

OPTIGEL-CL

Version 2

Revision Date 09/16/2025

Print Date 04/23/2026

SECTION 1. IDENTIFICATION

Product name : OPTIGEL-CL

Manufacturer or supplier's detailsCompany : BYK USA LLC
524 South Cherry Street
Wallingford CT 06492

Telephone : (203) 265-2086

Visit our web site : www.byk.comE-mail address : BRIEF.BYK.NAFTA@altana.comEmergency telephone : 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**

Carcinogenicity : Category 1A

Specific target organ toxicity : Category 2 (Lungs)
- repeated exposure
(Inhalation)**GHS label elements**

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H350 May cause cancer.

Precautionary Statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P281 Use personal protective equipment as required.
Response:
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
Storage:
P405 Store locked up.

OPTIGEL-CL

Version 2

Revision Date 09/16/2025

Print Date 04/23/2026

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance
 Chemical nature : Modified / activated phyllosilicate
Hazardous ingredients

Component	CAS-No.	Concentration (%)
Crystalline silica (quartz)	14808-60-7	>= 1 - < 5

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
 Show this material safety data sheet to the doctor in attendance.
 Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical advice.
 If symptoms persist, call a physician.

In case of skin contact : Wash off with soap and plenty of water.
 If skin irritation persists, call a physician.
 Wash contaminated clothing before re-use.

In case of eye contact : Flush eyes with water as a precaution.
 Remove contact lenses.
 Protect unharmed eye.
 Keep eye wide open while rinsing.
 If eye irritation persists, consult a specialist.

If swallowed : Induce vomiting immediately and call a physician.
 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.
 Take victim immediately to hospital.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Foam
 Carbon dioxide (CO₂)
 Dry chemical

Unsuitable extinguishing : High volume water jet

OPTIGEL-CL

Version 2

Revision Date 09/16/2025

Print Date 04/23/2026

media
Further information : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special protective equipment for fire-fighters : 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 dust formation.
Avoid breathing dust.

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Neutralize with acid.
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid formation of respirable particles.
Do not breathe vapors/dust.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Crystalline silica (quartz)	14808-60-7	TWA (respirable)	10 mg/m ³ / %SiO ₂ +2	OSHA Z-3
Crystalline silica (quartz)		TWA (respirable)	250 mppcf / %SiO ₂ +5	OSHA Z-3
Crystalline silica (quartz)		TWA	0.1 mg/m ³	OSHA P0

OPTIGEL-CL

Version 2

Revision Date 09/16/2025

Print Date 04/23/2026

		(respirable dust fraction)		
Crystalline silica (quartz)		TWA (Respirable particulate matter)	0.025 mg/m3 (Silica)	ACGIH
Crystalline silica (quartz)		TWA (Respirable dust)	0.05 mg/m3 (Silica)	NIOSH REL
Crystalline silica (quartz)		TWA (Respirable dust)	0.05 mg/m3	OSHA Z-1
Crystalline silica (quartz)		PEL (respirable)	0.05 mg/m3	OSHA CARC

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

Personal protective equipment

- Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.
Dust safety masks are recommended when the dust concentration is more than 10 mg/m3.
- Hand protection
Material : Protective gloves
- Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
- Skin and body protection : Dust impervious protective suit
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

OPTIGEL-CL

Version 2

Revision Date 09/16/2025

Print Date 04/23/2026

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder
Color : white
Odor : odorless
pH : 10.3, Concentration: 5 % (73 °F (23 °C)) Method: measured

Melting point/ range : > 842 °F (> 450 °C)

Initial boiling point : Not applicable
Vapor pressure : Not applicable

Flash point : Not applicable
Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

Evaporation rate : Not applicable

Flammability (solid, gas) : does not ignite

Relative vapor density : Not applicable

Relative Density/Specific Gravity : No data available
Density : ca. 2.6 g/cm³ (68 °F (20 °C))

Bulk density : 400 - 600 g/l

Solubility(ies)
Water solubility : slightly soluble

Partition coefficient: n-octanol/water : No data available
Ignition temperature : Not applicable

Thermal decomposition : Not applicable

Viscosity
Viscosity, dynamic : Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

OPTIGEL-CL

Version 2

Revision Date 09/16/2025

Print Date 04/23/2026

Chemical stability : No decomposition if stored and applied as directed.
Possibility of hazardous reactions : No decomposition if stored and applied as directed.
Dust may form explosive mixture in air.

Conditions to avoid : No data available
Incompatible materials : None known.
Hazardous decomposition products : No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Inhalation
Ingestion
Eye contact
Skin contact

Acute toxicity**Product:**

Acute oral toxicity : Remarks: No data available

Skin corrosion/irritation**Product:**

Remarks: No data available

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

Remarks: No data available

Respiratory or skin sensitization**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:**

OPTIGEL-CL

Version 2

Revision Date 09/16/2025

Print Date 04/23/2026

Remarks: No data available

IARC

Group 1: Carcinogenic to humans

Crystalline silica (quartz) 14808-60-7

OSHA

OSHA specifically regulated carcinogen

Crystalline silica (quartz) 14808-60-7

NTP

Known to be human carcinogen

Crystalline silica (quartz) 14808-60-7

Reproductive toxicity**Product:**

Effects on fertility : Remarks: No data available

Effects on fetal development : Remarks: No data available

STOT-single exposure**Product:**

Remarks: No data available

STOT-repeated exposure**Product:**

Remarks: No data available

Repeated dose toxicity**Product:**

Remarks: No data available

Aspiration toxicity**Product:**

No data available

Further information**Product:**

Remarks: No data available

OPTIGEL-CL

Version 2

Revision Date 09/16/2025

Print Date 04/23/2026

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish :
Remarks: No data available

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

Product:

Mobility : Remarks: Bentonite is almost insoluble and thus presents a low mobility in most soils

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

Waste from residues : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.

Contaminated packaging : Empty remaining contents.
Send to a licensed waste management company.

OPTIGEL-CL

Version 2

Revision Date 09/16/2025

Print Date 04/23/2026

Dispose of as unused product.
Do not re-use empty containers.

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.

Domestic regulation**49 CFR**

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION**EPCRA - Emergency Planning and Community Right-to-Know****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

OPTIGEL-CL

Version 2

Revision Date 09/16/2025

Print Date 04/23/2026

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 Intermediate or Final VOC's (40 CFR 60.489).

Massachusetts Right To Know

Crystalline silica (quartz) 14808-60-7

Pennsylvania Right To Know

Phyllosilicate -
Crystalline silica (quartz) 14808-60-7

New Jersey Right To Know

New Jersey Trade Secret : 800963-6398
Registry Number for the product (NJ TSRN)

California Prop. 65

 **WARNING:** This product can expose you to chemicals including Crystalline silica (quartz), which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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

TSCA : We certify that all of the components of this product are either listed on the TSCA Inventory or are not subject to the notification requirements per 40 CFR 720 30(h).

TSCA Inventory Active List : All components of this product are listed active and/or are exempt

DSL : We certify that all of the components of this product are listed on the DSL.

SECTION 16. OTHER INFORMATION

Revision Date : 09/16/2025

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.