respirator/mask during exposure.

Hand protection

Material : Impervious gloves

Remarks : Use protective skin cream before handling the product. 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

Physical state	:	powder
Colour	:	white
Odour	:	odourless
Odour Threshold	:	Not applicable
pH	:	9.7, 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)	:	Will not burn
Relative vapour density	:	Not applicable
Relative Density/Specific Gravity	:	2.53 (68 - 70 °F (20 - 21 °C))
Particle size	:	No data available
Density	:	No data available
Bulk density	:	1,000 kg/m3
Solubility(ies)		
Water solubility	:	insoluble
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Ignition temperature	:	Not applicable
Auto-ignition temperature	:	Not applicable
Thermal decomposition	:	No data available
Viscosity		

Viscosity, dynamic : Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard.
Chemical stability : Stable; polymerization will not occur
Possibility of hazardous reactions : No data available
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 : LD0 (Rat, female): > 2,000 mg/kg
Method: OECD Test Guideline 420
GLP: yes

LD50 (Rat, male and female): > 2,000 mg/kg
Method: Directive 67/548/EEC, Annex V, B.1.
GLP: no

Acute inhalation toxicity : LC50 (Rat, male and female): > 1660
Exposure time: 4 h
Test atmosphere: dust/mist
GLP: yes

LC0 (Rat, male and female): > 0.34 mg/l
Exposure time: 6 h
Test atmosphere: dust/mist
Method: Directive 67/548/EEC, Annex V, B.2.
GLP: no

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2,000 mg/kg
GLP: yes

Skin corrosion/irritation

Product:

Species: Rabbit
Result: No skin irritation
GLP: yes

Species: EPISKIN human epidermis skin constructs
Result: No skin irritation
GLP: yes

Serious eye damage/eye irritation

Product:

Species: Bovine corneal opacity and permeability assay (BCOP)
Result: No eye irritation
Method: OECD Test Guideline 437
GLP: yes

Respiratory or skin sensitisation

Product:

Test Type: Mouse Local Lymph Node assay (LLNA)
Exposure routes: Dermal
Species: Mouse
Method: OECD Test Guideline 429
Result: Does not cause skin sensitisation.
GLP: yes

Assessment: No acute effects have been observed.
Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Test Type: Ames test
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: yes

: Test Type: Chromosome aberration test in vitro
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
GLP: yes

: Test Type: In vitro mammalian cell gene mutation test (mouse lymphoma)

Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: yes

Genotoxicity in vivo : Remarks: No data available

Germ cell mutagenicity-Assessment : In vitro tests did not show mutagenic effects

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:

Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Product:

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

Product:

Remarks: No known chronic health effects.

Repeated dose toxicity - Assessment : No acute effects have been observed.
No persistent or cumulative effects were observed.

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 : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

GLP: yes

Toxicity to bacteria : EC50 (activated sludge): > 1,000 mg/l
Method: OECD Test Guideline 209
GLP: yes

Ecotoxicology Assessment
Acute aquatic toxicity : This product has no known ecotoxicological effects.

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 information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

EPA Hazardous Waste Code(s) : Not applicable.

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

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).

Non-volatile (Wt)	:	No data available

Massachusetts Right To Know

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

Pennsylvania Right To Know

Synthetic phyllosilicate -

New Jersey Right To Know

New Jersey Trade Secret Registry Number for the product (NJ TSRN) : 800963-1103

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 : The following component(s) is/are not listed on the DSL:

SECTION 16. OTHER INFORMATION

Revision Date : 05/17/2026

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.