

# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

## Graphene Spray Coating

Version number: GHS 1.0

Date of compilation: 2022-09-30

### SECTION 1: Identification

#### 1.1 Product identifier

Trade name **Graphene Spray Coating**

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

Relevant identified uses  
Vehicle coating  
Professional use  
Industrial use

#### 1.3 Details of the supplier of the safety data sheet

Logicar  
1361 NW 155th Drive  
Miami, FL 33169

703-527-3887  
help@axiomcarcare.com  
www.axiomcarcare.com

#### 1.4

Emergency information service  
24 hour emergency number  
1-800-262-8200

### 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	Category	Hazard class and category	Hazard statement
A.10	aspiration hazard	1	Asp. Tox. 1	H304
B.6	flammable liquid	4	Flam. Liq. 4	H227

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

GHS08



- Hazard statements

H227

Combustible liquid.

H304

May be fatal if swallowed and enters airways.

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### - Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	If swallowed: Immediately call a poison center/doctor.
P331	Do NOT induce vomiting.
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 distillates (petroleum) hydrotreated, light

### 2.3 Other hazards

This material is combustible, but will not ignite readily.

#### Hazards not otherwise classified

Contains . May produce an allergic reaction.

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

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

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not relevant (mixture)

### 3.2 Mixtures

#### Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS
decamethylcyclopentasiloxane	CAS No 541-02-6	55 - < 70	Flam. Liq. 4 / H227
distillates (petroleum) hydrotreated, light	CAS No 64742-47-8	12 - < 20	Asp. Tox. 1 / H304
Cyclosilazanes, di-Me, Me Hydrogen, polymers with di-Me, Me hydrogen silazanes, and 2,4-TDI		3 - < 12	Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Flam. Liq. 2 / H225

#### Hazardous ingredients, Consideration of other advice

*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.*

Exact percentage of ingredients is withheld as a trade secret.

For full text of abbreviations: see SECTION 16.

## 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. Provide fresh air.

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### Following skin contact

Wash with plenty of soap and water.

### Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

### 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 (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. 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.

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Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

### 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.

- 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	graphite	7782-42-5	PEL (CA)		2.5					natural, r	Cal/OSHA PEL

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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	graphite	7782-42-5	REL		2.5 (10 h)					natural, r	NIOSH REL
US	graphite	7782-42-5	PEL	530						partml, r, natural	29 CFR 1910.1000
US	graphite	7782-42-5	TLV®		2					r, exGraphFib	ACGIH® 2019
US	graphite	7782-42-5	REL							synthetic, appx-D	NIOSH REL
US	graphite	7782-42-5	PEL (CA)		10					synthetic, dust	Cal/OSHA PEL
US	graphite	7782-42-5	PEL		15					synthetic, i, dust	29 CFR 1910.1000
US	graphite	7782-42-5	PEL (CA)		5					synthetic, r	Cal/OSHA PEL
US	graphite	7782-42-5	PEL		5					synthetic, r, dust	29 CFR 1910.1000

### Notation

appx-D	see Appendix D - Substances with No Established RELs
Ceiling-C	ceiling value is a limit value above which exposure should not occur
dust	as dust
exGraphFib	except graphite fibers
i	inhalable fraction
natural	natural
partml	particles/ml
r	respirable fraction
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)
synthetic	synthetic
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	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
decamethylcyclopentasiloxane	541-02-6	DNEL	97 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - systemic effects
decamethylcyclopentasiloxane	541-02-6	DNEL	24 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - local effects
decamethylcyclopentasiloxane	541-02-6	DNEL	97 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects

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Relevant DNELs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
decamethylcyclopentasiloxane	541-02-6	DNEL	24 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - local effects

Relevant PNECs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
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	marine 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	marine sediment	short-term (single instance)
decamethylcyclopentasiloxane	541-02-6	PNEC	2.5 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.

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

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### 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	black
Particle	not relevant (liquid)
Odor	like ammonia - fruity

#### Other safety parameters

pH (value)	not determined
Melting point/freezing point	not determined
Initial boiling point and boiling range	>65 °C at 1 atm
Flash point	61 °C 142 °F closed cup
Evaporation rate	Not determined
Flammability (solid, gas)	not relevant, (fluid)

#### Explosive limits

- Lower explosion limit (LEL)	0.6 vol%
- Upper explosion limit (UEL)	4.9 vol%

Vapor pressure	33 Pa at 25 °C
Density	not determined
Vapor density	this information is not available
Relative density	Information on this property is not available
Solubility(ies)	not determined

#### Partition coefficient

- n-octanol/water (log KOW)	this information is not available
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Auto-ignition temperature	262 °C (auto-ignition temperature (liquids and gases))
Viscosity	not determined
Explosive properties	none
Oxidizing properties	none

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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 in contact with skin or if inhaled.

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, and 2,4-TDI		oral	500 mg/kg

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

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



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### Respiratory or skin sensitization

Contains . May produce an allergic reaction.

### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

### Carcinogenicity

Shall not be classified as carcinogenic.

### 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 of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
decamethylcyclopentasiloxane	541-02-6	LC50	>16 µg/l	fish	96 h
decamethylcyclopentasiloxane	541-02-6	EC50	>2.9 µg/l	aquatic invertebrates	48 h

Aquatic toxicity (chronic) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
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).

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### 12.6 Endocrine disrupting properties

None of the ingredients are listed.

### 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

DOT	UN 3082
IMDG-Code	UN 3082
ICAO-TI	UN 3082

### 14.2 UN proper shipping name

DOT	Environmentally hazardous substance, liquid, n.o.s.
IMDG-Code	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
ICAO-TI	Environmentally hazardous substance, liquid, n.o.s.
Technical name (hazardous ingredients)	decamethylcyclopentasiloxane, Alkyl Polysilicates

### 14.3 Transport hazard class(es)

DOT	9
IMDG-Code	9
ICAO-TI	9

### 14.4 Packing group

DOT	III
IMDG-Code	III
ICAO-TI	III

### 14.5 Environmental hazards

Environmentally hazardous substance (aquatic environment)	hazardous to the aquatic environment decamethylcyclopentasiloxane, Alkyl Polysilicates
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### 14.6 Special precautions for user

There is no additional information.

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### 14.7 Transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.


#### Information for each of the UN Model Regulations

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

Not regulated under DOT until packaged in single containers larger than 119 gallons each - liquid, or 882 lbs each - solid.

Particulars in the shipper's declaration	UN3082, Environmentally hazardous substance, liquid, n.o.s., (contains: decamethylcyclopentasiloxane, Alkyl Polysilicates), 9, III
Reportable quantity (RQ)	11,278,827 lbs (5,120,588 kg) (methanol)
Danger label(s)	9, fish and tree
	
Environmental hazards	yes (hazardous to the aquatic environment)
Special provisions (SP)	8, 146, 173, 335, IB3, T4, TP1, TP29
ERG No	171

##### International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant	yes (hazardous to the aquatic environment) (decamethylcyclopentasiloxane)
Danger label(s)	9, fish and tree
	
Special provisions (SP)	274, 335, 969
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-A, S-F
Stowage category	A

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

Environmental hazards	yes (hazardous to the aquatic environment)
Danger label(s)	9, fish and tree
	
Special provisions (SP)	A97, A158, A197
Excepted quantities (EQ)	E1
Limited quantities (LQ)	30 kg

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### 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

##### 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	
Cyclosilazanes, di-Me, Me Hydrogen, polymers with di-Me, Me hydrogen silazanes, and 2,4-TDI		refractory resin	
Alkyl Polysilicates	Trade Secret	resin	
polydimethylsiloxane	63148-62-9	surface modifier	
polytrimethylhydrosilylsiloxane	68988-56-7	surface modifier	
Graphene	7782-42-5	surface modifier	
trimethylsiloxysilicate	68988-56-7	resin	
benzyl benzoate	120-51-4	fragrance	EU Fragrance Allergens
tetra(trimethylsiloxy)silane	3555-47-3	surface modifier	Canada PBITs
Terpenes & Terpenoids, grapefruit oil	68917-32-8	fragrance	
methanol	67-56-1	alcohols	CA TACs NTP OHAT - Repr. or Dev. Toxicants OEHA RELs Prop 65
cyclamen aldehyde	103-95-7	fragrance	
benzyl salicylate	118-58-1	fragrance	
lyral	31906-04-4	fragrance	EU Fragrance Allergens
2-(4-tert-butylbenzyl)propionaldehyde	80-54-6	fragrance	EU Fragrance Allergens
benzyl alcohol	100-51-6	fragrance	
Allyl hexanoate	123-68-2	fragrance	
allyl cyclohexylpropionate	2705-87-5	fragrance	
ethyl vanillin	121-32-4	fragrance	
ethyl maltol	4940-11-8	fragrance	
7-hydroxycitronellal	107-75-5	fragrance	EU Fragrance Allergens

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Name of substance	CAS No	Functionality	Authoritative Lists
Phenethyl alcohol	60-12-8	fragrance	

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

Proposition 65 List of chemicals					
Name of substance	Name acc. to inventory	CAS No	Wt%	Remarks	Type of the toxicity
methanol	methanol	67-56-1	0.044		developmental

### VOC content

- Regulated Volatile Organic Compounds (VOC-EPA) 0.14 %
- Regulated Volatile Organic Compounds (VOC-Cal ARB) 0.14 %

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

#### NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	/	none
Health	0	no significant risk to health
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	0	material that, under emergency conditions, would offer no hazard beyond that of ordinary combustible material
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

### National inventories

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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
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
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 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

### 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 U.S. Department of Transportation
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Acute Tox.	Acute toxicity
Asp. Tox.	Aspiration hazard
ATE	Acute Toxicity Estimate

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Abbr.	Descriptions of used abbreviations
Cal/OSHA PEL	California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs)
Cal ARB	California Air Resources Board
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)
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
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
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
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
NIOSH REL	National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs)
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
PEL	Permissible exposure limit
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
STEL	Short-term exposure limit
TLV®	Threshold Limit Values

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Abbr.	Descriptions of used abbreviations
TWA	Time-weighted average
VOC	Volatile Organic Compounds
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.
H227	Combustible liquid.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.

### Disclaimer

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