



# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

## Jade Ceramic Coating - Quartz

version number GHS 8.0.

revision 2019-06-14.

### SECTION 1: Identification

- 1.1 Product identifier**  
**Trade name** Jade Ceramic Coating - Quartz
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**  
**Relevant identified uses** Vehicle coating
- 1.3 Details of the supplier of the safety data sheet**  
B&B Blending, LLC  
10963 Leroy Drive  
Northglenn  
CO 80233  
United States
- telephone  
1.800.875.6320, 1.303.289.6320  
e-mail: info@bbblending.com  
website  
bbblending.com
- e-mail (competent person)** Btirrell@bbblending.com  
(Beth Tirrell)
- 1.4 Emergency telephone number**  
**Emergency information service** USA 1.800.535.5053, INTL 1.352.323.3500  
24 hour emergency number

### SECTION 2: Hazard(s) identification

- 2.1 Classification of the substance or mixture**  
**Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)**

Section	Hazard class	Cat-egory	Hazard class and category	Hazard state-ment
A.10	Acute toxicity (oral)	4	Acute Tox. 4	H302
A.2	Skin corrosion/irritation	2	Skin Irrit. 2	H315
A.3	Serious eye damage/eye irritation	1	Eye Dam. 1	H318
A.7	Reproductive toxicity	2	Repr. 2	H361f
A.10	Aspiration hazard	1	Asp. Tox. 1	H304
B.6	Flammable liquid	3	Flam. Liq. 3	H226

For full text of abbreviations: see SECTION 16

#### The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources. The mixture contains a substance that was identified as a PBT (persistent, bioaccumulative and toxic). The mixture contains a substance that was identified as vPvB (very persistent and very bioaccumulative).

#### Additional information

Containing a PBT-/vPvB-substance in a concentration of  $\geq 0,1\%$ .



# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

## Jade Ceramic Coating - Quartz

version number GHS 8.0.

revision 2019-06-14.

### 2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Signal word Danger

Pictograms

GHS02, GHS05,  
GHS07, GHS08



#### Hazard statements

H226 Flammable liquid and vapor.  
H302 Harmful if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H361f Suspected of damaging fertility.

#### Precautionary statements

P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P281 Wear personal protective equipment/face protection.  
P301+P310 If swallowed: Immediately call a poison center/doctor.  
P302+P352 If on skin: Wash with plenty of water.  
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P321 Specific treatment (see on this label).  
P330 Rinse mouth.  
P331 Do NOT induce vomiting.  
P362 Take off contaminated clothing and wash it before reuse.  
P370+P378 In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.  
P403+P235 Store in a well-ventilated place. Keep cool.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Hazardous ingredients for labelling

Octamethylcyclotetrasiloxane  
Cyclosilazanes, di-Me, Me hydrogen, polymers with  
di-Me, Me hydrogen silazanes, reaction products with  
3-(triethoxysilyl)-1-propanamine  
Distillates (petroleum) hydrotreated, light

### 2.3 Other hazards

#### Hazards not otherwise classified

Very toxic to aquatic life with long lasting effects (GHS category 1: aquatic toxicity - acute and/or chronic).



# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

## Jade Ceramic Coating - Quartz

version number GHS 8.0.

revision 2019-06-14.

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Not relevant (mixture).

#### 3.2 Mixtures

##### Description of the mixture

Hazardous ingredients acc. to GHS				
Name of substance	Identifier	Wt%	Classification acc. to GHS	Notes
octamethylcyclotetrasiloxane	CAS No 556-67-2	40 - < 55	Repr. 2 / H361f Flam. Liq. 3 / H226	PBT vPvB
Cyclosilazanes, di-Me, Me hydrogen, polymers with di-Me, Me hydrogen silazanes, reaction products with 3-(triethoxysilyl)-1-propanamine	CAS No 475645-84-2	12 - < 20	Acute Tox. 3 / H301 Skin Corr. 1C / H314 Eye Dam. 1 / H318 Flam. Liq. 2 / H225	
decamethylcyclopentasiloxane	CAS No 541-02-6	12 - < 20	Flam. Liq. 4 / H227	PBT vPvB
distillates (petroleum) hydro-treated, light	CAS No 64742-47-8	3 - < 12	Asp. Tox. 1 / H304 Flam. Liq. 4 / H227	
methanol	CAS No 67-56-1	0.1 - < 1	Acute Tox. 3 / H301 Acute Tox. 3 / H311 Acute Tox. 3 / H331 STOT SE 1 / H370 Flam. Liq. 2 / H225	IOELV

##### Notes

IOELV: Substance with a community indicative occupational exposure limit value

PBT: The substance was identified as a PBT (persistent, bioaccumulative and toxic)

vPvB: The substance was identified as a vPvB (very persistent and very bioaccumulative)

##### Hazardous ingredients

This mixture does not meet the criteria for classification.

For full text of abbreviations: see SECTION 16. Exact percentage of ingredients is withheld as a trade secret.

### SECTION 4: First-aid measures

#### 4.1 Description of first-aid measures

##### General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

##### Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

##### Following skin contact

Wash with plenty of soap and water.

##### Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing.

##### Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.



# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

## Jade Ceramic Coating - Quartz

version number GHS 8.0.

revision 2019-06-14.

### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

### 4.3 Indication of any immediate medical attention and special treatment needed

none

## SECTION 5: Fire-fighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Water spray. BC-powder. Carbon dioxide (CO<sub>2</sub>).

#### Unsuitable extinguishing media

Water jet.

### 5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapor-air mixture. Solvent vapors are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

#### Hazardous combustion products

Nitrogen oxides (NO<sub>x</sub>). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Remove persons to safety.

#### For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

### 6.3 Methods and material for containment and cleaning up

#### Advices on how to contain a spill

Covering of drains.

#### Advices on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). collect spillage  
sawdust  
kieselgur (diatomite)  
sand  
universal binder

#### Appropriate containment techniques

Use of adsorbent materials.

#### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.



# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

## Jade Ceramic Coating - Quartz

version number GHS 8.0.

revision 2019-06-14.

### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Recommendations

#### Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

#### Specific notes/details

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapors are heavier than air, spread along floors and form explosive mixtures with air. Vapors may form explosive mixtures with air.

#### Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Managing of associated risks

#### Explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

#### Flammability hazards

Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

#### General rule

Do not use for squirting or spraying.

#### Ventilation requirements

Use local and general ventilation. Ground/bond container and receiving equipment.

#### Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

### 7.3 Specific end use(s)

See section 16 for a general overview.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)											
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Ceiling-C [ppm]	Ceiling-C [mg/m <sup>3</sup> ]	Notation	Source
US	methyl alcohol	67-56-1	REL	200 (10 h)	260 (10 h)	250	325				NIOSH REL



# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

## Jade Ceramic Coating - Quartz

version number GHS 8.0.

revision 2019-06-14.

Occupational exposure limit values (Workplace Exposure Limits)											
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Ceiling-C [ppm]	Ceiling-C [mg/m <sup>3</sup> ]	Notation	Source
US	methyl alcohol	67-56-1	PEL	200	260						29 CFR 1910.1000
US	methyl alcohol (methanol)	67-56-1	PEL (CA)	200	260	250	325	1,000			Cal/OSHA PEL

### Notation

- Ceiling-C Ceiling value is a limit value above which exposure should not occur
- STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
- TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Relevant DNELs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
octamethylcyclotetrasiloxane	556-67-2	DNEL	73 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
octamethylcyclotetrasiloxane	556-67-2	DNEL	73 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - systemic effects
octamethylcyclotetrasiloxane	556-67-2	DNEL	73 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - local effects
octamethylcyclotetrasiloxane	556-67-2	DNEL	73 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - local effects
decamethylcyclopentasiloxane	541-02-6	DNEL	97.3 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
decamethylcyclopentasiloxane	541-02-6	DNEL	97.3 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - systemic effects
decamethylcyclopentasiloxane	541-02-6	DNEL	24.2 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - local effects
decamethylcyclopentasiloxane	541-02-6	DNEL	24.2 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - local effects
methanol	67-56-1	DNEL	260 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - local effects
methanol	67-56-1	DNEL	40 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
methanol	67-56-1	DNEL	260 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects



# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

## Jade Ceramic Coating - Quartz

version number GHS 8.0.

revision 2019-06-14.

Relevant PNECs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
octamethylcyclotetrasiloxane	556-67-2	PNEC	10 mg/l	microorganisms	sewage treatment plant (STP)	short-term (single instance)
octamethylcyclotetrasiloxane	556-67-2	PNEC	0.059 mg/kg	pelagic organisms	sediment	short-term (single instance)
octamethylcyclotetrasiloxane	556-67-2	PNEC	1.7 mg/kg	(top) predators	water	short-term (single instance)
octamethylcyclotetrasiloxane	556-67-2	PNEC	0.44 µg/l	aquatic organisms	freshwater	short-term (single instance)
octamethylcyclotetrasiloxane	556-67-2	PNEC	0.044 µg/l	aquatic organisms	Quartz water	short-term (single instance)
octamethylcyclotetrasiloxane	556-67-2	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
octamethylcyclotetrasiloxane	556-67-2	PNEC	3 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
octamethylcyclotetrasiloxane	556-67-2	PNEC	0.3 mg/kg	aquatic organisms	Quartz sediment	short-term (single instance)
octamethylcyclotetrasiloxane	556-67-2	PNEC	0.59 mg/kg	benthic organisms	sediment	short-term (single instance)
octamethylcyclotetrasiloxane	556-67-2	PNEC	0.16 mg/kg	terrestrial organisms	soil	short-term (single instance)
decamethylcyclopentasiloxane	541-02-6	PNEC	10 mg/l	microorganisms	sewage treatment plant (STP)	short-term (single instance)
decamethylcyclopentasiloxane	541-02-6	PNEC	11 mg/kg	benthic organisms	sediment	short-term (single instance)
decamethylcyclopentasiloxane	541-02-6	PNEC	13 mg/kg	(top) predators	water	short-term (single instance)
decamethylcyclopentasiloxane	541-02-6	PNEC	1.1 mg/kg	pelagic organisms	sediment	short-term (single instance)
decamethylcyclopentasiloxane	541-02-6	PNEC	1.2 µg/l	aquatic organisms	freshwater	short-term (single instance)
decamethylcyclopentasiloxane	541-02-6	PNEC	0.12 µg/l	aquatic organisms	Quartz water	short-term (single instance)
decamethylcyclopentasiloxane	541-02-6	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
decamethylcyclopentasiloxane	541-02-6	PNEC	11 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
decamethylcyclopentasiloxane	541-02-6	PNEC	1.1 mg/kg	aquatic organisms	Quartz sediment	short-term (single instance)
decamethylcyclopentasiloxane	541-02-6	PNEC	1.27 mg/kg	terrestrial organisms	soil	short-term (single instance)
methanol	67-56-1	PNEC	20.8 mg/l	aquatic organisms	freshwater	short-term (single instance)
methanol	67-56-1	PNEC	100 mg/l	microorganisms	sewage treatment plant (STP)	short-term (single instance)



# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

## Jade Ceramic Coating - Quartz

version number GHS 8.0.

revision 2019-06-14.

Relevant PNECs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
methanol	67-56-1	PNEC	77 mg/kg	benthic organisms	sediment	short-term (single instance)
methanol	67-56-1	PNEC	7.7 mg/kg	pelagic organisms	sediment	short-term (single instance)
methanol	67-56-1	PNEC	3.18 mg/kg	terrestrial organisms	soil	short-term (single instance)
methanol	67-56-1	PNEC	1,540 mg/l	aquatic organisms	water	intermittent release
methanol	67-56-1	PNEC	2.08 mg/l	aquatic organisms	Quartz water	short-term (single instance)

### 8.2 Exposure controls

#### Appropriate engineering controls

General ventilation.

#### Individual protection measures (personal protective equipment)

##### Eye/face protection

Wear eye/face protection.

##### Skin protection

##### Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

##### Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

##### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

##### Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

Physical state	Liquid
Color	Various
Odor	Penetrating - Like solvent





# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

## Jade Ceramic Coating - Quartz

version number GHS 8.0.

revision 2019-06-14.

### Other safety parameters

<b>PH (value)</b>	Not determined
<b>Melting point/freezing point</b>	Not determined
<b>Initial boiling point and boiling range</b>	45 °C
<b>Flash point</b>	49 °C at 101.3 kPa 121 °F at 1 atm
<b>Evaporation rate</b>	Not determined
<b>Flammability (solid, gas)</b>	Not relevant Fluid

### Explosive limits

<b>Lower explosion limit (LEL)</b>	0.6 vol%
<b>Upper explosion limit (UEL)</b>	4.9 vol%
<b>Vapor pressure</b>	132 Pa at 25 °C
<b>Density</b>	0.94 g/ml at 25 °C 7.92 lb/gal at 25 °C
<b>Vapor density</b>	This information is not available
<b>Solubility(ies)</b>	Not determined

### Partition coefficient

<b>- n-octanol/water (log KOW)</b>	This information is not available
<b>Auto-ignition temperature</b>	215 °C Auto-ignition temperature (liquids and gases)
<b>Viscosity</b>	Not determined
<b>Explosive properties</b>	None
<b>Oxidizing properties</b>	None

### 9.2 Other information

<b>Temperature class (USA, acc. to NEC 500)</b>	T3 Maximum permissible surface temperature on the equipment: 200 °C
---	--



# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

## Jade Ceramic Coating - Quartz

version number GHS 8.0.

revision 2019-06-14.

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s). Risk of ignition.

##### If heated

Risk of ignition.

#### 10.2 Chemical stability

See below "Conditions to avoid".

#### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

##### Hints to prevent fire or explosion

Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

#### 10.5 Incompatible materials

Oxidizers.

#### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

##### Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

##### Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

##### Acute toxicity

Harmful if swallowed.

##### Acute toxicity estimate (ATE)

Oral 1,525 mg/kg

Acute toxicity estimate (ATE) of components of the mixture			
Name of substance	CAS No	Exposure route	ATE
Cyclosilazanes, di-Me, Me hydrogen, polymers with di-Me, Me hydrogen silazanes, reaction products with 3-(triethoxysilyl)-1-propanamine	475645-84-2	oral	300 mg/kg
methanol	67-56-1	oral	100 mg/kg
methanol	67-56-1	dermal	300 mg/kg
methanol	67-56-1	inhalation: vapor	3 mg/l/4h

##### Skin corrosion/irritation

Causes skin irritation.



# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

## Jade Ceramic Coating - Quartz

version number GHS 8.0.

revision 2019-06-14.

### Serious eye damage/eye irritation

Causes serious eye damage.

### Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

### Carcinogenicity

Shall not be classified as carcinogenic.

### Reproductive toxicity

Suspected of damaging fertility.

### Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

### Aspiration hazard

May be fatal if swallowed and enters airways.

## SECTION 12: Ecological information

### 12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
octamethylcyclotetrasiloxane	556-67-2	LC50	>22 µg/l	fish	96 h
octamethylcyclotetrasiloxane	556-67-2	EC50	>1,000 mg/l	aquatic invertebrates	96 h
Cyclosilazanes, di-Me, Me hydrogen, polymers with di-Me, Me hydrogen silazanes, reaction products with 3-(triethoxysilyl)-1-propanamine	475645-84-2	LC50	57.1 mg/l	zebra fish	96 h
decamethylcyclopentasiloxane	541-02-6	LC50	>16 µg/l	fish	96 h
decamethylcyclopentasiloxane	541-02-6	EC50	>2.9 µg/l	aquatic invertebrates	48 h
methanol	67-56-1	LC50	15,400 mg/l	fish	96 h
methanol	67-56-1	EC50	12,700 mg/l	fish	96 h
methanol	67-56-1	ErC50	22,000 mg/l	algae	96 h



# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

## Jade Ceramic Coating - Quartz

version number GHS 8.0.

revision 2019-06-14.

Aquatic toxicity (chronic) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
octamethylcyclotetrasiloxane	556-67-2	LC50	10 µg/l	fish	14 d
octamethylcyclotetrasiloxane	556-67-2	EC50	>500 mg/l	aquatic invertebrates	24 h
decamethylcyclopentasiloxane	541-02-6	LC50	>16 µg/l	fish	14 d
decamethylcyclopentasiloxane	541-02-6	EC50	>15 µg/l	aquatic invertebrates	21 d

### 12.2 Persistence and degradability

Data are not available.

### 12.3 Bioaccumulative potential

The substance fulfills the very bioaccumulative criterion.

### 12.4 Mobility in soil

Data are not available.

### 12.5 Results of PBT and vPvB assessment

The mixture contains a substance that was identified as a PBT (persistent, bioaccumulative and toxic). The mixture contains a substance that was identified as vPvB (very persistent and very bioaccumulative).

### 12.6 Other adverse effects

#### Endocrine disrupting potential

The mixture contains substance(s) with an endocrine disrupting potential.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Waste treatment-relevant information

Solvent reclamation/regeneration.

#### Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

#### Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to DOT) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

#### Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.



# Safety Data Sheet


acc. to 29 CFR 1910.1200 App D

## Jade Ceramic Coating - Quartz

version number GHS 8.0.

revision 2019-06-14.

### SECTION 14: Transport information

<b>14.1 UN number</b>	<b>2924</b>
<b>14.2 UN proper shipping name</b>	<b>Flammable liquid, corrosive, n.o.s.</b>
<b>Technical name</b>	Polysiloxazane
<b>14.3 Transport hazard class(es)</b>	
<b>Class</b>	<b>3 Flammable liquids</b>
<b>Subsidiary risk(s)</b>	8 Corrosive effects
<b>14.4 Packing group</b>	III Substance presenting low danger
<b>14.5 Environmental hazards</b>	Hazardous to the aquatic environment
<b>Environmentally hazardous substance (aquatic environment)</b>	Octamethylcyclotetrasiloxane
<b>14.6 Special precautions for user</b>	
There is no additional information.	
<b>14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code</b>	
The cargo is not intended to be carried in bulk.	
<b>14.8 Information for each of the UN Model Regulations</b>	
<b>Transport of dangerous goods by road or rail (49 CFR US DOT)</b>	
<b>Index number</b>	2924
<b>Proper shipping name</b>	Flammable liquid, corrosive, n.o.s.
<b>Particulars in the shipper's declaration</b>	UN2924, Flammable liquid, corrosive, n.o.s., (poly-siloxazane, solution), 3 (8), III, environmentally hazardous
<b>Class</b>	3
<b>Subsidiary risk(s)</b>	8
<b>Packing group</b>	III
<b>Danger label(s)</b>	3+8 Fish and tree
	
<b>Environmental hazards</b>	Yes Hazardous to the aquatic environment
<b>Special provisions (SP)</b>	B1, IB3, T7, TP1, TP28
<b>ERG No</b>	132
<b>International Maritime Dangerous Goods Code (IMDG)</b>	
<b>UN number</b>	2924
<b>Proper shipping name</b>	FLAMMABLE LIQUID, CORROSIVE, N.O.S.
<b>Class</b>	3
<b>Subsidiary risk(s)</b>	8
<b>Quartz pollutant</b>	Yes Hazardous to the aquatic environment
<b>Packing group</b>	III
<b>Danger label(s)</b>	3+8 Fish and tree



# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

## Jade Ceramic Coating - Quartz

version number GHS 8.0.

revision 2019-06-14.



**Special provisions (SP)** 223, 274  
**Excepted quantities (EQ)** E1  
**Limited quantities (LQ)** 5 L  
**EmS** F-E, S-C  
**Stowage category** A  
**International Civil Aviation Organization (ICAO-IATA/DGR)**  
**UN number** 2924  
**Proper shipping name** Flammable liquid, corrosive, n.o.s.  
**Class** 3  
**Subsidiary risk(s)** 8  
**Environmental hazards** Yes  
 Hazardous to the aquatic environment  
**Packing group** III  
**Danger label(s)** 3+8



**Special provisions (SP)** A3  
**Excepted quantities (EQ)** E1  
**Limited quantities (LQ)** 1 L

### SECTION 15: Regulatory information

#### 15.1 Safety, health and environmental regulations specific for the product in question

##### National regulations (United States)

**Toxic Substance Control Act (TSCA)** All ingredients are listed

**Superfund Amendment and Reauthorization Act (SARA TITLE III)**

**The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)**

none of the ingredients are listed

##### Specific Toxic Chemical Listings (EPCRA Section 313)

###### Toxics Release Inventory: Specific Toxic Chemical Listings

Name acc. to inventory	CAS No	Remarks	Effective date
methanol	67-56-1		1986-12-31

##### Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

###### List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Name of substance	CAS No	Remarks	Statutory code	Final RQ pounds (Kg)
methanol	67-56-1		3 4	5000 (2270)

##### Legend

- 3 "3" indicates that the source is section 112 of the Clean Air Act
- 4 "4" indicates that the source is section 3001 of the Resource Conservation and Recovery Act (RCRA)



# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

## Jade Ceramic Coating - Quartz

version number GHS 8.0.

revision 2019-06-14.

**Clean Air Act**

none of the ingredients are listed

**New Jersey Worker and Community Right to Know Act**

<b>Right to Know Hazardous Substance List</b>			
Name acc. to inventory	CAS No	Remarks	Classifications
methanol	67-56-1		TE F3

**Legend**

F3 Flammable - Third Degree  
TE Teratogenic

**California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987**

<b>Proposition 65 List of chemicals</b>				
Name acc. to inventory	CAS No	Wt%	Remarks	Type of the toxicity
methanol	67-56-1	0.2025		developmental

**Industry or sector specific available guidance(s)**

**NPCA-HMIS® III**

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	*	chronic (long-term) health effects may result from repeated overexposure
Health	3	major injury likely unless prompt action is taken and medical treatment is given
Flammability	2	material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

**NFPA® 704**

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	2	material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur
Health	3	material that, under emergency conditions, can cause serious or permanent injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		



# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

## Jade Ceramic Coating - Quartz

version number GHS 8.0.

revision 2019-06-14.

### National inventories

Country	Inventory	Status
CA	DSL	not all ingredients are listed
CA	NDSL	not all ingredients are listed
EU	REACH Reg.	not all ingredients are listed
US	TSCA	all ingredients are listed

#### Legend

DSL Domestic Substances List (DSL)  
NDSL Non-domestic Substances List (NDSL)  
REACH Reg. REACH registered substances  
TSCA Toxic Substance Control Act

### 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information, including date of preparation or last revision

### Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
3.2		Hazardous ingredients acc. to GHS: change in the listing (table)	yes
3.2		Hazardous ingredients: This mixture does not meet the criteria for classification. For full text of abbreviations: see SECTION 16. Exact percentage of ingredients is withheld as a trade secret.	yes

### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
29 CFR 1910.1000	29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits)
49 CFR US DOT	49 CFR § 40 U.S. Department of Transportation
Acute Tox.	Acute toxicity
Asp. Tox.	Aspiration hazard
ATE	Acute Toxicity Estimate
Cal/OSHA PEL	California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
DOT	Department of Transportation (USA)
EmS	Emergency Schedule
ERG No	Emergency Response Guidebook - Number





# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

## Jade Ceramic Coating - Quartz

version number GHS 8.0.

revision 2019-06-14.

Abbr.	Descriptions of used abbreviations
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Quartz Pollutant")
NIOSH REL	National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs)
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PEL	Permissible exposure limit
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
Repr.	Reproductive toxicity
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
STOT SE	Specific target organ toxicity - single exposure
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative

### Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### Classification procedure

Physical and chemical properties. The classification is based on tested mixture.

Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).



# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

## Jade Ceramic Coating - Quartz

version number GHS 8.0.

revision 2019-06-14.

### List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H227	Combustible liquid.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H361f	Suspected of damaging fertility.
H370	Causes damage to organs.

### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.