

OPTIBENT-1248

Version 3

Revision Date 05/17/2026

Print Date 08/06/2026

SECTION 1. IDENTIFICATION

Product name : OPTIBENT-1248

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 : 203-265-2086; CHEMTREC 1-800-424-9300 / +1
number 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**

Acute toxicity (Oral) : Category 4

Eye irritation : Category 2A

Carcinogenicity : Category 1A

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H302 Harmful if swallowed.
H319 Causes serious eye irritation.
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.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear eye protection/ face protection.
P281 Use personal protective equipment as required.
Response:

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P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
Storage:
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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

Component	CAS-No.	Concentration (%)
Tetrasodium pyrophosphate	7722-88-5	>= 30 - < 60
Crystalline silica (quartz)	14808-60-7	>= 0.1 - < 1

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this 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 : Remove contaminated clothing. Wash thoroughly with soap and water.

In case of eye contact : Immediately flush eye(s) with plenty of water.
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.

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Most important symptoms and effects, both acute and delayed : Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.
: No information available.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Dry chemical
Alcohol-resistant foam
Carbon dioxide (CO₂)
Foam
Carbon dioxide (CO₂)
Dry chemical

Unsuitable extinguishing media : No information available.

Specific hazards during firefighting : High volume water jet
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 dust formation.
Avoid breathing dust.
Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).
Only qualified personnel equipped with suitable protective equipment may intervene.

: 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.

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Methods and materials for containment and cleaning up : Neutralise 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 vapours/dust.
Avoid exposure - obtain special instructions before use.
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.

Materials to avoid : No materials to be especially mentioned.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Tetrasodium pyrophosphate	7722-88-5	TWA	5 mg/m ³	NIOSH REL
Tetrasodium pyrophosphate		TWA	5 mg/m ³	OSHA P0
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 (respirable dust fraction)	0.1 mg/m ³	OSHA P0
Crystalline silica (quartz)		TWA (Respirable particulate matter)	0.025 mg/m ³ (Silica)	ACGIH
Crystalline silica (quartz)		TWA (Respirable dust)	0.05 mg/m ³ (Silica)	NIOSH REL
Crystalline silica (quartz)		TWA (Respirable dust)	0.05 mg/m ³	OSHA Z-1

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Crystalline silica (quartz)		PEL (respirable)	0.05 mg/m ³	OSHA CARC
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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 : Engineering and/or work practice controls should be implemented to maintain exposure to respirable crystalline silica below the permissible exposure limit.

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
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
Wear face-shield and protective suit for abnormal processing problems.

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.

Protective measures : Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : powder
Colour : off-white
Odour : odourless
Odour Threshold : Not applicable

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pH	:	10.3, Concentration: 2 % (73 °F (23 °C)) Method: measured
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)	:	Does not sustain combustion.
Minimum Explosible Concentration	:	Not applicable
Relative vapour density	:	Not applicable
Relative Density/Specific Gravity	:	No data available
Particle size	:	No data available
Density	:	No data available
Bulk density	:	600 - 900 kg/m3
Solubility(ies)		
Water solubility	:	partly soluble
Solubility in other solvents	:	No data available
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.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous	:	No data available

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reactions

No decomposition if stored and applied as directed.

Conditions to avoid : No data available
Incompatible materials : Strong acids
Hazardous decomposition : No data available
products

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

Acute oral toxicity : Acute toxicity estimate : 1,667 mg/kg
Method: Calculation method

Remarks: No data available

Components:**7722-88-5 Tetrasodium pyrophosphate:**

Acute oral toxicity : LD50 (Rat): > 300 - < 2,000 mg/kg
Method: OECD Test Guideline 420
GLP: yes

Skin corrosion/irritation**Product:**

Remarks: No data available

Components:**7722-88-5 Tetrasodium pyrophosphate:**

Result: No skin irritation

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

GLP: yes

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

Species: Bovine corneal opacity and permeability assay (BCOP)

Result: Eye irritation

Method: OECD Test Guideline 437

GLP: yes

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Remarks: Causes serious eye irritation.

Components:**7722-88-5 Tetrasodium pyrophosphate:**

Result: Severe eye irritation

Assessment: Risk of serious damage to eyes.

Species: Rabbit

Result: Corrosive to eyes

Method: OECD Test Guideline 405

GLP: yes

Respiratory or skin sensitisation**Product:**

Remarks: No data available

Components:**7722-88-5 Tetrasodium pyrophosphate:**

Test Type: Mouse Local Lymph Node assay (LLNA)

Exposure routes: Skin contact

Species: Mouse

Method: OECD Test Guideline 429

Result: Not a skin sensitizer.

GLP: yes

Carcinogenicity**IARC**

Group 1: Carcinogenic to humans

Crystalline silica (quartz)

14808-60-7

OSHA

OSHA specifically regulated carcinogen

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

NTP

Known to be human carcinogen

Crystalline silica (quartz)

14808-60-7

Repeated dose toxicity**Product:**

Remarks: Long term inhalation of crystalline silica dusts may cause lung disease (silicosis).

Crystalline silica has been classified as a probable human carcinogen by IARC.

Epidemiological studies suggest that respirable crystalline silica has caused both immune system and kidney effects. The mechanisms causing these effects are unclear and a dose-

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response relationship has not been determined.

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 will probably 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

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

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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.

Waste from residues

: Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging

: Empty remaining contents.
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.

National Regulations**49 CFR**

Not regulated as a dangerous good

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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

US State Regulations**Massachusetts Right To Know**

Tetrasodium pyrophosphate	7722-88-5
Crystalline silica (quartz)	14808-60-7

Pennsylvania Right To Know

Phyllosilicate	-
Tetrasodium pyrophosphate	7722-88-5

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Pennsylvania Right To Know

Phyllosilicate	-
Tetrasodium pyrophosphate	7722-88-5 9049-76-7

New Jersey Right To Know**New Jersey Right To Know**

New Jersey Trade Secret Registry Number for the product (NJ TSN) : 800963-1027

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 components 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).
Section 4 / 12(b)	: Not applicable
Section 5	: Not applicable
TSCA Inventory Active List	: All components of this product are listed active and/or are exempt
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.