

CLAYTONE-VZ V XR

Version 1

Revision Date 05/17/2026

Print Date 06/18/2026

SECTION 1. IDENTIFICATION

Product name : CLAYTONE-VZ V XR

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
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

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

CLAYTONE-VZ V XR

Version 1

Revision Date 05/17/2026

Print Date 06/18/2026

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

None known.

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 : If on skin, rinse well with water.
 If on clothes, remove clothes.
 Wash clothing before reuse.

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.

CLAYTONE-VZ V XR

Version 1

Revision Date 05/17/2026

Print Date 06/18/2026

Most important symptoms and effects, both acute and delayed : Take victim immediately to hospital.
 Notes to physician : No information available.
 : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

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

Unsuitable extinguishing media : High volume water jet

Specific hazards during firefighting : Hazardous decomposition products formed under fire conditions.
 Keep dust to a minimum to avoid potential formation of explosive air/dust mixture.
 Will not explode on mechanical impact.
 Do not allow run-off from fire fighting to enter drains or water courses.
 Handle as an industrial chemical.
 Cool closed containers exposed to fire with water spray.
 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.

Hazardous combustion products : Carbon oxides
 Nitrogen oxides (NO_x)
 Ammonia
 silicone compounds

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 : Avoid breathing dust.
 Avoid dust formation.
 Use personal protective equipment.
 Use non-sparking tools.
 Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).

: Use personal protective equipment.
 Avoid dust formation.
 Avoid breathing dust.

CLAYTONE-VZ V XR

Version 1

Revision Date 05/17/2026

Print Date 06/18/2026

- 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).
Non-sparking tools should be used.
Keep in suitable, closed containers for disposal.
- 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 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

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/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)	0.025 mg/m ³ (Silica)	ACGIH

CLAYTONE-VZ V XR

Version 1

Revision Date 05/17/2026

Print Date 06/18/2026

		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
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

CLAYTONE-VZ V XR

Version 1

Revision Date 05/17/2026

Print Date 06/18/2026

Hygiene measures : concentration of the dangerous substance at the work place.
: 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 : slight
Odour Threshold : Not applicable

pH : 6 - 8, 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 : 95 g/m³

Evaporation rate : Not applicable

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

Dust explosion description : 116 m.b_/s
number Kst

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- : No data available

CLAYTONE-VZ V XR

Version 1

Revision Date 05/17/2026

Print Date 06/18/2026

octanol/water Ignition temperature	:	527 °F (275 °C) Ignition temperature dust layer
		968 °F (520 °C) Ignition temperature dust cloud
Thermal decomposition	:	No data available
Viscosity		
Viscosity, dynamic	:	Not applicable
Viscosity, kinematic	:	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	:	No decomposition if stored and applied as directed. Dust may form explosive mixture in air.
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. No data available
Incompatible materials	:	Strong oxidizing agents Strong acids and strong bases
Hazardous decomposition products	:	No decomposition if used 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

CLAYTONE-VZ V XR

Version 1

Revision Date 05/17/2026

Print Date 06/18/2026

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

Remarks: No data available

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)	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 foetal development : Remarks: No data available

STOT - single exposure**Product:**

Remarks: No data available

CLAYTONE-VZ V XR

Version 1

Revision Date 05/17/2026

Print Date 06/18/2026

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

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Product:**Toxicity to fish :
Remarks: No data availableToxicity 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

CLAYTONE-VZ V XR

Version 1

Revision Date 05/17/2026

Print Date 06/18/2026

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

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) : 800963-5614

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

CLAYTONE-VZ V XR

Version 1

Revision Date 05/17/2026

Print Date 06/18/2026

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 : 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.