

**CLAYTONE®-II**

Version 5

Revision Date 01/21/2018

Print Date 01/31/2018

**SECTION 1. IDENTIFICATION**

Product name : CLAYTONE®-II

**Manufacturer or supplier's details**

Company : BYK USA Inc.  
524 South Cherry Street  
Wallingford CT 06492

Telephone : (203) 265-2086

Visit our web site : [www.byk.com](http://www.byk.com)

E-mail address : [BRIEF.BYK.NAFTA@altana.com](mailto: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 : 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.

## CLAYTONE®-II

Version 5

Revision Date 01/21/2018

Print Date 01/31/2018

P264 Wash skin thoroughly after handling.  
 P270 Do not eat, drink or smoke when using this product.  
 P281 Use personal protective equipment as required.  
**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	>= 2 - < 3

## 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 : 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.

**CLAYTONE®-II**

Version 5

Revision Date 01/21/2018

Print Date 01/31/2018

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 : Dry chemical  
 Alcohol-resistant foam  
 Carbon dioxide (CO<sub>2</sub>)
- Unsuitable extinguishing media : No information available.
- 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  
 Nitrogen oxides (NO<sub>x</sub>)  
 Ammonia
- 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.

## CLAYTONE®-II

Version 5

Revision Date 01/21/2018

Print Date 01/31/2018

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, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).

### 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 : 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 (total dust)	30 mg/m <sup>3</sup> / %SiO <sub>2</sub> +2	OSHA Z-3
Crystalline silica (quartz)		TWA (respirable)	10 mg/m <sup>3</sup> / %SiO <sub>2</sub> +2	OSHA Z-3
Crystalline silica (quartz)		TWA (respirable)	250 mppcf / %SiO <sub>2</sub> +5	OSHA Z-3
Crystalline silica (quartz)		TWA (respirable dust fraction)	0.1 mg/m <sup>3</sup>	OSHA P0
Crystalline silica (quartz)		TWA (Respirable)	0.025 mg/m <sup>3</sup> (Silica)	ACGIH

**CLAYTONE®-II**

Version 5

Revision Date 01/21/2018

Print Date 01/31/2018

		fraction)		
Crystalline silica (quartz)		TWA (Respirable dust)	0.05 mg/m <sup>3</sup> (Silica)	NIOSH REL

OSHA has established an action limit of 0.025 mg/m<sup>3</sup> (8-hr TWA) and a permissible exposure limit of .05 mg/m<sup>3</sup> (8-hour TWA) for respirable crystalline silica.

**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/m <sup>3</sup> total dust	OSHA Z-3
	TWA	5 mg/m <sup>3</sup> respirable fraction	OSHA Z-3
	TWA	15Million particles per cubic foot respirable fraction	OSHA Z-3
Dust, nuisance dust and particulates	PEL	10 mg/m <sup>3</sup> Total dust	CAL PEL
	PEL	5 mg/m <sup>3</sup> respirable dust fraction	CAL PEL

**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 : Unless air monitoring demonstrates vapor/mist/dust levels are below the PEL/TLV wear a properly fitted respirator (NIOSH approved) or dust mask during exposure.

Hand protection  
Material : Neoprene

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.

**CLAYTONE®-II**

Version 5

Revision Date 01/21/2018

Print Date 01/31/2018

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**

Appearance : powder

Colour : off-white

Odour : odourless

Odour Threshold : Not applicable

pH : Not applicable

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) : May form combustible dust concentrations in air.

Dust explosion description number Kst : 147 m.b\_/s

**Dust explosion class : St1**

Minimum Explosible Concentration : 50 g/m<sup>3</sup>

Relative vapour density : Not applicable

Relative Density/Specific Gravity : No data available

Density : No data available

Bulk density : No data available

**CLAYTONE®-II**

Version 5

Revision Date 01/21/2018

Print Date 01/31/2018

Solubility(ies)  
Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No bioaccumulation is to be expected.

Auto-ignition temperature : 374 °F (190 °C)  
Method: Minimum Ignition Temperature (layer)

950 °F (510 °C)  
Method: Minimum Ignition Temperature (cloud)

Thermal decomposition : Not applicable

Viscosity  
Viscosity, dynamic : No data available

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable; polymerization will not occur

Possibility of hazardous reactions : 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.

Incompatible materials : Strong oxidizing agents  
Strong acids and strong bases

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

**CLAYTONE®-II**

Version 5

Revision Date 01/21/2018

Print Date 01/31/2018

**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**

<b>IARC</b>	Group 1: Carcinogenic to humans	
	Crystalline silica (quartz)	14808-60-7
<b>OSHA</b>	OSHA specifically regulated carcinogen	
	Crystalline silica (quartz)	14808-60-7
<b>NTP</b>	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:

**CLAYTONE®-II**

Version 5

Revision Date 01/21/2018

Print Date 01/31/2018

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

**CLAYTONE®-II**

Version 5

Revision Date 01/21/2018

Print Date 01/31/2018

**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

**CLAYTONE®-II**

Version 5

Revision Date 01/21/2018

Print Date 01/31/2018

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**

Crystalline silica (quartz)	14808-60-7
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**Pennsylvania Right To Know**

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

**New Jersey Right To Know**

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

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

**California Prop 65**

	WARNING! This product contains a chemical known to the State of California to cause cancer.
Crystalline silica (quartz)	14808-60-7

CONEG Heavy Metal: We confirm that we use packaging and/or packaging components in which the sum of the incidental concentration levels of lead, mercury, cadmium and hexavalent chromium do not exceed 100 parts per million by weight.

**The components of this product are reported in the following inventories:**

TSCA : We certify that all of the components of this product are either

**CLAYTONE®-II**

Version 5

Revision Date 01/21/2018

Print Date 01/31/2018

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 : BYK USA Inc. certifies that all of the components of this product are listed on the interim list of TSCA active substances, and/or an NOC was filed during the lookback period or was filed on or after June 22, 2016, and/or a NOA report form was submitted during the reporting period. All components of this product will be listed on the final TSCA Inventory Active List. Impurities and by-products are exempt from reporting 40 CFR 720 30(h).

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

**SECTION 16. OTHER INFORMATION**

Revision Date : 01/21/2018

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.