

OPTIBENT-NT 10

Version 6

Revision Date 05/17/2026

Print Date 08/06/2026

SECTION 1. IDENTIFICATION

Product name : OPTIBENT-NT 10

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**

Combustible dust :
Carcinogenicity : Category 1A

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : May form combustible dust concentrations in air.
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.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
Storage:
P405 Store locked up.
Disposal:

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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 (%)
Amorphous silica gel	112945-52-5	≥ 5 - < 10
Crystalline silica (quartz)	14808-60-7	≥ 0.1 - < 1

The specific chemical identity/weight percent of proprietary ingredient(s) is a trade secret

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 : 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.

Most important symptoms and effects, both acute and delayed : No information available.

SECTION 5. FIREFIGHTING MEASURES

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Suitable extinguishing media	: Alcohol-resistant foam Carbon dioxide (CO ₂) Dry chemical
Unsuitable extinguishing media	: High volume water jet
Specific hazards during firefighting	: Handle as an industrial chemical. Keep dust to a minimum to avoid potential formation of explosive air/dust mixture. Will not explode on mechanical impact. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	: Carbon oxides
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.
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	: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). 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.
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- 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.
 Provide for appropriate exhaust ventilation and dust collection at machinery.
 Minimize dust generation and accumulation.
 Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.
 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 : Keep away from oxidizing agents.
 Keep away from strong acids.
- Recommended storage temperature : 0 - 30 °C

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

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Amorphous silica gel	112945-52-5	TWA (Dust)	20 Million particles per cubic foot (Silica)	OSHA Z-3
Amorphous silica gel		TWA (Dust)	80 mg/m ³ / %SiO ₂ (Silica)	OSHA Z-3
Amorphous silica gel		TWA	6 mg/m ³ (Silica)	NIOSH REL
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

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Crystalline silica (quartz)		TWA (respirable dust fraction)	0.1 mg/m3	OSHA P0
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	50 Million 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	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
Material : Impervious 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.

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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

pH : **insoluble**

Melting point/ range : Not applicable
Initial boiling point : Not applicable
Vapour pressure : Not applicable

Flash point : Not applicable
Upper explosion limit : Not applicable

Lower explosion limit : > 250 g/m³

Evaporation rate : Not applicable

Flammability (solid, gas) : May form combustible dust concentrations in air.

Dust explosion description : 73 m.b./s

number Kst
Dust explosion class : St1

Minimum Explosible : No data available

Concentration
Relative vapour density : Not applicable

Relative Density/Specific : No data available
Gravity

Particle size : No data available

Density : 1.8 g/cm³ (68 °F (20 °C))

Bulk density : 300 - 500 kg/m³

Solubility(ies)
Water solubility : insoluble

Solubility in other solvents : No data available

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Partition coefficient: n-octanol/water : No data available

Ignition temperature : 1004 °F (540 °C)

Thermal decomposition : No data available

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 reactions : Dust may form explosive mixture in air.

No decomposition if stored and applied as directed.

Conditions to avoid : Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Incompatible materials : Strong oxidizing agents
Acids

Hazardous decomposition products : No data available

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

Acute oral toxicity : Remarks: No data available

Acute toxicity estimate : > 5,000 mg/kg

Method: Calculation method

Components:**112945-52-5 Amorphous silica gel:**

Acute oral toxicity : LD50 (Rat): > 10,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0.1390 mg/l

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Skin corrosion/irritation**Product:**

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Remarks: No data available

Components:**112945-52-5 Amorphous silica gel:**

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

GLP: yes

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

Remarks: No data available

Components:**112945-52-5 Amorphous silica gel:**

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

GLP: yes

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

Group 1: Carcinogenic to humans

Crystalline silica (quartz)

14808-60-7

OSHA

OSHA specifically regulated carcinogen

Crystalline silica (quartz)

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OSHA specifically regulated carcinogen

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NTP

Known to be human carcinogen

Crystalline silica (quartz)

14808-60-7

Reproductive toxicity**Product:**

Effects on fertility : Remarks: No data available

Effects on foetal 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: 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-response relationship has not been determined.

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.

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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

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

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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

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

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

Non-volatile (Wt) : No data available

Massachusetts Right To Know

Crystalline silica (quartz) 14808-60-7

Pennsylvania Right To Know

Phyllosilicate -
Amorphous silica gel 112945-52-5

New Jersey Right To Know

New Jersey Trade Secret Registry Number for the product (NJ TSRN) : 800963-1033

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

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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.