Safety Data Sheet
acc. to 29 CFR 1910.1200 App D

Jade Emerald - Quartz Ceramic Coating

version number 2.0. revision 2026-08-05.

SECTION 1: Identification

1.1 Product identifier

Trade name **Jade Emerald - Quartz Ceramic Coating**

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses Polymeric automobile paint sealant
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) Smunoz@bbblending.com

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 statement
A.2	Skin corrosion/irritation	2	Skin Irrit. 2	H315
A.4S	Skin sensitization	1	Skin Sens. 1	H317
A.6	Carcinogenicity	2	Carc. 2	H351
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).

2.2 Label elements

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

Signal word Danger

Pictograms

GHS02, GHS07, GHS08



Hazard statements

H226	Flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.

Precautionary statements

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P272	Contaminated work clothing must not be allowed out of the workplace.
P280	Wear protective gloves/eye protection/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 or shower.
P308+P313	If exposed or concerned: Get medical advice/attention.
P321	Specific treatment (see on this label).
P331	Do NOT induce vomiting.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	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 to industrial combustion plant.

Hazardous ingredients for labelling

Parachlorobenzotrifluoride
Distillates (petroleum) hydrotreated, light
Solvent naphtha(petroleum), heavy aromatic, Naphthalene Depleted

2.3 Other hazards

Hazards not otherwise classified

May be harmful if swallowed (GHS category 5: acutely toxic - oral).
May be harmful in contact with skin (GHS category 5: acutely toxic - dermal).
May be harmful if inhaled (GHS category 5: acutely toxic - inhalation).
Very toxic to aquatic life with long lasting effects (GHS category 1: aquatic toxicity - acute and/or chronic).

Results of PBT and vPvB assessment

Contains a PBT-substance at a concentration of ≥ 0.1%. Contains a vPvB-substance at a concentration of ≥ 0.1%.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of ≥ 0.1%.

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
decamethylcyclopentasiloxane	CAS No 541-02-6	40 – < 55	Flam. Liq. 4 / H227	PBT vPvB
distillates (petroleum) hydrotreated, light	CAS No 64742-47-8	12 – < 20	Asp. Tox. 1 / H304	
parachlorobenzotrifluoride	CAS No 98-56-6	12 – < 20	Skin Sens. 1B / H317 Carc. 2 / H351 Flam. Liq. 3 / H226	IARC: 2B
Polyurea polysilazane	CAS No 2649792-57-2	3 – < 12	Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Flam. Liq. 2 / H225	

Notes

IARC 2B: IARC group 2B: possibly carcinogenic to humans (International Agency for Research on Cancer)

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)

Remarks

For full text of abbreviations: see SECTION 16.
This table, if present, includes all GHS classified ingredients present above their cut-off limits, even if the finished product is not classified as hazardous by GHS.

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.

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 (CO2).

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 (NOx). Carbon monoxide (CO). Carbon dioxide (CO2).

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate 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

Advice on how to contain a spill

Covering of drains.

Advice 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.

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/m³]	STEL [ppm]	STEL [mg/m³]	Ceiling-C [ppm]	Ceiling-C [mg/m³]	Notation	Source
US	p-Chloro-alpha,alpha,alpha-trifluoro-toluene	98-56-6	TLV®	0.5							ACGIH® 2026
US	p-Chloro-alpha,alpha,alpha-trifluoro-toluene	98-56-6	TLV®		20					sconc-mg	ACGIH® 2026

Notation

Ceiling-C Ceiling value is a limit value above which exposure should not occur

sconc-mg Surface concentration expressed as mg/100cm2

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

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
decamethylcyclo-pentasiloxane	541-02-6	DNEL	97.3 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
decamethylcyclo-pentasiloxane	541-02-6	DNEL	24.2 mg/m³	human, inhalatory	worker (industry)	acute - local effects
decamethylcyclo-pentasiloxane	541-02-6	DNEL	97.3 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
decamethylcyclo-pentasiloxane	541-02-6	DNEL	24.2 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
parachlorobenzotrifluoride	98-56-6	DNEL	1.025 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
parachlorobenzotrifluoride	98-56-6	DNEL	0.4 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
parachlorobenzotrifluoride	98-56-6	DNEL	17.6 µg/cm²	human, dermal	worker (industry)	acute - local effects

Relevant PNECs of components

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
decamethylcyclo-pentasiloxane	541-02-6	PNEC	10 $^{mg}/_{l}$	microorganisms	sewage treatment plant (STP)	short-term (single instance)
decamethylcyclo-pentasiloxane	541-02-6	PNEC	11 $^{mg}/_{kg}$	benthic organisms	sediment	short-term (single instance)
decamethylcyclo-pentasiloxane	541-02-6	PNEC	13 $^{mg}/_{kg}$	(top) predators	water	short-term (single instance)
decamethylcyclo-pentasiloxane	541-02-6	PNEC	1.1 $^{mg}/_{kg}$	pelagic organisms	sediment	short-term (single instance)
decamethylcyclo-pentasiloxane	541-02-6	PNEC	1.2 $^{µg}/_{l}$	aquatic organisms	freshwater	short-term (single instance)
decamethylcyclo-pentasiloxane	541-02-6	PNEC	0.12 $^{µg}/_{l}$	aquatic organisms	marine water	short-term (single instance)
decamethylcyclo-pentasiloxane	541-02-6	PNEC	10 $^{mg}/_{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
decamethylcyclo-pentasiloxane	541-02-6	PNEC	11 $^{mg}/_{kg}$	aquatic organisms	freshwater sediment	short-term (single instance)
decamethylcyclo-	541-02-6	PNEC	1.1 $^{mg}/_{kg}$	aquatic organ-	marine sediment	short-term (single

Relevant PNECs of components						
Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
pentasiloxane				isms		instance)
decamethylcyclopentasiloxane	541-02-6	PNEC	2.54 mg/kg	terrestrial organisms	soil	short-term (single instance)
parachlorobenzotrifluoride	98-56-6	PNEC	2 µg/l	aquatic organisms	freshwater	short-term (single instance)
parachlorobenzotrifluoride	98-56-6	PNEC	0.2 µg/l	aquatic organisms	marine water	short-term (single instance)
parachlorobenzotrifluoride	98-56-6	PNEC	0.032 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
parachlorobenzotrifluoride	98-56-6	PNEC	0.022 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
parachlorobenzotrifluoride	98-56-6	PNEC	0.002 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
parachlorobenzotrifluoride	98-56-6	PNEC	0.026 mg/kg	terrestrial organisms	soil	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.

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

Physical state	Liquid
Color	Transparent - Light green
Odor	Characteristic
Melting point/freezing point	Not determined
Boiling point or initial boiling point and	>133.8 °C at 1 atm

boiling range	
Flammability	flammable liquid in accordance with GHS criteria
Lower and upper explosion limit	0.6 vol% - 5 vol%
Flash point	50 °C at 101.3 kPa
Auto-ignition temperature	262 °C Auto-ignition temperature (liquids and gases)
Decomposition temperature	Not relevant
PH (value)	Not determined
Kinematic viscosity	Not determined
Solubility(ies)	Not determined

Partition coefficient

Partition coefficient n-octanol/water (log value)	This information is not available

Vapor pressure	33.2 Pa at 25 °C

Density and/or relative density

Density	7.92 $^{lb}/_{gal}$ at 77 °F 0.95 $^{g}/_{cm^3}$ at 25 °C
Relative vapour density	information on this property is not available

Particle characteristics	Not relevant Liquid

9.2 Other information

Information with regard to physical hazard classes	There is no additional information

Other safety characteristics

Temperature class (USA, acc. to NEC 500)	T2B Maximum permissible surface temperature on the equipment: 260°C

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

Shall not be classified as acutely toxic.
GHS of the United Nations, annex 4. May be harmful if swallowed, in contact with skin or if inhaled.

Acute toxicity estimate (ATE) of components

Name of substance	CAS No	Exposure route	ATE
decamethylcyclopentasiloxane	541-02-6	dermal	>2,000 $^{mg}/_{kg}$
decamethylcyclopentasiloxane	541-02-6	inhalation: dust/mist	8.67 $^{mg}/_{l}$/4h
parachlorobenzotrifluoride	98-56-6	dermal	>3,300 $^{mg}/_{kg}$
Polyurea polysilazane	2649792-57-2	oral	500 $^{mg}/_{kg}$

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitization

May cause an allergic skin reaction.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Suspected of causing cancer.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans			
Name of substance	CAS No	Classification	Number
parachlorobenzotrifluoride	98-56-6	2B	

Legend

2B Possibly carcinogenic to humans

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

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					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
decamethylcyclopentasiloxane	541-02-6	LC50	>16 µg/l	rainbow trout (Oncorhynchus mykiss)	96 h
decamethylcyclopentasiloxane	541-02-6	EC50	>2.9 µg/l	daphnia magna	48 h
parachlorobenzotrifluoride	98-56-6	LC50	3 mg/l	fish	48 h
parachlorobenzotrifluoride	98-56-6	ErC50	>0.41 mg/l	algae	72 h
parachlorobenzotrifluoride	98-56-6	EC50	>0.41 mg/l	algae	72 h
Polyurea polysilazane	2649792-57-2	LC50	57.1 mg/l	zebra fish (Danio rerio)	96 h

Aquatic toxicity (chronic) of components					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
decamethylcyclopentasiloxane	541-02-6	LC50	>16 µg/l	rainbow trout (Oncorhynchus mykiss)	14 d
decamethylcyclopentasiloxane	541-02-6	EC50	>15 µg/l	daphnia magna	21 d
parachlorobenzotrifluoride	98-56-6	LC50	6.5 mg/l	fish	24 h
parachlorobenzotrifluoride	98-56-6	EC50	242.1 mg/l	microorganisms	30 min

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Contains a PBT-substance at a concentration of ≥ 0.1%. Contains a vPvB-substance at a concentration of ≥ 0.1%.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of ≥ 0.1%.

12.7 Other adverse effects

Data are not available.

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.

SECTION 14: Transport information

14.1	**UN number**	**1993**
	DOT	UN 1993
	IMDG-Code	UN 1993
	ICAO-TI	UN 1993
14.2	**UN proper shipping name**	**Flammable liquid, n.o.s.**
	DOT	Flammable liquid, n.o.s.
	IMDG-Code	FLAMMABLE LIQUID, N.O.S.
	ICAO-TI	Flammable liquid, n.o.s.
	Technical nameHazardous ingredients	Parachlorobenzotrifluoride Polyurea polysilazane
14.3	**Transport hazard class(es)**	
	DOT	3
	IMDG-Code	3
	ICAO-TI	3
14.4	**Packing group**	III Substance presenting low danger

DOT	III
IMDG-Code	III
ICAO-TI	III

14.5 Environmental hazards Hazardous to the aquatic environment

Environmentally hazardous substance (aquatic environment) Decamethylcyclopentasiloxane

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

Transport of dangerous goods by road or rail (49 CFR US DOT)Additional information

Particulars in the shipper's declaration	UN1993, Flammable liquid, n.o.s., (contains: para-chlorobenzotrifluoride, Polyurea polysilazane), 3, III, environmentally hazardous
Danger label(s)	3 Fish and tree



Environmental hazards	Yes Hazardous to the aquatic environment
Special provisions (SP)	B1, B52, IB3, T4, TP1, TP29
ERG No	128

International Maritime Dangerous Goods Code (IMDG)Additional information

Marine pollutant	Yes Hazardous to the aquatic environment Decamethylcyclopentasiloxane
Danger label(s)	3 Fish and tree



Special provisions (SP)	223, 274, 955
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-E, S-E
Stowage category	A

International Civil Aviation Organization (ICAO-IATA/DGR)Additional information

Environmental hazards	Yes Hazardous to the aquatic environment
Danger label(s)	3



Special provisions (SP)	A3
Excepted quantities (EQ)	E1
Limited quantities (LQ)	10 L

SECTION 15: Regulatory information

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

National regulations (United States)

Toxic Substances Control Act (TSCA) Not all ingredients are listed (ACTIVE)

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

Clean Air Act

none of the ingredients are listed

Right to Know Hazardous Substance List

Cleaning Product Right to Know Act Substance List (CA-RTK)

Name of substance	CAS No	Functionality	Authoritative Lists
decamethylcyclopentasiloxane	541-02-6	solvents	Canada PBiTs CECBP - Priority Chemicals EC PBTs
distillates (petroleum) hydrotreated, light	64742-47-8	solvents	
parachlorobenzotrifluoride	98-56-6	solvents	
Polyurea polysilazane	2649792-57-2	refractory resin	
polydimethylsiloxane	63148-62-9	surface modifier	
fluorine modified silicone fluid	115361-68-7	surface modifier	
polytrimethylhydrosilylsiloxane	68988-56-7	surface modifier	
trimethylsiloxysilicate	68988-56-7	resin	
7-(diethylamino)-4-methyl-2H-chromen-2-one	91-44-1	colorant	
tetra(trimethylsiloxy)silane	3555-47-3	surface modifier	Canada PBiTs

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

Proposition 65 List of chemicals

Name acc. to inventory	CAS No	Wt%	Remarks	Type of the toxicity
naphthalene	91-20-3	0.000003		cancer
p-chloro-α,α,α-trifluorotoluene (para-Chlorobenzotrifluoride, PCBTF)	98-56-6	13.74		cancer

VOC content

Regulated Volatile Organic Compounds (VOC-EPA) 0.000597 %

Regulated Volatile Organic Compounds (VOC-Cal ARB) 0.000597 %

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	2	temporary or minor injury may occur
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	2	material that, under emergency conditions, can cause temporary incapacitation or residual injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

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	not all ingredients are listed
AU	AIIC	not all ingredients are listed
CN	IECSC	not all ingredients are listed
EU	ECSI	not all ingredients are listed
JP	CSCL-ENCS	not all ingredients are listed
JP	ISHA-ENCS	not all ingredients are listed
KR	KECI	not all ingredients are listed
MX	INSQ	not all ingredients are listed
NZ	NZIoC	not all ingredients are listed
PH	PICCS	not all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	not all ingredients are listed

Legend

AIIC Australian Inventory of Industrial Chemicals

CICR Chemical Inventory and Control Regulation

Legend

CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
ISHA-ENCS	Inventory of Existing and New Chemical Substances (ISHA-ENCS)
KECI	Korea Existing Chemicals Inventory
NDSL	Non-domestic Substances List (NDSL)
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substances 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)

Alignment to regulation. Globally Harmonized System of Classification and Labelling of Chemicals ("Purple book").
Restructuring: section 9, section 14

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
1.1	Trade name: Jade Emerald - Quartz Ceramic Coating -UV Re-active	Trade name: Jade Emerald - Quartz Ceramic Coating	yes
1.2	HS code: 3208.90.00.		yes
8.1	Control parameters: Occupational exposure limit values (Workplace Exposure Limits) this information is not available	Control parameters	yes
8.1		Occupational exposure limit values (Workplace Exposure Limits): change in the listing (table)	yes
9.1	Appearance		yes
9.1	Other safety parameters		yes
9.1	Flammability (solid, gas):	Flammability:	yes

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
	Not relevant Fluid	flammable liquid in accordance with GHS criteria	
9.1	Explosive limits	Lower and upper explosion limit: 0.6 vol% - 5 vol%	yes
9.1	Evaporation rate: Not determined		yes
9.1	Lower explosion limit (LEL): 0.6 vol%		yes
9.1	Upper explosion limit (UEL): 5 vol%		yes
9.1		Decomposition temperature: Not relevant	yes
9.1		Kinematic viscosity: Not determined	yes
9.1		Density and/or relative density	yes
9.1	Vapor density: This information is not available		yes
9.1	Viscosity: Not determined		yes
9.1	Explosive properties: None		yes
9.1	Oxidizing properties: None		yes
9.1		Relative vapour density: information on this property is not available	yes
9.2		Information with regard to physical hazard classes: There is no additional information	yes
9.2		Other safety characteristics	yes
16		Abbreviations and acronyms: change in the listing (table)	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
49 CFR US DOT	49 CFR U.S. Department of Transportation
Acute Tox.	Acute toxicity
Asp. Tox.	Aspiration hazard
ATE	Acute Toxicity Estimate
Cal ARB	California Air Resources Board
Carc.	Carcinogenicity
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)

Abbr.	Descriptions of used abbreviations
DNEL	Derived No-Effect Level
DOT	Department of Transportation (USA)
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
ED	Endocrine disruptor
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
EPA	Environmental Protection Agency. An agency of the federal government of the United States charged with protecting human health and the environment
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
ERG No	Emergency Response Guidebook - Number
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
NLP	No-Longer Polymer
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
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitization
STEL	Short-term exposure limit
TLV®	Threshold Limit Values
TWA	Time-weighted average
VOC	Volatile Organic Compounds

Abbr.	Descriptions of used abbreviations
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).

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

Code	Text
H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H227	Combustible liquid.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.

Disclaimer

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