CLAYTONE-II

Version 5 | Revision Date 05/17/2026 | Print Date 08/06/2026

SECTION 1. IDENTIFICATION

Product name : CLAYTONE-II

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

Combustible dust :

Carcinogenicity : Category 1A

Specific target organ toxicity - repeated exposure (Inhalation) : Category 1 (Lungs)

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : May form combustible dust concentrations in air.
H350 May cause cancer.
H372 Causes damage to organs (Lungs) through prolonged or repeated exposure if inhaled.

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/ vapours/ spray.
P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.
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:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

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.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance
Chemical nature : Organophilic phyllosilicate
Hazardous components

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

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

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

Unsuitable extinguishing media : High volume water jet

Specific hazards during firefighting : 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.
During processing, dust may form explosive mixture in air.

Hazardous combustion products : Carbon oxides
Nitrogen oxides (NOx)
Ammonia

Further information : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Keep away from heat and sources of ignition.
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 : Avoid dust formation.
Use non-sparking tools.
Remove all sources of ignition.
Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).
For personal protection see section 8.

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 : Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.
Avoid dispersal of dust in the air (i.e., clearing dust surfaces

with compressed air).
Use only non-sparking tools and/or equipment that is capable of being grounded. Electronic devices must have the proper electrical rating.

Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Minimize dust generation and accumulation.
Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.
Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations.
Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Do not use sparking tools.
Keep away from heat and flame.
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.
Electrical installations / working materials must comply with the technological safety standards.
Observe label precautions.

Materials to avoid : Keep away from oxidizing agents.
Keep away from strong acids.
Keep away from strong bases.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components 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/m3 / %SiO2+2	OSHA Z-3
Crystalline silica (quartz)		TWA (respirable)	250 mppcf / %SiO2+5	OSHA Z-3
Crystalline silica (quartz)		TWA (respirable dust fraction)	0.1 mg/m3	OSHA P0
Crystalline silica (quartz)		TWA (Respirable	0.025 mg/m3 (Silica)	ACGIH

		particulate matter)		
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

Engineering measures : It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment.
Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).
Use only appropriately classified electrical equipment and powered industrial trucks.

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 : Wear suitable gloves. 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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	:	powder
Colour	:	off-white
Odour	:	odourless
Odour Threshold	:	Not applicable
pH	:	4 - 6, Concentration: 1 % (68 °F (20 °C)) Method: Universal pH-value indicator
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	:	85 g/m3
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	May form combustible dust concentrations in air.
Dust explosion description number Kst	:	137.6 m.b_/s
Dust explosion class	:	St1
Minimum Explosible Concentration	:	50 g/m3
Relative vapour density	:	Not applicable
Relative Density/Specific Gravity	:	No data available
Particle size	:	No data available
Density	:	1.6 g/cm3 (68 °F (20 °C))
Bulk density	:	No data available
Solubility(ies)		
Water solubility	:	insoluble

Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No bioaccumulation is to be expected.
Ignition temperature	:	374 °F (190 °C) Ignition temperature dust layer 950 °F (510 °C) Ignition temperature dust cloud
Thermal decomposition	:	Not applicable
Viscosity		
Viscosity, dynamic	:	No data available

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. Keep away from open flames, hot surfaces and sources of ignition.
Incompatible materials	:	Strong oxidizing agents Strong acids and strong bases
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

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 sensitisation

Product:

Remarks: No data available

Carcinogenicity

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

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.

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

No data available

Persistence and degradability

No data available

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No bioaccumulation is to be expected.

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

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 SOCMI 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

Organophilic phyllosilicate	-
Crystalline silica (quartz)	14808-60-7

New Jersey Right To Know

New Jersey Trade Secret Registry Number for the product (NJ TSRN) : 800963-1077

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

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 : 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.