according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

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

1.1 Product identifier

Trade name : ULTRASTAR UV LED FP-8320 Silver

Product code : 025920U30

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

Use of the : Colouring agents, pigments

Substance/Mixture

1.3 Details of the supplier of the safety data sheet

Company : ECKART GmbH

Guentersthal 4 91235 Hartenstein

Telephone : +499152770

Telefax : +499152777008

E-mail address of person

responsible for the SDS

: msds.eckart@altana.com

1.4 Emergency telephone number

NCEC: +44 1235 239670 (Europe)

Call and response in your language is possible.

Contract no.: ECKART29003-NCEC.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2
H315: Causes skin irritation.
Eye irritation, Category 2
H319: Causes serious eye irritation.
Skin sensitisation, Category 1
H317: May cause an allergic skin reaction.

Long-term (chronic) aquatic hazard, H411: Toxic to aquatic life with long lasting effects.

Category 2

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

Hazard pictograms :





Signal word : Warning

Hazard statements : H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : Prevention:

P261 Avoid breathing mist or vapours.
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.

P280 Wear protective gloves/ eye protection/ face

protection.

Response:

P333 + P313 If skin irritation or rash occurs: Get medical

advice/ attention.

P391 Collect spillage.

Hazardous components which must be listed on the label:

Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-[(1-oxo-2-propenyl)oxy]-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1)

Bisphenol A epoxy acrylate

monoalkylor monoaryl or monoalkylaryl esters of acrylic acid

(5-ethyl-1,3-dioxan-5-yl)methyl acrylate

ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate

Glycerol, propoxylated, esters with acrylic acid

hexamethylene diacrylate

2-ethylhexyl acrylate

2.3 Other hazards

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

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	ClassificationREGUL ATION (EC) No 1272/2008	Concentration (% w/w)
Poly(oxy-1,2-ethanediyl), .alphahydroomega[(1-oxo-2-propenyl)oxy]-, ether with 2-ethyl-	28961-43-5 500-066-5	Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 3;	>= 10 - < 20

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

2-(hydroxymethyl)-1,3- propanediol (3:1)		H412	
Poly(oxy-1,2-ethanediyl), .alphahydroomega[(1-oxo-2-propen-1-yl)oxy]-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1)	51728-26-8 500-111-9 01-2119969962-19	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Chronic 2; H411	>= 10 - < 20
Bisphenol A epoxy acrylate	55818-57-0 500-130-2	Skin Sens. 1; H317 Aquatic Chronic 2; H411	>= 10 - < 20
monoalkylor monoaryl or monoalkylaryl esters of acrylic acid	64194-22-5 264-727-7 607-133-00-9	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1A; H317 STOT SE 3; H335 (Respiratory system) Aquatic Chronic 3; H412	
		specific concentration limit STOT SE 3; H335 >= 10 % STOT SE 3; H335 >= 10 %	
(5-ethyl-1,3-dioxan-5-yl)methyl acrylate	66492-51-1 266-380-7	Skin Irrit. 2; H315 Skin Sens. 1B; H317 Aquatic Chronic 2; H411	>= 2.5 - < 10
ethyl phenyl(2,4,6- trimethylbenzoyl)phosphinate	84434-11-7 282-810-6 01-2119987994-10	Skin Sens. 1; H317 Aquatic Chronic 2; H411	>= 2.5 - < 10
Glycerol, propoxylated, esters with acrylic acid	52408-84-1 500-114-5 01-2119487948-12	Eye Irrit. 2; H319 Skin Sens. 1; H317	>= 1 - < 10
hexamethylene diacrylate	13048-33-4 235-921-9 607-109-00-8 01-2119484737-22	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 2; H411	>= 2.5 - < 10
aluminium powder (stabilised)	7429-90-5	M-Factor (Acute aquatic toxicity): 1 Flam. Sol. 1; H228	>= 1 - < 10

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

	013-002-00-1		
	01-2119529243-45		
2-ethylhexyl acrylate	103-11-7	Skin Irrit. 2; H315	>= 0.1 - < 1
	203-080-7	Skin Sens. 1; H317	
	607-107-00-7	STOT SE 3; H335	
		(Respiratory system)	
	01-2119453158-37		

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Move the victim to fresh air.

Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled : Remove to fresh air.

If unconscious, place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact : Wash off immediately with soap and plenty of water.

If skin irritation persists, call a physician.

If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : Immediately flush eye(s) with plenty of water.

Immediately flush eye(s) with plenty of water.

Remove contact lenses.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Risks : Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye irritation.

A member of **O ALTANA**

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

4.3 Indication of any immediate medical attention and special treatment needed

This information is not available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Dry sand

Special powder against metal fire

Unsuitable extinguishing

media

ABC powder

Carbon dioxide (CO2)

Water Foam

High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

Contact with water liberates extremely flammable gas

(hydrogen).

Do not allow run-off from fire fighting to enter drains or water

courses.

5.3 Advice for firefighters

Special protective equipment:

for firefighters

Wear self-contained breathing apparatus for firefighting if

necessary.

Further information : Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.
Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.

Use personal protective equipment. Use personal protective equipment.

6.2 Environmental precautions

General advice : The product should not be allowed to enter drains, water

courses or the soil.

Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

If the product contaminates rivers and lakes or drains inform

respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Use mechanical handling equipment.

Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Do not breathe vapours/dust.

Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

Dispose of rinse water in accordance with local and national

regulations.

Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

Advice on protection against

fire and explosion

Normal measures for preventive fire protection.

Hygiene measures : When using do not eat or drink. When using do not smoke.

Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Keep away from sources of ignition

- No smoking. Keep container closed when not in use.

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the

technological safety standards.

Advice on common storage : Do not store near acids.

Do not store together with oxidizing and self-igniting products. Keep away from oxidizing agents and strongly acid or alkaline

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

materials.

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Further information on storage stability

No decomposition if stored and applied as directed.

7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis	
aluminium powder (stabilised)	7429-90-5	TWA (Inhalable)	10 mg/m3	GB EH40	
		TWA (Respirable fraction)	4 mg/m3	GB EH40	
		TWA (inhalable dust)	10 mg/m3	GB EH40	
	Further information: For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/4 General methods for sampling and gravimetric analysis or respirable, thoracic and inhalable aerosols., The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'., Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/4., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.				
		TWA (Respirable dust)	4 mg/m3	GB EH40	
	inhalable dust when samplin	are those fractions g is undertaken in a	ses of these limits, respirable of airborne dust which will be coordance with the methods ampling and gravimetric ana	e collected described in	

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

respirable, thoracic and inhalable aerosols., The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'.. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/4., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with. Where no specific short-term exposure limit is listed. a figure three times the long-term exposure limit should be used.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Poly(oxy-1,2- ethanediyl), .alpha hydroomega[(1- oxo-2-propen-1- yl)oxy]-, ether with 2,2- bis(hydroxymethyl)- 1,3-propanediol (4:1)	Workers	Inhalation	Long-term systemic effects	0.88 mg/m3
	Workers	Dermal	Long-term systemic effects	0.5 mg/kg
Bisphenol A epoxy acrylate	Workers	Inhalation	Long-term systemic effects	1.17 mg/m3
	Workers	Dermal	Long-term systemic effects	33 mg/kg
	Consumers	Inhalation	Long-term systemic effects	0.29 mg/m3
	Consumers	Dermal	Long-term systemic effects	16.67 mg/kg
	Consumers	Oral	Long-term systemic effects	0.17 mg/kg
monoalkylor monoaryl or monoalkylaryl esters of acrylic acid	Workers	Inhalation	Long-term systemic effects	5.88 mg/m3
	Workers	Dermal	Long-term systemic effects	0.83 mg/kg
	Consumers	Inhalation	Long-term systemic effects	1.45 mg/m3
	Consumers	Dermal	Long-term systemic	0.42 mg/kg

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

			effects	
	Consumers	Oral	Long-term systemic effects	0.42 mg/kg
ethyl phenyl(2,4,6- trimethylbenzoyl)phos phinate	Workers	Dermal	Long-term systemic effects	1.7 mg/kg
	Workers	Inhalation	Long-term systemic effects	5.88 mg/m3
Glycerol, propoxylated, esters with acrylic acid	Workers	Inhalation	Long-term systemic effects	16.22 mg/m3
	Workers	Dermal	Long-term systemic effects	1.92 mg/kg
	Consumers	Inhalation	Long-term systemic effects	4.87 mg/m3
	Consumers	Dermal	Long-term systemic effects	1.15 mg/kg
	Consumers	Oral	Long-term systemic effects	1.39 mg/kg
hexamethylene diacrylate	Workers	Inhalation	Long-term systemic effects	24.48 mg/m3
	Workers	Dermal	Long-term systemic effects	2.77 mg/kg
	Consumers	Oral	Long-term systemic effects	2.08 mg/kg
	Consumers	Dermal	Long-term systemic effects	1.66 mg/kg
	Consumers	Inhalation	Long-term systemic effects	7.24 mg/m3
aluminium powder (stabilised)	Workers	Inhalation	Long-term systemic effects	3.72 mg/m3
	Workers	Inhalation	Long-term local effects	3.72 mg/m3
	Consumers	Oral	Long-term systemic effects	3.95 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Poly(oxy-1,2-ethanediyl), .alpha	Soil	0.0078 mg/kg
hydroomega[(1-oxo-2-propen-		
1-yl)oxy]-, ether with 2,2-		
bis(hydroxymethyl)-1,3-		
propanediol (4:1)		
	Fresh water	0.00176 mg/l
	Fresh water sediment	0.017 mg/kg
	Marine water	0.000176 mg/l
	Marine sediment	0.0017 mg/kg
	STP	4 mg/l
Bisphenol A epoxy acrylate	Fresh water	0.025 mg/l
	Marine water	0.003 mg/l
	Intermittent Release	1 mg/l

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

	Fresh water sediment	8.96 mg/kg
	Marine sediment	0.896 mg/kg
	STP	10 mg/l
	Soil	1.78 mg/kg
monoalkylor monoaryl or monoalkylaryl esters of acrylic acid	Fresh water	0.001 mg/l
	Marine water	0.001 mg/l
	STP	2.7 mg/l
	Fresh water sediment	0.031 mg/kg
	Marine sediment	0.003 mg/kg
	water (intermittent release)	0.012 mg/l
Glycerol, propoxylated, esters with acrylic acid	Fresh water	0.0057 mg/l
	Marine water	0.00057 mg/l
	Fresh water sediment	0.0168 mg/kg
	Marine sediment	0.00168 mg/kg
	STP	10 mg/l
	Soil	0.0011 mg/kg
hexamethylene diacrylate	Soil	0.094 mg/kg
	Fresh water	0.007 mg/l
	Marine water	0.001 mg/l
	STP	2.7 mg/l
	Marine sediment	0.049 mg/kg
aluminium powder (stabilised)	Fresh water	0.0749 mg/l
	clarification plant	20 mg/l

8.2 Exposure controls

Personal protective equipment

Eye/face protection : Goggles

Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing

problems.

Hand protection

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Skin and body protection : Impervious clothing

Choose body protection according to the amount and

concentration of the dangerous substance at the work place.

Respiratory protection : Use suitable breathing protection if workplace concentration

requires.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form : liquid

Colour : silver

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

Odour : characteristic

Odour Threshold : No data available

Melting point/range : Not applicable

Boiling point/boiling range : > 100 °C

Flammability : No data available

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Flash point : $> 100 \, ^{\circ}\text{C}$

Auto-ignition temperature : No data available

Decomposition temperature : No data available

pH : 6-8

Concentration: 100 %

Viscosity, kinematic : No data available

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

0.105 Pa (20 °C)

octarior, water

Vapour pressure : No data available

Vapor Pressure for Components:

Poly(oxy-1,2-ethanediyl), : 0.0032 hPa (20 °C)

.alpha.-hydro-.omega.-[(1-oxo-2-propenyl)oxy]-, ether

with 2-ethyl-2-(hydroxymethyl)-1,3-

propanediol (3:1) monoalkylor monoaryl or

monoalkylaryl esters of

acrylic acid

(5-ethyl-1,3-dioxan-5- : 0.6 Pa (20 °C)

yl)methyl acrylate

Glycerol, propoxylated, : 0.0032 Pa (20 °C)

esters with acrylic acid Method: OECD Test Guideline 104

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

hexamethylene diacrylate : < 0.01 hPa (20 °C)

2-ethylhexyl acrylate : 1.33 hPa

Relative density : No data available

Density : 1.1 g/cm3

Relative vapour density : No data available

Particle characteristics

Particle Size Distribution : No data available

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : Contact with acids and alkalis may release hydrogen.

No decomposition if stored and applied as directed.

10.4 Conditions to avoid

Conditions to avoid : Do not allow evaporation to dryness.

No data available

10.5 Incompatible materials

Materials to avoid : Acids

Bases

Oxidizing agents

10.6 Hazardous decomposition products

This information is not available.

SECTION 11: Toxicological information

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

Acute toxicity

Not classified based on available information.

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

Product:

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l

Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Components:

monoalkylor monoaryl or monoalkylaryl esters of acrylic acid:

Acute inhalation toxicity : Assessment: The component/mixture is moderately toxic after

short term inhalation.

 $ethyl\ phenyl (2,4,6-trimethyl benzoyl) phosphinate:$

Acute oral toxicity : (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 401

Acute dermal toxicity : (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 402

hexamethylene diacrylate:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : (Rat): 0.14 mg/l

Exposure time: 7 h

Acute dermal toxicity : LD50 (Rabbit): 3,650 mg/kg

Method: OECD Test Guideline 402

aluminium powder (stabilised):

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Skin corrosion/irritation

Causes skin irritation.

Product:

Remarks : May cause skin irritation and/or dermatitis.

Components:

monoalkylor monoaryl or monoalkylaryl esters of acrylic acid:

Result : Skin irritation

ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate:

Remarks : May cause skin irritation and/or dermatitis.

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

hexamethylene diacrylate:

Result : Skin irritation

2-ethylhexyl acrylate:

Result : Skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Remarks : May cause irreversible eye damage.

Components:

Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-[(1-oxo-2-propenyl)oxy]-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1):

Result : Irritating to eyes.

monoalkylor monoaryl or monoalkylaryl esters of acrylic acid:

Result : Eye irritation

ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate:

Remarks : Vapours may cause irritation to the eyes, respiratory system

and the skin.

Glycerol, propoxylated, esters with acrylic acid:

Result : Eye irritation

hexamethylene diacrylate:

Result : Eye irritation

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified based on available information.

Product:

Remarks : Causes sensitisation.

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

Components:

Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-[(1-oxo-2-propenyl)oxy]-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1):

Result : May cause sensitisation by skin contact.

Bisphenol A epoxy acrylate:

Result : May cause sensitisation by skin contact.

monoalkylor monoaryl or monoalkylaryl esters of acrylic acid:

Result : The product is a skin sensitiser, sub-category 1A.

ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate:

Result : May cause sensitisation by skin contact.

Glycerol, propoxylated, esters with acrylic acid:

Result : May cause sensitisation by skin contact.

hexamethylene diacrylate:

Result : May cause sensitisation by skin contact.

2-ethylhexyl acrylate:

Result : May cause sensitisation by skin contact.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

Components:

monoalkylor monoaryl or monoalkylaryl esters of acrylic acid:

Exposure routes : Inhalation

Assessment : The substance or mixture is classified as specific target organ

toxicant, single exposure, category 3 with respiratory tract

irritation.

2-ethylhexyl acrylate:

Assessment : May cause respiratory irritation.

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

11.2 Information on other hazards

Further information

Product:

Remarks : No data available

SECTION 12: Ecological information

12.1 Toxicity

Components:

Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-[(1-oxo-2-propenyl)oxy]-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1):

Ecotoxicology Assessment

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Bisphenol A epoxy acrylate:

Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

monoalkylor monoaryl or monoalkylaryl esters of acrylic acid:

Ecotoxicology Assessment

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate:

Ecotoxicology Assessment

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

hexamethylene diacrylate:

M-Factor (Short-term (acute) : 1

aquatic hazard)

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Components:

Glycerol, propoxylated, esters with acrylic acid:

Partition coefficient: n- : log Pow: 2.52 (23 °C)

octanol/water Method: OECD Test Guideline 107

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : 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.

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

Product:

Additional ecological

information

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Toxic to aquatic life with long lasting effects.

Components:

ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate:

Additional ecological

information

: An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Toxic to aquatic life with long lasting effects.

Glycerol, propoxylated, esters with acrylic acid:

Additional ecological

information

: No data available

2-ethylhexyl acrylate:

Additional ecological

: No data available

information

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

SECTION 13: Disposal considerations

European Waste Catalogue : 08 03 12* - waste ink containing dangerous substances

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product. Do not re-use empty containers.

SECTION 14: Transport information

14.1 UN number or ID number

 ADR
 : UN 3082

 IMDG
 : UN 3082

 IATA
 : UN 3082

14.2 UN proper shipping name

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(hexane-1,6-diol diacrylate)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(hexane-1,6-diol diacrylate)

IATA : Environmentally hazardous substance, liquid, n.o.s.

(hexane-1,6-diol diacrylate)

14.3 Transport hazard class(es)

Class Subsidiary risks

 ADR
 : 9

 IMDG
 : 9

 IATA
 : 9

14.4 Packing group

ADR

Packing group : III
Classification Code : M6
Hazard Identification Number : 90

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

Labels : 9
Tunnel restriction code : (-)

IMDG

Packing group : III Labels : 9

EmS Code : F-A, S-F

IATA (Cargo)

Packing instruction (cargo : 964

aircraft)

Packing instruction (LQ) : Y964
Packing group : III
Labels : 9

IATA (Passenger)

Packing instruction : 964

(passenger aircraft)

Packing instruction (LQ) : Y964
Packing group : III
Labels : 9

14.5 Environmental hazards

ADR

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

14.6 Special precautions for user

Remarks : For single packagings <=5L / 5 kg, or combination

packagings containing inner packagings <= 5L / 5 kg net per inner packaging, SV375 ADR, 2.10.2.7 IMDG-Code, A197

IATA-DGR may be applied.

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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

Relevant EU provisions transposed through retained EU law

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) Conditions of restriction for the following entries should be

considered:

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

Number on list 3

Poly(oxy-1,2-ethanediyl), .alpha.-

hydro-.omega.-[(1-oxo-2-

propenyl)oxy]-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol

(3:1) (Number on list 3)

Bisphenol A epoxy acrylate (Number

on list 3)

monoalkylor monoaryl or

monoalkylaryl esters of acrylic acid

(Number on list 3)

(5-ethyl-1,3-dioxan-5-yl)methyl acrylate (Number on list 3)

ethyl phenyl(2,4,6-

trimethylbenzoyl)phosphinate

(Number on list 3)

Glycerol, propoxylated, esters with acrylic acid (Number on list 3) hexamethylene diacrylate (Number

on list 3)

aluminium powder (stabilised)

(Number on list 40)

2-ethylhexyl acrylate (Number on list

3)

UK REACH Candidate list of substances of very high

concern (SVHC) for Authorisation

The Persistent Organic Pollutants Regulations (retained

Regulation (EU) 2019/1021 as amended for Great

Britain)

Regulation (EC) No 1005/2009 on substances that

deplete the ozone layer

UK REACH List of substances subject to authorisation

(Annex XIV)

Not applicable

Not applicable

Not applicable

: Not applicable

15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Full text of H-Statements

H228 : Flammable solid. H315 : Causes skin irritation.

H317 : May cause an allergic skin reaction.
H319 : Causes serious eye irritation.

H332 : Harmful if inhaled.

H335 : May cause respiratory irritation.

H400 : Very toxic to aquatic life.

H411 : Toxic to aquatic life with long lasting effects.
H412 : Harmful to aquatic life with long lasting effects.

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Acute : Short-term (acute) aquatic hazard Aquatic Chronic : Long-term (chronic) aquatic hazard

Eye Irrit. : Eye irritation
Flam. Sol. : Flammable solids
Skin Irrit. : Skin irritation
Skin Sens. : Skin sensitisation

STOT SE : Specific target organ toxicity - single exposure GB EH40 : UK. EH40 WEL - Workplace Exposure Limits

GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)

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; 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 Verv 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

Further information

Classification of the mixture: Classification procedure:

Skin Irrit. 2 H315 Calculation method
Eye Irrit. 2 H319 Calculation method
Skin Sens. 1 H317 Calculation method

according to Regulation (EC) No. 1907/2006



ULTRASTAR UV LED FP-8320 Silver

Version Revision Date: SDS Number: Print Date: 23.04.2024

7.0 22.04.2024 102000032669 Date of first issue: 28.02.2020

Aquatic Chronic 2 H411 Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GB / EN