

Graphene Shampoo

Graphene Shampoo

Vehicle wash / shampoo

Version number: GHS 1.0

SECTION 1: Identification

- 1.1 Product identifier Trade name
- 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

1.3 Details of the supplier of the safety data sheet

Adam's Polishes Inc. 8225 North Valley Hwy. Thornton CO 80221 720-484-5059

tips@adamspolishes.com www.adamspolishes.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	Category	Hazard class and category	Hazard state- ment
A.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
A.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318
A.4S	skin sensitization	1	Skin Sens. 1	H317

For full text of abbreviations: see SECTION 16.

2.2 Label elements

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

- Signal word danger

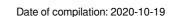
- Pictograms

GHS05, GHS07



- Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.







acc. to 29 CFR 1910.1200 App D

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- Precautionary state	ements					
P261	Avoid breathing dust/fume/ga	s/mist/vapors/spray.				
P272	Contaminated work clothing n	nust not be allowed out of the workplace.				
P280	Wear protective gloves/protective	ctive clothing/eye protection/face protection.				
P302+P352	If on skin: Wash with plenty of	f water.				
P305+P351+P338	P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and e to do. Continue rinsing.					
P310	Immediately call a poison cen	ter/doctor.				
P321	Specific treatment (see on this	s label).				
P362	Take off contaminated clothin	g and wash it before reuse.				
P363	Wash contaminated clothing b	pefore reuse.				
P501	Dispose of contents/container	r in accordance with local/regional/national/international regulations.				
- Hazardous ingredie	ents for labelling	sodium laureth sulfate, orange oil, amines, coco al-				

kyldimethyl, N-oxides

2.3 Other hazards

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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		
sodium laureth sulfate	CAS No 9004-82-4 68891-38-3 15826-16-1	3-<12	Acute Tox. 4 / H312 Skin Irrit. 2 / H315 Eye Dam. 1 / H318		
amines, coco alkyldimethyl, N-ox- ides	CAS No 61788-90-7	3-<12	Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Dam. 1 / H318		
cocamidopropylhydroxysultaine	CAS No 68139-30-0	3-<12	Eye Irrit. 2A / H319 Eye Irrit. 2B / H320 Flam. Liq. 4 / H227		
disodium cocoamphodipropionate	CAS No 68604-71-7	1-<3			
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		
orange oil	CAS No 8028-48-6 68647-72-3	0.1-<1	Skin Irrit. 2 / H315 Skin Sens. 1 / H317 Asp. Tox. 1 / H304 Flam. Liq. 3 / H226		

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



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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.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

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

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



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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. 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. Use only in well-ventilated areas.

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

Control of the effects

Protect against external exposure, such as

Frost

- 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

Occup	Occupational exposure limit values (Workplace Exposure Limits)											
Coun try	Name of agent	CAS No	lden- tifier	TWA [ppm]	TWA [mg/ m³]	STEL [ppm]	STEL [mg/ m³]	Ceil- ing-C [ppm]	Ceil- ing-C [mg/ m ³]	Nota tion	Sourc e	
US	methanol	67-56-1	TLV®	200		250					AC- GIH® 2019	
US	methyl alcohol	67-56-1	REL	200 (10 h)	260 (10 h)	250	325				NIOS H REL	





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US	methyl alcohol	67-56-1	PEL	200	260						29 CFR 1910.1 000	
US	methyl alcohol (methanol)	67-56-1	PEL (CA)	200	260	250	325	1,000			Cal/ OSHA PEL	

Notation Ceiling-C STEL

ceiling value is a limit value above which exposure should not occur 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

Biological limit values										
Country	Name of agent	Parameter	Nota- tion	Identifier	Value	Source				
US	methanol	methanol		BEI®	15 mg/l	ACGIH® 2019				

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				
sodium laureth sulfate	9004-82-4 68891-38-3 15826-16-1	DNEL	175 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects				
sodium laureth sulfate	9004-82-4 68891-38-3 15826-16-1	DNEL	2,750 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects				
sodium laureth sulfate	9004-82-4 68891-38-3 15826-16-1	DNEL	132 μg/cm²	human, dermal	worker (industry)	chronic - local ef- fects				
amines, coco al- kyldimethyl, N-oxides	61788-90-7	DNEL	6.2 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects				
amines, coco al- kyldimethyl, N-oxides	61788-90-7	DNEL	11 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects				
methanol	67-56-1	DNEL	130 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects				
methanol	67-56-1	DNEL	130 mg/m ³	human, inhalatory	worker (industry)	acute - systemic effects				
methanol	67-56-1	DNEL	130 mg/m ³	human, inhalatory	worker (industry)	chronic - local ef- fects				
methanol	67-56-1	DNEL	130 mg/m ³	human, inhalatory	worker (industry)	acute - local ef- fects				





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Relevant DNELs of components of the mixture									
Name of substanceCAS NoEnd- pointThreshold levelProtection goal, route of exposureUsed inExposure									
methanol	67-56-1	DNEL	20 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects			
methanol	67-56-1	DNEL	20 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic effects			
orange oil	8028-48-6 68647-72-3	DNEL	31.1 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects			
orange oil	8028-48-6 68647-72-3	DNEL	8.89 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects			
orange oil	8028-48-6 68647-72-3	DNEL	185.8 μg/ cm²	human, dermal	worker (industry)	acute - local ef- fects			

Relevant PNECs of	components	of the mix	ture			
Name of substance	CAS No	End- point	Threshold level	Organism	Environmental compartment	Exposure time
sodium laureth sulfate	9004-82-4 68891-38-3 15826-16-1	PNEC	0.24 ^{mg} / _l	aquatic organisms	freshwater	short-term (single instance)
sodium laureth sulfate	9004-82-4 68891-38-3 15826-16-1	PNEC	0.024 ^{mg} / _l	aquatic organisms	marine water	short-term (single instance)
sodium laureth sulfate	9004-82-4 68891-38-3 15826-16-1	PNEC	10 ^g / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
sodium laureth sulfate	9004-82-4 68891-38-3 15826-16-1	PNEC	0.917 ^{mg} / _{kg}	aquatic organisms	freshwater sedi- ment	short-term (single instance)
sodium laureth sulfate	9004-82-4 68891-38-3 15826-16-1	PNEC	0.092 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)
sodium laureth sulfate	9004-82-4 68891-38-3 15826-16-1	PNEC	7.5 ^{mg} / _{kg}	terrestrial organisms	soil	short-term (single instance)
amines, coco al- kyldimethyl, N-oxides	61788-90-7	PNEC	0.034 ^{mg} / _l	aquatic organisms	freshwater	short-term (single instance)
amines, coco al- kyldimethyl, N-oxides	61788-90-7	PNEC	0.003 ^{mg} / _l	aquatic organisms	marine water	short-term (single instance)
amines, coco al- kyldimethyl, N-oxides	61788-90-7	PNEC	0.034 ^{mg} / _l	aquatic organisms	water	intermittent re- lease
amines, coco al- kyldimethyl, N-oxides	61788-90-7	PNEC	24 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
amines, coco al- kyldimethyl, N-oxides	61788-90-7	PNEC	5.24 ^{mg} / _{kg}	aquatic organisms	freshwater sedi- ment	short-term (single instance)
amines, coco al- kyldimethyl, N-oxides	61788-90-7	PNEC	0.524 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)





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Relevant PNECs of components of the mixture										
Name of substance	CAS No	End- point	Threshold level	Organism	Environmental compartment	Exposure time				
amines, coco al- kyldimethyl, N-oxides	61788-90-7	PNEC	1.02 ^{mg} / _{kg}	terrestrial organisms	soil	short-term (single instance)				
methanol	67-56-1	PNEC	100 ^{mg} / _l	microorganisms	sewage treatment plant (STP)	short-term (single instance)				
methanol	67-56-1	PNEC	77 ^{mg} / _{kg}	benthic organisms	sediment	short-term (singl instance)				
methanol	67-56-1	PNEC	7.7 ^{mg} / _{kg}	pelagic organisms	sediment	short-term (singl instance)				
methanol	67-56-1	PNEC	1,540 ^{mg} / _l	aquatic organisms	water	intermittent re- lease				
methanol	67-56-1	PNEC	20.8 ^{mg} / _l	aquatic organisms	freshwater	short-term (singl instance)				
methanol	67-56-1	PNEC	2.08 ^{mg} / _l	aquatic organisms	marine water	short-term (singl instance)				
methanol	67-56-1	PNEC	100 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (singl instance)				
methanol	67-56-1	PNEC	77 ^{mg} / _{kg}	aquatic organisms	freshwater sedi- ment	short-term (sing instance)				
methanol	67-56-1	PNEC	7.7 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (sing instance)				
methanol	67-56-1	PNEC	100 ^{mg} / _{kg}	terrestrial organisms	soil	short-term (sing instance)				
orange oil	8028-48-6 68647-72-3	PNEC	2.1 ^{mg} / _l	microorganisms	sewage treatment plant (STP)	short-term (sing instance)				
orange oil	8028-48-6 68647-72-3	PNEC	1.3 ^{mg} / _{kg}	benthic organisms	sediment	short-term (sing instance)				
orange oil	8028-48-6 68647-72-3	PNEC	0.13 ^{mg} / _{kg}	pelagic organisms	sediment	short-term (sing instance)				
orange oil	8028-48-6 68647-72-3	PNEC	44.44 ^{mg} / _{kg}	(top) predators	water	short-term (sing instance)				
orange oil	8028-48-6 68647-72-3	PNEC	5.77 ^{µg} / _l	aquatic organisms	water	intermittent re- lease				
orange oil	8028-48-6 68647-72-3	PNEC	5.4 ^{µg} / _l	aquatic organisms	freshwater	short-term (sing instance)				
orange oil	8028-48-6 68647-72-3	PNEC	0.54 ^{µg} / _l	aquatic organisms	marine water	short-term (sing instance)				
orange oil	8028-48-6 68647-72-3	PNEC	2.1 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (sing instance)				
orange oil	8028-48-6 68647-72-3	PNEC	1.3 ^{mg} / _{kg}	aquatic organisms	freshwater sedi- ment	short-term (sing instance)				
orange oil	8028-48-6 68647-72-3	PNEC	0.13 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (sing instance)				



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	Relevant PNECs of components of the mixture								
	Exposure time								
	orange oil	8028-48-6 68647-72-3	PNEC	0.261 ^{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

Appearance

Physical state	liquid
Color	smoke
Odor	citrus

Other safety parameters

pH (value)	8–9 (25 °C)
Melting point/freezing point	-7 °C
Initial boiling point and boiling range	90 °C
Flash point	>100 °C at 101.3 kPa
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)



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Explosive limits	not determined
Vapor pressure	31.69 hPa at 25 °C
Density	1 – 1.01 ^g / _{cm³} at 25 °C
Vapor density	this information is not available
Solubility(ies)	
- Water solubility	miscible in any proportion
Partition coefficient	
- n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	
Viscosity	not determined
Explosive properties	none
Oxidizing properties	none
	there is no additional information

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

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.



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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.

Acute toxicity estimate (ATE) of components of the mixture					
Name of substance	CAS No	Exposure route	ATE		
sodium laureth sulfate	9004-82-4 68891-38-3 15826-16-1	dermal	≥2,000 ^{mg} / _{kg}		
methanol	67-56-1	oral	100 ^{mg} / _{kg}		

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

May cause an allergic skin 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

Shall not be classified as presenting an aspiration hazard.



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SECTION 12: Ecological information

12.1 Toxicity

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Very toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute	e) of components	of the mixture			
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
sodium laureth sulfate	9004-82-4 68891-38-3 15826-16-1	LC50	7.1 ^{mg} / _l	fish	96 h
sodium laureth sulfate	9004-82-4 68891-38-3 15826-16-1	EC50	7.2 ^{mg} / _l	aquatic invertebrates	48 h
sodium laureth sulfate	9004-82-4 68891-38-3 15826-16-1	ErC50	27 ^{mg} / _l	algae	72 h
amines, coco al- kyldimethyl, N-oxides	61788-90-7	LC50	134 ^{mg} / _l	fish	96 h
amines, coco al- kyldimethyl, N-oxides	61788-90-7	EC50	3.9 ^{mg} / _l	aquatic invertebrates	48 h
amines, coco al- kyldimethyl, N-oxides	61788-90-7	ErC50	0.86 ^{mg} / _l	algae	72 h
cocamidopropylhy- droxysultaine	68139-30-0	LC50	1.7 – 2 ^{mg} / _l	algae	72 h
cocamidopropylhy- droxysultaine	68139-30-0	LC50	1.7 – 2 ^{mg} / _l	daphnia	48 h
cocamidopropylhy- droxysultaine	68139-30-0	LC50	1.7 – 2 ^{mg} / _l	fish	96 h
cocamidopropylhy- droxysultaine	68139-30-0	EC50	11 ^{mg} / _l	aquatic invertebrates	48 h
cocamidopropylhy- droxysultaine	68139-30-0	ErC50	0.32 ^{mg} / _l	algae	72 h
disodium cocoamphodi- propionate	68604-71-7	LC50	1 – 100 ^{mg} / _l	fish	72 h
disodium cocoamphodi- propionate	68604-71-7	EC50	0.55 – 48 ^{mg} / _l	algae	72 h
disodium cocoamphodi- propionate	68604-71-7	EC50	6.5 ^{mg} / _l	daphnia	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
orange oil	8028-48-6 68647-72-3	LL50	5.65 ^{mg} / _l	fish	96 h
orange oil	8028-48-6 68647-72-3	EL50	1.4 ^{mg} / _l	aquatic invertebrates	24 h



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Aquatic toxicity (chronic) of components of the mixture						
Name of substance	CAS No	Endpoint	Value	Species	Exposure time	
sodium laureth sulfate	9004-82-4 68891-38-3 15826-16-1	EC50	0.37 ^{mg} / _l	aquatic invertebrates	21 d	
sodium laureth sulfate	9004-82-4 68891-38-3 15826-16-1	LC50	0.74 ^{mg} / _l	aquatic invertebrates	21 d	
amines, coco al- kyldimethyl, N-oxides	61788-90-7	LC50	0.87 ^{mg} / _l	fish	120 d	
amines, coco al- kyldimethyl, N-oxides	61788-90-7	EC50	0.88 ^{mg} / _l	aquatic invertebrates	21 d	

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 Data are not available.

12.6 Other adverse effects

Endocrine disrupting potential None of the ingredients are listed.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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.



acc. to 29 CFR 1910.1200 App D

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SEC	TION 14: Transport information	
14.1	UN number	3082
14.2	UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
	Technical name (hazardous ingredients)	sodium laureth sulfate, cocamidopropylhydroxysul- taine
14.3	Transport hazard class(es)	
	Class	9 (environmentally hazardous)
14.4	Packing group	III (substance presenting low danger)
14.5	Environmental hazards	hazardous to the aquatic environment
	Environmentally hazardous substance (aquatic environment)	sodium laureth sulfate, cocamidopropylhydroxysul- taine
14.6	Special precautions for user There is no additional information.	
14.7	Transport in bulk according to Annex II of MAR The cargo is not intended to be carried in bulk.	POL and the IBC Code
	Information for each of the UN Model Regulation	ons
	Transport of dangerous goods by road or rail (4	
	Not regulated under DOT until packaged in single lbs each - solid.	containers larger than 119 gallons each - liquid, or 882
	Index number	3082
	Proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
	- Particulars in the shipper's declaration	UN3082, Environmentally hazardous substance, li- quid, n.o.s., (contains: sodium laureth sulfate, coc- amidopropylhydroxysultaine), 9, III
	- Reportable quantity (RQ)	2,568,199 lbs (1,165,963 kg) (methanol) (1,4-dioxane)
	Class	9
	Packing group	III
	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 (I	MDG)
UN number	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Class	9
Marine pollutant	Yes (hazardous to the aquatic environment)



acc. to 29 CFR 1910.1200 App D

Graphene Shampoo

Version number: GHS 1.0 Date of compilation: 2020-10-19 Packing group Ш Danger label(s) 9, fish and tree Special provisions (SP) 274, 335, 969 Excepted quantities (EQ) E1 Limited quantities (LQ) 5 L F-A, S-F EmS Stowage category А International Civil Aviation Organization (ICAO-IATA/DGR) **UN** number 3082 Proper shipping name Environmentally hazardous substance, liquid, n.o.s. Class 9 Environmental hazards YES (hazardous to the aquatic environment) Packing group Ш Danger label(s) 9, fish and tree ふり Special provisions (SP) A97, A158, A197 Excepted quantities (EQ) E1 Limited quantities (LQ) 30 kg

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question National regulations (United States)

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- Specific Toxic Chemical Listings (EPCRA Section 313)

Toxics Release Inventory: Specific Toxic Chemical Listings						
Name of substance 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	Wt%	Remarks	Statutory code	Final RQ pounds (Kg)
methanol	67-56-1	0.1947		3 4	5000 (2270)

Legend

"3" indicates that the source is section 112 of the Clean Air Act

"4" indicates that the source is section 3001 of the Resource Conservation and Recovery Act (RCRA)

3



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Right to Know Hazardous Substance List

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

Name of substance	CAS No	Functionality	Authoritative Lists
water	7732-18-5	solvent	
sodium laureth sulfate	9004-82-4 68891-38-3 15826-16-1	surfactant	
amines, coco alkyldimethyl, N-oxides	61788-90-7	surfactant	
cocamidopropylhydroxysultaine	68139-30-0	surfactant	
Poly(ethylene glycol-ran-propylene glycol) monobutyl ether	9038-95-3	surfactant	
disodium cocoamphodipropionate	68604-71-7	surfactant	
sodium chloride	7647-14-5	viscosity modifier	
Siloxanes and Silicones, hydroxyalkyl group- terminated, ethoxylated	withheld	shine agent	
ambient temperature curable refractory resin B	not available	refractory resin	
Alkyl Polysilicate	not available	resin	
alcohols, C12-14 secondary, ethoxylated	84133-50-6	surfactant	
polyethylene oxide lauryl ether	9002-92-0	surfactant	
methanol	67-56-1	alcohols	CA TACs NTP OHAT - Repr. or Dev. Toxicants OEHHA RELs Prop 65
orange oil	8028-48-6 68647-72-3	fragrance	
graphene	7782-42-5	surface modifier	
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	25322-68-3	surfactant	
cocoyl hydroxyethylimidazoline	61791-38-6	non-functional con- stituent	
Lime oil	8008-26-2 68917-71-5 90063-52-8	fragrance	
linalool	78-70-6	fragrance	EU Fragrance Allergens
Lemon oil	8008-56-8	fragrance	
C12-14 secondary alcohols	126950-60-5	surfactant	

- Toxic or Hazardous Substance List (MA-TURA)

Name of substance	CAS No	DEP CODE	PBT / HHS / LHS	PBT / HHS Threshol d	De Minimis Con- centration Threshold
methanol	67-56-1				1.0 %



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- Hazardous Substances List (MN-ERTK)

Name of substance	CAS No	References	Remarks
Graphene Shampoo	7782-42-5	A, O	dust

Legend Ā

American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices for 1992-93", available from ACGIH If the substance poses an airborne particulate exposure hazard, the substance is followed by the word "dust." Occupational Safety and Health Administration (OSHA), Safety and Health Standards, Code of Federal Regulations, title 29, part 1910, subpart Z, "Toxic and Hazardous Substances, 1990." General information: Minnesota Department of Labor and Industry, Occupational dust O Safety and Health Division

- Hazardous Substance List (NJ-RTK)

Name of substance	CAS No	Remarks	Classifications
methanol	67-56-1		TE F3

Legend

F3 TE Flammable - Third Degree

Teratogenic

- Hazardous Substance List (Chapter 323) (PA-RTK)

Name acc. to inventory	CAS No	Classification
METHANOL	67-56-1	E

Legend E

Environmental hazard

- Hazardous Substance List (RI-RTK)

Name of substance	CAS No	References
methanol	67-56-1	T, F

Legend

т

Flammability (NFPA®)

Toxicity (ACGIH®)

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
methanol	67-56-1	0.1947		developmental
ethylene oxide	75-21-8	0.00003167		cancer
ethylene oxide	75-21-8	0.00003167		female
ethylene oxide	75-21-8	0.00003167		developmental, male
1,4-dioxane	123-91-1	0.0003167		cancer



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VOC content	
- Regulated Volatile Organic Compounds (VOC-EPA)	0.4398 %
- Regulated Volatile Organic Compounds (VOC-Cal ARB)	0.44 %

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	1	material that must be preheated 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	-	
Chronic: Flammability: Health: Personal protection: Physical hazard:	chronic hazard flammability haza health hazard personal protecti reactivity	ard ve equipment (PPE) for normal use

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	1	material that must be preheated 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		

National inventories

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

Legend

Domestic Substances List (DSL) REACH registered substances Toxic Substance Control Act DSL REACH Reg.

TSCA

15.2 **Chemical Safety Assessment**

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



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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 Sub- stances (permissible exposure limits)
49 CFR US DOT	49 CFR U.S. Department of Transportation
ACGIH®	American Conference of Governmental Industrial Hygienists
ACGIH® 2019	From ACGIH®, 2019 TLVs® and BEIs® Book. Copyright 2019. Reprinted with permission. Information on the proper use of the TLVs® and BEIs®: http://www.acgih.org/tlv-bei-guidelines/policies-procedures-presentations/tlv-bei-position-statement
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)
Cal ARB	California Air Resources Board
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DEP CODE	Department of Environmental Protection Code
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
EL50	Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms
EmS	Emergency Schedule
EPA	Environmental Protection Agency. An agency of the federal government of the United States charged with protect- ing 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
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
HHS	Higher hazard substance
ΙΑΤΑ	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)



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Abbr.	Descriptions of used abbreviations
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethal- ity during a specified time interval
LHS	Lower hazard substance
LL50	Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 50 % lethality
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NFPA®	National Fire Protection Association (United States)
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
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
STOT SE	Specific target organ toxicity - single exposure
TLV®	Threshold Limit Values
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).



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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.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H320	Causes eye irritation.
H331	Toxic if inhaled.
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.