

Product name: VPS 4721

SAFETY DATA SHEET

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

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

1.1 Product identifier

Product name:
VPS 4721

Additional identification

Chemical name: Alkylpolysiloxanes, modified
Chemical formula: -
INDEX No. -
CAS-No. -
EC No. -

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

Identified uses: Coating agent

Uses advised against: Not determined.

1.3 Details of the supplier of the safety data sheet

Company Name : Evonik Operations GmbH
Rellinghauser Str. 1-11
45128 Essen
Germany

Telephone : +49 6181 59 4787

E-mail : sds-hu@evonik.com

1.4 Emergency telephone number:

**24-Hour Health
Emergency** : +49 7623 919191

National Poison Information Service (NPIS)
England, Scotland and Wales: NHS: 111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified according to the legislation in force.

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

Health Hazards

Product name: VPS 4721

Serious eye irritation

Category 2

H319: Causes serious eye irritation.

2.2 Label Elements

Signal Words:

Warning

Hazard Statement(s):

H319: Causes serious eye irritation.

Precautionary Statements
Prevention:

P264: Wash face, hands and any exposed skin thoroughly after handling.

P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

2.3 Other hazards
PBT/vPvB data

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients
3.1 Substances
General information:

Polymers are exempt from REACH registration. The monomers of this polymer are registered pursuant to EC Regulation No. 1907/2006 (REACH).

Chemical name:

Alkylpolysiloxanes, modified

INDEX No.:
CAS-No.:
EC No.:
REACH Registration No.:

Chemical name	Concentration	CAS-No.	EC No.	UK-REACH Registration No.	REACH Registration No.	M-Factor:	Notes
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	<3%	2530-83-8	219-784-2		01-2119513212-58	No data available.	
methanol	<=0.3%	67-56-1	200-659-6		01-2119433307-44	No data available.	#

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- * All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
 # This substance has workplace exposure limit(s).
 ## This substance is listed as SVHC.

Classification

Chemical name	Classification	Notes
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	Classification: Eye Dam.: 1: H318; Aquatic Chronic: 3: H412; Supplemental label information: None known.	None.
methanol	Classification: Flam. Liq.: 2: H225; Acute Tox.: 3: H301; Acute Tox.: 3: H311; Acute Tox.: 3: H331; STOT SE: 1: H370; Supplemental label information: None known.	None.

SECTION 4: First aid measures
4.1 Description of first aid measures

General information:	Immediately remove contaminated clothing.
Inhalation:	If aerosol or mists are formed: Move to fresh air. Get medical attention if any discomfort continues.
Skin Contact:	Wash off immediately with plenty of water. In case of discomfort: Supply with medical care.
Eye contact:	Keeping eyelid open, immediately rinse thoroughly for at least 5 minutes using plenty of water or, if necessary, eye rinsing solution. Consult an eye doctor (ophthalmologist).
Ingestion:	Have the mouth rinsed with water. Get medical attention immediately.
Personal Protection for First-aid Responders:	No data available.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:	After absorbing large amounts of substance: Liberation of reaction products (Methanol) can lead to symptoms of poisoning. Possible signs of poisoning: daze, dizziness, nausea, colicky abdominal pain, respiratory disturbance. Symptoms upon increasing intoxication: dysopia, loss of eyesight.
Hazards:	None known.

4.3 Indication of immediate medical attention and special treatment needed

Treatment:	Treatment Immediate gastric lavage. Antidote treatment, correction of acid-base balance. Detection of substance (Methanol) possible in: Blood Antidote treatment: ethanol.
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SECTION 5: Firefighting measures
5.1 Extinguishing media

Product name: VPS 4721

Suitable extinguishing media: Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media: High volume water jet.

5.2 Special hazards arising from the substance or mixture: Standard procedure for chemical fires.

5.3 Advice for firefighters

Special fire fighting procedures: Water used to extinguish fire should not enter drainage systems, soil or stretches of water. Ensure there are sufficient retaining facilities for water used to extinguish fire. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for fire-fighters: In case of fire: wear a self contained respiratory apparatus

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid contact with eyes.

6.1.1 For non-emergency personnel: No data available.

6.1.2 For emergency responders: No data available.

6.2 Environmental Precautions: Do not allow entrance in sewage water, soil stretches of water, groundwater, drainage systems.

6.3 Methods and material for containment and cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Transfer into suitable containers. To be disposed of in compliance with existing regulations.

6.4 Reference to other sections: For personal protection see section 8. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Technical measures: No data available.

Local/Total ventilation: Provide for good ventilation if vapours/aerosols are formed.

Safe handling advice: Provide adequate ventilation. Avoid contact with eyes. Handle in accordance with good industrial hygiene and safety practice. The personal protective equipment used must meet the requirements of Regulation (EU) 2016/425 and amendments (CE certification). If workplace exposure limits are exceeded and/or larger amounts are released (leakage, spilling, dust) the indicated respiratory protection should be used. If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used. Do not breathe in vapours or aerosols. Avoid contact with skin and eyes.

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Contact avoidance measures: No data available.

7.2 Conditions for safe storage, including any incompatibilities
Safe storage conditions: Normal measures for preventive fire protection. Keep containers tightly closed in a cool, well-ventilated place. Protect from moisture.

Safe packaging materials: No data available.

7.3 Specific end use(s): Applications; see Section 1. No further information available

SECTION 8: Exposure controls/personal protection
8.1 Control Parameters
Occupational Exposure Limits

Chemical name	Type	Form of exposure	Exposure Limit Values		Source
methanol	TWA		200 ppm	266 mg/m ³	EH40 WEL (12 2011)
	STEL 15 minutes		250 ppm	333 mg/m ³	EH40 WEL (01 2020)

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

DNEL-Values

Critical component	Type	Route of Exposure	Health Warnings	Remarks
[3-(2,3-epoxypropoxy)propyl]trimethoxy silane	General population	Inhalation	Systemic, long-term; 17 mg/m ³	Repeated dose toxicity
	Workers	Eyes	Local effect;	Medium hazard (no threshold derived)
	General population	Eyes	Local effect;	Medium hazard (no threshold derived)
	General population	Dermal	Systemic, long-term; 5 mg/kg	Repeated dose toxicity
	Workers	Inhalation	Systemic, long-term; 70.5 mg/m ³	Repeated dose toxicity
	General population	Oral	Systemic, long-term; 5 mg/kg	Repeated dose toxicity
	Workers	Dermal	Systemic, long-term; 10 mg/kg	Repeated dose toxicity
	General population	Eyes	Local effect;	No hazard identified
	Workers	Eyes	Local effect;	No hazard identified
	methanol	Workers	Dermal	Systemic, short-term; 20 mg/kg
General population		Inhalation	Local, short-term; 26 mg/m ³	Acute toxicity
General population		Inhalation	Systemic, short-term; 26 mg/m ³	Acute toxicity
General population		Dermal	Systemic, long-term; 4 mg/kg	Acute toxicity
General population		Dermal	Systemic, short-term; 4 mg/kg	Acute toxicity
Workers		Inhalation	Systemic, short-term; 130 mg/m ³	Acute toxicity
General population		Inhalation	Systemic, long-term; 26 mg/m ³	Acute toxicity
Workers		Eyes	Local effect;	No hazard identified

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	Workers	Dermal	Systemic, long-term; 20 mg/kg	Acute toxicity
	General population	Oral	Systemic, short-term; 4 mg/kg	Acute toxicity
	Workers	Inhalation	Local, short-term; 130 mg/m ³	Acute toxicity
	Workers	Inhalation	Systemic, long-term; 130 mg/m ³	Acute toxicity
	General population	Inhalation	Local, long-term; 26 mg/m ³	Acute toxicity
	General population	Eyes	Local effect;	No hazard identified
	General population	Oral	Systemic, long-term; 4 mg/kg	Acute toxicity
	Workers	Inhalation	Local, long-term; 130 mg/m ³	Acute toxicity

PNEC-Values

Critical component	Environmental compartment	PNEC-Values	Remarks
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	Sediment (freshwater)	1.6 mg/kg	
	Sediment (marine water)	0.16 mg/kg	
	Aquatic (freshwater)	0.45 mg/l	
	Aquatic (marine water)	0.045 mg/l	
	Sediment (freshwater)	1.6 mg/kg	
	Soil	0.063 mg/kg	Soil

8.2 Exposure controls
Appropriate Engineering Controls: Provide for good ventilation if vapours/aerosols are formed.

Individual protection measures, such as personal protective equipment
Eye/face protection: Safety glasses with side shields

Hand Protection:

Material: Butyl rubber.
 Break-through time: >= 480 min
 Glove thickness: 0.5 mm

Material: Fluorinated rubber (Viton)
 Break-through time: >= 480 min
 Glove thickness: 0.4 mm

Additional Information: Selection of protective gloves to meet the requirements of specific workplaces., The suitability for a specific workplace should be discussed with the producers of the protective gloves., The information is based on our own tests, references from the literature and information from glove manufacturers, or derived by analogy with similar materials., Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature).

Skin and Body Protection: No special protective equipment required.

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Respiratory Protection:	In case of dusts/vapours/aerosols being formed or if the limit values like TLV are exceeded: use respiratory equipment with suitable filter (filter type ABEK) or wear a self contained respiratory apparatus Use only respiratory protection equipment with CE-symbol including four digit test number. The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used. Note time limit for wearing respiratory protective equipment.
Hygiene measures:	When using, do not eat, drink or smoke. Wash face and/or hands before break and end of work. Immediately remove contaminated clothing. Wash contaminated clothing before reuse.
Environmental Controls:	see section 6.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****Appearance**

Physical state:	liquid
Form:	liquid
Color:	colorless to yellowish
Odor:	Unspecific
Odor Threshold:	No data available.
Freezing point:	-67 °C Method: DIN / ISO 3016
Boiling Point:	> 120 °C Literature
Flammability:	Not applicable
Upper/lower limit on flammability or explosive limits	
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Flash Point:	> 95 °C Method: DIN EN ISO 2719
Auto-ignition temperature:	375 °C Method: DIN 51794
Decomposition Temperature:	No data available.
pH:	< 6 Method: DIN 38404-C5 DIN 38404-C5
Viscosity	
Dynamic viscosity:	750 - 1,350 mPa.s at 25 °C Method: DIN 53019
Kinematic viscosity:	No data available.
Solubility(ies)	
Solubility in Water:	immiscible decomposition by hydrolysis

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Partition coefficient (n-octanol/water):	No data available.
Vapor pressure:	No data available.
Relative density:	No data available.
Density:	1.23 g/cm ³ at 20 °C Method: DIN 51757
Relative vapor density:	No data available.

9.2 Other information

Oxidizing properties:	Not applicable
Self-ignition:	Not applicable
Peroxides:	Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity:	No dangerous reaction known under conditions of normal use.
10.2 Chemical Stability:	Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions:	No dangerous reactions known.
10.4 Conditions to avoid:	Keep away from moisture.
10.5 Incompatible Materials:	Water.
10.6 Hazardous Decomposition Products:	Methanol in case of hydrolysis. Alcohol formed by hydrolysis lowers the flash point of the product.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Information on likely routes of exposure

Inhalation:	Information on effects are given below.
Skin Contact:	Information on effects are given below.
Eye contact:	Information on effects are given below.
Ingestion:	Information on effects are given below.

Acute toxicity (list all possible routes of exposure)
Oral

Product:	Not classified for acute toxicity based on available data.
Components:	
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	LD 50, Rat, Female, Male, 8,025 mg/kg, OECD 401
methanol	LD 50, Rat, 100 mg/kg

Dermal

Product:	ATEmix, > 2,000 mg/kg
Components:	

Product name: VPS 4721

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	LD 50, Rabbit, Male, 4,248 mg/kg, OECD 402
methanol	LD 50, Rat, 300 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.

Components:

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	LC 50, Rat, Female, Male, 4 h, 5.3 mg/l, Dust and mist, OECD 403
methanol	Vapour, Not toxic after single exposure, Not applicable

	LC 50, Acute toxicity estimate, 4 h, 3 mg/l, Vapour, Vapour
	LC 50, Acute toxicity estimate, 4 h, > 0.5 mg/l, Dust and mist, Dust and mist

Repeated dose toxicity

Product: No data available.

Components:

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	NOAEL Rat, Female, Male, Oral, 90 day, 7 days a week, >= 1,000 mg/kg
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	NOAEC, Rat, Male, Inhalation - dust and mist, 28 day, 6 hours/day, 119 mg/m ³
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methanol	No data available.
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Skin Corrosion/Irritation

Product: No data available.

Components:

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	Not irritating, OECD 404, Rabbit
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methanol	Not irritating, Rabbit, Literature
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Serious Eye Damage/Eye Irritation

Product: Irritating.

Components:

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	Risk of serious damage to eyes., OECD 405, Rabbit
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methanol	Not irritating, Rabbit
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Respiratory or Skin Sensitization

Product: No data available.

Components:

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	Buehler Test, OECD 406, Guinea Pig, Not a skin sensitizer.
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methanol	Maximization Test, OECD 406, Guinea Pig, Not a skin sensitizer.
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Carcinogenicity

Product: No data available.

Components:

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	Did not show carcinogenic effects in animal experiments.
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methanol	Not classified
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Germ Cell Mutagenicity
In vitro

Product: No data available.

Components:

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[3-(2,3-epoxypropoxy)propyl]trimethoxysilane methanol	Ames test, OECD 471: , positive and negative
	Ames test, OECD 471: , negative gene mutation test, OECD 476: , negative Micronucleus test: , negative

In vivo

Product:	No data available.
Components:	
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane methanol	No data available. Micronucleus test, OECD 474, Intraperitoneal, Mouse, Female, Male, negative Chromosomal aberration, Intraperitoneal, Mouse, Female, Male, negative

Reproductive toxicity

Product:	No data available.
Components:	
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane methanol	Animal testing did not show any effects on fertility. Not classified

Specific Target Organ Toxicity - Single Exposure

Product:	No data available.
Components:	
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane methanol	Not classified based on available information. Dermal Oral Inhalation - vapor, optic nerve, Central nervous system., Category 1 Causes damage to organs.

Specific Target Organ Toxicity - Repeated Exposure

Product:	No data available.
Components:	
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane methanol	Not classified based on available information. No data available.

Aspiration Hazard

Product:	No evidence of aspiration toxicity
Components:	
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane methanol	Not classified Not classified

11.2 Information on other hazards
Other information

Product:	No toxicological tests are available on the product.; The properties of this product which are hazardous to health have been calculated as per regulation (EC) No. 1272/2008. See section 2 "Hazards Identification".;
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Product name: VPS 4721

SECTION 12: Ecological information
12.1 Toxicity:
Acute hazards to the aquatic environment:
Fish

Product:	No data available.
Components:	
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	LC 50, Cyprinus carpio, 96 h, 55 mg/l OECD 203
methanol	LC 50, Bluegill Sunfish, 96 h, 15,400 mg/l US-EPA-method, Literature

Aquatic Invertebrates

Product:	No data available.
Components:	
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	LC 50, Simocephalus vetulus, 48 h, 324 mg/l US-EPA-method
methanol	EC 50, Daphnia magna, 96 h, 18,260 mg/l OECD 202, Literature

Toxicity to Aquatic Plants

Product:	No data available.
Components:	
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	EC 50 (Algae (Pseudokirchneriella subcapitata), 96 h): 350 mg/l (OECD 201)
methanol	EC 50 (Selenastrum capricornutum (green algae), 96 h): Approximate 22,000 mg/l (OECD 201) Literature

Toxicity to microorganisms

Product:	No data available.
Components:	
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	EC 50, local activated sludge, 3 h, > 100 mg/l, OECD 209, tested in the presence of emulsifiers
methanol	EC 50, activated sludge, 3 h, > 1,000 mg/l, OECD 209, Literature

Chronic hazards to the aquatic environment:
Fish

Product:	No data available.
Components:	
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	No data available.
methanol	No data available.

Aquatic Invertebrates

Product:	No data available.
Components:	
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	NOEC, Daphnia magna, 21 d, 100 mg/l, OECD 211 Lowest Observed Effect Concentration, Daphnia magna, 21 d, > 100 mg/l, OECD 211

Product name: VPS 4721

methanol No data available.

Toxicity to Aquatic Plants
Product: No data available.

Components:

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane NOEC (Algae (Pseudokirchneriella subcapitata), 96 h): 130 mg/l (OECD 201)

methanol No data available.

Toxicity to microorganisms
Product: No data available.

Components:

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane EC 50, local activated sludge, 3 h, > 100 mg/l, OECD 209, tested in the presence of emulsifiers

methanol EC 50, activated sludge, 3 h, > 1,000 mg/l, OECD 209, Literature

12.2 Persistence and Degradability
Biodegradation
Product: No data available.

Components:

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane 37 %, 28 d, (DOC; Die Away test - 79/831/EEC part C.4-A), The product is not biodegradable., aerobic

methanol 98 %, 28 d, (DOC; modif. OECD screening test / OECD 301 E), Own study The product is easily biodegradable., aerobic

12.3 Bioaccumulative potential
Bioconcentration Factor (BCF)
Product: No data available.

Components:

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane not bioaccumulative

methanol Leuciscus idus (Golden orfe), < 10, Measured, No significant bioaccumulation.

Partition Coefficient n-octanol / water (log Kow)
Product: No data available.

Components:

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane 0.5, 20 °C

methanol -0.77

12.4 Mobility in soil:
Product No data available.

Components:

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane Adsorption on the floor: low.

methanol soil - Log Koc: 1 calculated) Not expected to adsorb on soil.

12.5 Results of PBT and vPvB assessment:

Product name: VPS 4721

Product This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Components:
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane
methanol

Non-classified vPvB substance,
Non-classified PBT substance

Non-classified vPvB substance,
Non-classified PBT substance

12.6 Other adverse effects:

Other hazards

Product: An Expert Judgment stated that no classification is necessary based on present knowledge.

Additional Information: No ecotoxicological data is available for this product.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information: No data available.

Disposal methods: With respect to local regulations, e.g. dispose of to suitable waste incineration plant. No waste key number as per the European Waste Types List can be assigned to this product, since such classification is based on the (as yet undetermined) use to which the product is put by the consumer. The waste key number must be determined as per the European Waste Types List (decision on EU Waste Types List 2000/532/EC) in cooperation with the disposal firm / producing firm / official authority.

Contaminated Packaging: Do not reuse empty containers and dispose of in accordance with the regulations issued by the appropriate local authorities. If there is product residue in the emptied container, follow directions for handling on the container's label. Incorrect disposal or reuse of this container is illegal and can be dangerous. Other countries: observe the national regulations.

SECTION 14: Transport information

14.1 UN/ID No.

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

Product name: VPS 4721

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

EU Regulations

EU. REACH Annex XIV, Substances Subject to Authorization: None present or none present in regulated quantities.

EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC): None present or none present in regulated quantities.

EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended: None present or none present in regulated quantities.

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances: None present or none present in regulated quantities.

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex II, New Substances: None present or none present in regulated quantities.

UK EXP1: UK. GB PIC List, Regulation (EU) 649/2012 as amended by EU Exit Regulations S.I. 2019/720 and S.I. 2020/1567, as amended: None present or none present in regulated quantities.

UK EXP2: UK. GB PIC List, Regulation (EU) 649/2012 as amended by EU Exit Regulations S.I. 2019/720 and S.I. 2020/1567, as amended: None present or none present in regulated quantities.

UK EXP3: UK. GB PIC List, Regulation (EU) 649/2012 as amended by EU Exit Regulations S.I. 2019/720 and S.I. 2020/1567, as amended: None present or none present in regulated quantities.

UK BAN: UK. GB PIC List, Regulation (EU) 649/2012 as amended by EU Exit Regulations S.I. 2019/720 and S.I. 2020/1567, as amended: None present or none present in regulated quantities.

EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I: Not applicable

15.2 Chemical safety assessment: No chemical safety assessment is required for this product.

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Product name: VPS 4721**Rotterdam convention**

Not applicable

Kyoto protocol

Not applicable

SECTION 16: Other information**Abbreviations and acronyms:**

EH40 WEL:	UK. EH40 Workplace Exposure Limits (WELs), as amended
EH40 WEL / STEL:	Short Term Exposure Limit (STEL):
EH40 WEL / TWA:	Time Weighted Average (TWA):

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; EIGA - European Industrial Gases Association; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Key literature references and sources for data: No data available.

Training information: No data available.

Revision Information Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Product name: VPS 4721

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