Safety Data Sheet dated 04/10/2021, version 2.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier
 - Trade name:

GXT-Lube

VT ...

1.2. Relevant identified uses of the substance or mixture and uses advised against Recommended use:

Additive for lubricant

1.3. Details of the supplier of the safety data sheet

Company:

	Graphene-XI srl
	Via d'Azeglio, 15
	40123 Bologna (BO),
	Italy
Telefono:	+39 320 9368727
Fax:	+39 051 0821685
e-mail:	info@graphene-xt.com
	المحمد والمحلمات والمحلك والمستعد والمستعد والمالي

Competent person responsible for the safety data sheet:

Simone Ligi

1.4. Emergency telephone number

Croatia: Ksaverska cesta 2, POB 291, 10000 Zagreb T(24/7) (+385) 1 2348 342 Czech Republic: Toxikologické informacní stredisko, Na Bojišti 1, 120 00 Praha 2 Telefon (24h): (+420) 224 919 293, (+420) 224 915 402 Ireland: National Poisons Information Centre (+353) 01 8092566 or (+353) 01 8379964 24 hours a day and 365 days a year Latvia: Valsts ugunsdzesibas un glabšanas dienests, phone number: 112. Toksikologijas un sepses klinikas Saindešanas un zalu informacijas centrs, Hipokrata 2, Riga, Latvija, LV-1038, phone number (+371) 67042473. Service is available 24 hours. Malta: Mater Dey Hospital (24/7) (+356) 2545 0000 Slovakia: National Toxicological Information Center (24h) (+421 2 5477 4166) Sweden: 112 – ask for Poisons Information Other Countries: contact your national poison center.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture EC regulation criteria 1272/2008 (CLP) The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP). Adverse physicochemical, human health and environmental effects: No other hazards 2.2. Label elements Hazard pictograms: None Hazard statements: None Precautionary statements: None Special Provisions: None Special provisions according to Annex XVII of REACH and subsequent amendments: None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances
N.A.
3.2. Mixtures
Blend of synthetic oil blend added with technological additives.

The mineral base oils used have a DMSO extract value determined with the IP 346/92 method of less than 3%. They are therefore classified as non-carcinogenic according to the Note L (Directive 94/69/EC - Regulation (EC) No. 1272/2008).

Hazardous components identify by the CLP regulation and related classification:

Main components:			1	REACH		
Components	Concentration %	CAS	EC	registration number	Index	Classification
Lubricating oil (petroleum), C ₂₀₋₅₀ , based oil neutral, hydrotreated; based oil; kinematics viscosity at 40 °C ≤ 20.5 mm₂/s	46,5	72623-87-1	276-738-4	01-2119474889-13	649-483-00-5 (Note L)	Asp. Tox, 1; H304
Lubricating oil (petroleum), C ₂₀₋₅₀ , based oil neutral, hydrotreated; based oil; kinematics viscosity at 40 °C > 20.5 mm ₂ /s	31,9	72623-87-1	276-738-4	01-2119474889-13	649-483-00-5 (Note L)	Not classify

Other components classified as dangerous:

Components	Concentration %	CAS	EC	REACH registration number	Index	Classification
distillates (petroleum), heavy paraffinic "hydrotreating"	2,82 - 5,73	64742-54-7	265-157-1	01-2119484627-25	-	Asp. Tox. 1; H304
Distillates (petroleum), light paraffinic solvent- dewaxed	0,123 - 1,23	64742-56-9	265-159-2	01-2119480132-48	-	Asp. Tox. 1; H304
Distillates (petroleum), heavy paraffinic solvent- dewaxed	0,123 - 1,23	64742-65-0	265-169-7	01-2119471299-27	-	Asp. Tox. 1; H304
paraffin oils (petroleum), heavy dewaxed, catalytically	-, - , -			01-2119487080-42		Asp. Tox. 1; H304
bis (nonylphenyl) amine	0,3075 - 1,23	36878-20-3	253-249-4	01-2119488911-28	-	Acquatic Chronic 4; H413
C14-16-18 Alkyl phenol*	0,123 - 1,23	-	-	-		Skin Sens. 1B; H317 STOT RE 2; H373

As per supplier declaration the additive: C14-16-18 alkyl phenol, when present in concentrations lower than 10% in the mixture of origin, does not lead to the classification of the mixture itself as a sensitizer, but attributes a trigger probability for which the substance must be labeled as "EUH208: contains C14-16-148 alkyl phenol. May produce an allergic reaction." whenever it is present in concentrations higher than 0.1%. This information comes from a study carried out by the supplier on the mixture as such.

The mixture does not contain other dangerous substances in a concentration such as to require

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mention (Regulation (EC) No. 1907/2006) and subsequent amendments. The full text of the hazard statements is given in section 16 of the sheet.

In order to verify the classification of the mixture according to the CLP Regulation (see section 2.1), the calculation methods were applied.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

- 4.2. Most important symptoms and effects, both acute and delayed None
- 4.3. Indication of any immediate medical attention and special treatment needed Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Water. Carbon dioxide (CO2). Extinguishing media which must not be used for safety reasons: None in particular.

5.2. Special hazards arising from the substance or mixture Do not inhale explosion and combustion gases. Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures Wear personal protection equipment. Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

- 6.3. Methods and material for containment and cleaning up
- Wash with plenty of water.
- 6.4. Reference to other sections See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
 - Avoid contact with skin and eyes, inhalation of vapours and mists. See also section 8 for recommended protective equipment. Advice on general occupational hygiene: Do not eat or drink while working.
- 7.2. Conditions for safe storage, including any incompatibilities Keep away from food, drink and feed. Incompatible materials: Oxidising agents Instructions as regards storage premises: Adequately ventilated premises.
 7.3. Specific end use(s)
 - None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values (components of the mixture - Occupational exposure limit values):

Lubricating oils (petroleum), C20-50, neutral oil based, hydrotreated; base oil

Threshold limit value	State	TWA/8h mg/m ³	TWA/8h ppm	STEL/15min mg/m ³	STEL/15min ppm
TLV-ACGIH (2020)		5			

Derived level of no effect - DNEL / DMEL

Via di Exposure	Effects on consumers Acute premises	Effects on consumers Systemic acute	Effects on consumers Locals chronic	Effects on consumers Systemic chronic	Effects on workers Locals acute	Effects on workers Systemic acute	Effects on workers Locals chronic	Effects on workers Systemic chronic
Ingestion								
Inhalation			1,2 mg/m ³				5,4 g/m ³	
Dermal								

bis(nonylphenyl)amine

Derived level of no effect - DNEL / DMEL

Via di Exposure	Effects on consumers Acute premises	Effects on consumers Systemic acute	Effects on consumers Locals chronic	Effects on consumers Systemic chronic	Effects on workers Locals acute	Effects on workers Systemic acute	Effects on workers Locals chronic	Effects on workers Systemic chronic
Ingestion				0,31 mg/kg				
Inhalation				1,09 mg/m ³				4,37 g/m ³
Dermal				0,31 mg/kg				0,62 mg/kg

Predicted of no effect concentration on the environment - PNEC

Reference value in fresh water	0,1 mg/l
Reference value in sea water	0,01 mg/l
Reference value for sediments in fresh water	132000 mg/kg
Reference value for sediments in sea water	13200 mg/kg
Reference value for discontinuous use / release	1 mg/l
Reference value for sewage treatment plant	1 mg/l
Reference value for the soil	263000 mg/kg

Distillates (petroleum), hydrotreated heavy paraffinic

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Derived level of no effect - DNEL / DMEL

Via di Exposure	Effects on consumers Acute premises	Effects on consumers Systemic acute	Effects on consumers Locals chronic	Effects on consumers Systemic chronic	Effects on workers Locals acute	Effects on workers Systemic acute	Effects on workers Locals chronic	Effects on workers Systemic chronic
Ingestion								
Inhalation			1,2 mg/m ³				5,4 g/m ³	
Dermal								

Predicted of no effect concentration on the environment - PNEC

Reference value orally 9,33 mg/kg

Distillates (petroleum), solvent-dewaxed heavy paraffinic

Derived level of no effect - DNEL / DMEL

Via di Exposure	Effects on consumers Acute premises	Effects on consumers Systemic acute	Effects on consumers Locals chronic	Effects on consumers Systemic chronic	Effects on workers Locals acute	Effects on workers Systemic acute	Effects on workers Locals chronic	Effects on workers Systemic chronic
Ingestion								
Inhalation			1,2 mg/m ³				5,4 g/m ³	
Dermal								

Predicted of no effect concentration on the environment - PNEC

Reference value in fresh water	0,1 mg/l
Reference value for sediments in fresh water	132000 mg/kg
Reference value for sediments in sea water	13200 mg/kg
Reference value for discontinuous use / release	1 mg/l
Reference value for sewage treatment plant	1 mg/l
Reference value for the soil	263000 mg/kg
Reference value orally	9,33 mg/kg

Monitoring procedures:

Refer to Legislative Decree 81/2008 and subsequent amendments.

8.2. Exposure controls

Appropriate technical controls:

None particular under normal conditions of use. Refer to the rules of good operational, hygienic and environmental practice.

Avoid the production of mists and aerosols and their diffusion by shielding (if appropriate) the machines and by using localized ventilation / extraction.

Ensure adequate ventilation, especially in confined areas.

Organize activities with equipment suitable for the purpose. Make use of personnel adequately trained, informed and trained in operating procedures.

Eye protection:

Safety glasses.

(see standard EN 166)

Protection for skin:

Disposable suit. (see standard EN 13034)

Safety shoes.

(see standard UNI EN ISO 20345)

Protection for hands:

Suitable gloves type:

One-time gloves.

Suitable material:

NBR (nitrile rubber).

(see standard EN 374)

Wash hands before eating, drinking or smoking.

Respiratory protection:

Avoid inhaling the product.

Provide adequate ventilation. Good local ventilation and a good general air exchange system must be ensured.

Thermal Hazards:

None

Environmental exposure controls:

Operate only in an equipped area, equipped with containment systems and means for emergency intervention (See point 6). Refer to current legislation on air pollution, soil and water pollution (Legislative Decree 03/04/2006, n.152 and subsequent amendments).

Immage: PPE:



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Appearance and colour (20°C-101,3kPa):	Black liquid		
Odour:	Not Relevant		Not relevant for product classification purposes.
Odour threshold:	N.A.		
pH (20°C):	N.A.		
Melting point / freezing point:	-39°C	ASTM D 97	
Initial boiling point and boiling range:	350 - 620 °C		Referred to the most abundant component.
Flash point:	235	ASTM D 92	
Evaporation rate:	N.A.		
Solid/gas flammability:	N.A.		Liquid
Upper/lower flammability or explosive limits:	N.A.		Not flammable.
Vapour pressure:	Not Relevant		Not relevant for product classification purposes.
Vapour density:	Not Relevant		Not relevant for product classification purposes.
Relative density (20°C):	0,850 kg/l	ASTM D 4052	
Solubility in water:	Not Relevant		Not relevant for classification and use of the product.
Solubility in oil:	Not Relevant		Not relevant for classification and use of the product.
Partition coefficient (n- octanol/water):	N.A.		See paragraph 12 for values referring to individual substances.

Auto-ignition temperature:	N.A.		Not flammable.
Decomposition	Not Relevant		Decomposition temperature
temperature:			higher than the temperature
			range of use of the product.
Viscosity:	86,35 mm2/s	ASTM D 445	Not relevant for product
	@ 40 °C e		classification purposes.
	14,12 mm2/s		
	@ 100 °C		
	CCS 6250 cP	ASTM D 2602	
	@ -30 °C		
Explosive properties:	Not Explosive		Mixture consisting of non-
			explosive components.
Oxidizing properties:	Not Oxidizing		Mixture consisting of non-
			oxidizing components.

9.2. Other information

Properties	Value	Method:	Notes
Miscibility:	Not Relevant		Not relevant for classification and use of the product.
Fat Solubility:	Not Relevant		Not relevant for classification and use of the product.
Conductivity (25°C):	Not Relevant		
Substance Groups relevant properties	Not Relevant		
Other information		ASTM D 97	

SECTION 10: Stability and reactivity

- 10.1. Reactivity
 - Stable under normal conditions
- 10.2. Chemical stability
 - Stable under normal conditions
- 10.3. Possibility of hazardous reactions None
- 10.4. Conditions to avoid Heat, flames and sparks
- 10.5. Incompatible materials Oxidising agents
- 10.6. Hazardous decomposition products None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the substance: GXT-Lube

No experimental data on the product are available. Therefore, the concentration of the individual substances should be taken into account in order to evaluate the resulting toxicological effects from exposure to the product. The health risks indicated derive from the current knowledge on the toxicity of synthetic base oils, and of the additives used, in relation to the concentration in the finished product.

Studies on the separate components did not show consistent evidence of toxicity at the concentrations present in the mixture, therefore no classification is assigned required by the legislation on dangerous substances.

General warning

The high pressure injection of the product into the skin can lead to local necrosis if the product if not surgically removed.

a) acute toxicity

Not classified

Based on available data, the classification criteria are not met Other toxicity values

Acute toxicity data referred to the registration dossier of the most abundant component of the mixture (Lubricating oils (petroleum), C20-50, neutral oil based, hydrotreated; base oil):

Species	Route of administration	Dose	Source
rats	oral	DL50 >5000 mg/kg bw	Test OECD 423
Sprague-Dawley			Registration dossier
rats	inhalation	CL50 >5,53 mg/L air	Test OECD 403
Sprague-Dawley			Registration dossier
rats	dermal	DL50 >5000 mg/kg bw	Test OECD 402
Sprague-Dawley			Registration dossier

There are no significant toxicity data for the other components of the product. Based on available data, the classification criteria are not met.

b) skin corrosion/irritation

Irritation data referred to the registration dossier of the most abundant component of the mixture (Lubricating oils (petroleum), C20-50, neutral oil based, hydrotreated; base oil).

Species	Route of administration	Dose	Source
Rabbit	dermal	Not irritating	Test OECD 404
New Zeland White			Registration dossier

Repeated and prolonged contact could cause irritation. Prolonged and repeated skin contact over time can remove the skin's hydrolipidic layer, produce dryness of the skin, and therefore dermatitis.

There are no significant data on skin corrosion / irritation to the other components of the product.

Based on available data, the classification criteria are not met

c) serious eye damage/irritation

Irritation data referred to the registration dossier of the most abundant component of the mixture (Lubricating oils (petroleum), C20-50, neutral oil based, hydrotreated; base oil):

Species	Route of administration	Dose	Source
Rabbit	eye	Not irritating	Test OECD 405
New Zeland White			Registration dossier

There are no significant data on ocular corrosion/irritation to the other components of the product.

Based on available data, the classification criteria are not met

d) respiratory or skin sensitisation

Respiratory or skin sensitization data referred to the registration dossier of the most abundant component of the mixture (Lubricating oils (petroleum), C20-50, neutral oil-based, hydrotreated; base oil):

guinea pig maximisation test/ Not sensitizing Test OECD 406 Hartley intradermica ed epicutanea Registration dossie	Species	Route of administration	Dose	Source
Hartley Intradermica ed epicutanea Registration dossie	guinea pig	maximisation test/	Not sensitizing	Test OECD 406
	Hartley	intradermica ed epicutanea		Registration dossier

There are no significant sensitization data for the other components of the product.

Based on available data, the classification criteria are not met e) germ cell mutagenicity

Germ cell mutagenicity data referred to the registration dossier of the most abundant component of the mixture (Lubricating oils (petroleum), C20-50, neutral oil-based, hydrotreated; base oil):

Species	Dose	Source
Chinese hamster Ovary cells	Not mutagenic	Test OECD 473
		Registration dossier
S. typhimurium TA 98	Not mutagenic	Test OECD 471
	Ū	Registration dossier

There are no significant mutagenicity data for the other components of the product. Based on available data, the classification criteria are not met

f) carcinogenicity

Carcinogenicity data referred to the registration dossier of the most abundant component of the mixture (Lubricating oils (petroleum), C20-50, neutral oil-based, hydrotreated; base oil):

Species	Dose	Source
female mouse	Not carcinogenic	Test OECD 451
CF1		Registration dossier

There are no significant carcinogenicity data for the product components. Based on available data, the classification criteria are not met

g) reproductive toxicity

Reproductive toxicity data referring to the registration dossier of the most abundant component of the mixture (Lubricating oils (petroleum), C20-50, neutral oil based, hydrotreated; base oil):

Species	Dose	Source
rats	No effect on reproduction	Test OECD 414
Sprague-Dawley	and development	Registration dossier
rats	No effect on reproduction	Test OECD 414
Sprague-Dawley	and development	Registration dossier

There are no significant reproductive toxicity data for the product components. Based on available data, the classification criteria are not met

h) STOT-single exposure

Prolonged exposure to product vapors or mists can cause irritation to the respiratory tract.

In case of nebulization of the product, there is the possibility of irritation of the respiratory tract. In conditions of overexposure to fumes and mists of the product, headaches, nausea, irritation of the eyes and respiratory tract may occur.

The ingested product can cause irritation of the digestive system with nausea, vomiting, diarrhea. In case of vomiting, part of the product can enter the respiratory tract, and in this case serious injuries to the respiratory system may occur; therefore, in case of ingestion, do not induce vomiting but contact the emergency room immediately. Based on available data, the classification criteria are not met

i) STOT-repeated exposure

Repeated exposure toxicity data referred to the registration dossier of the most abundant component of the mixture (Lubricating oils (petroleum), C20-50, neutral oil based, hydrotreated; base oil):

Species	Route of administration	Dose	Source
rabbit	dermal	1000 mg/kg bw/day (male)	Test OECD 410
New Zeland White	uermai	1000 mg/kg bw/day (female)	Registration dossier
rats	dermal		Test OECD 411
Sprague-Dawley		≥ 2000 mg/kg bw/day	Registration dossier
male mouse	dermal	≥ 150 mg/kg bw/day	Test OECD 453

C3H/HeNCrIBR			Registration dossier
Rats Sprague-Dawley	inhalation	220 mg/m3 on alveolar macrophages >980 mg/m3 systemic	Registration dossier

There are no significant repeated dose toxicity data for the other components of the product.

Based on available data, the classification criteria are not met j) aspiration hazard

Although there are components classified as Asp. Tox.1; H304 in concentration> 10%, the final viscosity of the mixture excludes the hazard for this endpoint. Based on available data, the classification criteria are not met

SECTION 12: Ecological information

Studies on the separate components did not show consistent evidence of toxicity at concentrations present in the mixture, therefore no classification required by the legislation on dangerous substances is assigned. Use according to good manufacturing practices, avoiding to disperse the product in the environment. Notify the competent authorities if the product has reached water courses or sewers or if it has contaminated the ground or vegetation. The product can cause significant adverse impact, even on the activated sludge of biological purifiers. Refer to the limits established by Legislative Decree 152/2006 and subsequent amendments. (Table III, Annex 5, part 3), for the max parameter of total hydrocarbons: sewer 10 mg/l; surface water 5 mg/l.

12.1. Toxicity

Toxicity data referred to the registration dossier of the most abundant component of the mixture (Lubricating oils (petroleum), C20-50, neutral oil based, hydrotreated; base oil):

Endpoint	Result	Source
Toxicity to fish	LL50 ≥100 mg/L WAF 96 h	Test OECD 203
Pimephales promelas	LL30 2100 Mg/L WAF 90 M	Registration dossier
Toxicity to invertebrates	EL50 >10000 mg/L WAF 48 h	Test OECD 202
Daphnia magna	EL30 > 10000 IIIg/L WAF 48 II	Registration dossier
Toxicity to algae and	EL50 ≥100 mg/L WAF 72 h	Test OECD 201
cyanobacteria	$EL30 \ge 100 \text{ mg/L WAF 72 m}$	Registration dossier
Toxicity for microorganisms	NOEL >1,93 mg/L	Registration dossier

Toxicity data referred to the component bis(nonylphenyl)amine:

Endpoint	Result	Source
Toxicity to fish	CL50 >100 mg/L 96 h	Test OECD 203
Danio rerio	CE30 > 100 mg/E 90 m	SDS supplier
Toxicity to invertebrates	EC50 >100 mg/L 48 h	Test OECD 202
Daphnia magna	EC30 > 100 mg/L 46 m	SDS supplier
Toxicity to algae	EC50 > 100 mg/L 72 h	Test OECD 201
Desmodesmus subspicatus	EC50 >100 mg/L 72 h	SDS supplier

Based on available data, the classification criteria are not met

Persistence and degradability data referred to the registration dossier of the most abundant component of the mixture (Lubricating oils (petroleum), C20-50, neutral oil based, hydrotreated;

Endpoint	Result	Source
Ready biodegradability on water	Inherently biodegradable	Test OECD 301 F Registration dossier
		0

The finished product is to be considered poorly biodegradable, particularly in the soil.

^{12.2.} Persistence and degradability

- 12.3. Bioaccumulative potential
 - It can occur in aquatic sediments and in the sludge of biological purifiers.
- 12.4. Mobility in soil

The product floats on water.

The product is absorbed superficially by the soil.

The product is carried by the surface water, while it is absorbed and retained by the soil.

12.5. Results of PBT and vPvB assessment

This product does not meet the criteria as PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006.

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
 - Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

- 14.1. UN number
 - Not classified as dangerous in the meaning of transport regulations.
- 14.2. UN proper shipping name N.A.
- 14.3. Transport hazard class(es)
- N.A.
- 14.4. Packing group N.A.
- 14.5. Environmental hazards N.A.
- 14.6. Special precautions for user N.A.
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code N.A.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Dir. 98/24/EC (Risks related to chemical agents at work) Dir. 2000/39/EC (Occupational exposure limit values) Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP) Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013 Regulation (EU) 2015/830 Regulation (EU) n. 286/2011 (ATP 2 CLP) Regulation (EU) n. 618/2012 (ATP 3 CLP) Regulation (EU) n. 487/2013 (ATP 4 CLP) Regulation (EU) n. 944/2013 (ATP 5 CLP) Regulation (EU) n. 605/2014 (ATP 6 CLP) International Regulations of the transport of dangerous goods (ADR, RID, IMDG, ICAO/IATA). Regulation (EU) n. 2015/1221 (ATP 7 CLP) Regulation (EU) n. 2016/918 (ATP 8 CLP) Regulation (EU) n. 2016/1179 (ATP 9 CLP) Regulation (EU) n. 2017/776 (ATP 10 CLP) Regulation (EU) n. 2018/669 (ATP 11 CLP) Regulation (EU) n. 2018/1480 (ATP 13 CLP) Regulation (EU) n. 2019/521 (ATP 12 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: No restriction.

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions : Directive 2012/18/EU (Seveso III) Regulation (EC) nr 648/2004 (detergents). Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III): Seveso III category according to Annex 1, part 1 None

15.2. Chemical safety assessment No Chemical Safety Assessment has been carried out for the substance.

SECTION 16: Other information

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG: INCI:	International Maritime Code for Dangerous Goods. International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.

LD50: PNEC: RID:	Lethal dose, for 50 percent of test population. Predicted No Effect Concentration. Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.