

Globally Harmonized System of Classification and Labelling of  
Chemicals (GHS)

## ULTRASTAR UV FP-8220 Silver

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

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

#### 1.1 Product identifier

Trade name : ULTRASTAR UV FP-8220 Silver  
Material number : 052466U30

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

This information is not available.

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

Company :  
  
Telephone :  
Telefax :  
E-mail address : msds.eckart@altana.com  
Responsible/issuing person

#### 1.4 Emergency telephone number

**NCEC:**

(contract no.: ECKART29003-NCEC)

+44 1235 239671 (Middle East/Africa, call and response in your language)

+1 215 207 0061 (Americas, call and response in your language)

+65 3158 1074 (Asia-Pacific, call and response in your language)

### SECTION 2: Hazards identification

#### GHS Classification

: Skin corrosion/irritation, Category 2, H315  
Serious eye damage/eye irritation, Category 2A, H319  
Skin sensitisation, Category 1, H317

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

## ULTRASTAR UV FP-8220 Silver


Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

Short-term (acute) aquatic hazard, Category 1, H400  
 Long-term (chronic) aquatic hazard, Category 2, H411

### GHS-Labeling

Symbol(s)	:	
Signal word	:	Warning
Hazard statements	:	H315: Causes skin irritation. H317: May cause an allergic skin reaction. H319: Causes serious eye irritation. H400: Very toxic to aquatic life. H411: Toxic to aquatic life with long lasting effects.
Precautionary statements	:	<b>Prevention:</b> P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P273 Avoid release to the environment. P280 Wear protective gloves/ eye protection/ face protection. <b>Response:</b> P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P337 + P313 If eye irritation persists: Get medical advice/ attention. <b>Disposal:</b> P501 Dispose of contents/ container to an approved waste disposal plant.

### Hazardous components which must be listed on the label

Identification	CAS-No.
hexamethylene diacrylate	13048-33-4
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	28961-43-5
Epoxy acrylate	55818-57-0

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

## ULTRASTAR UV FP-8220 Silver

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

Glycerol, propoxylated, esters with acrylic acid 52408-84-1

### SECTION 3: Composition/information on ingredients

Substance name : ustar uv ul-1080 silber

Substance No. :

#### Hazardous components

Chemical name	CAS-No. EINECS-No.	Classification and labelling	Concentration[%]
hexamethylene diacrylate	13048-33-4 235-921-9	Acute Tox.;5;H313 Aquatic Acute;1;H400 Aquatic Chronic;2;H411 Eye Irrit.;2;H319 Skin Irrit.;2;H315 Skin Sens.;1;H317	25 - 50
Propylidynetrimehtanol, ethoxylated, esters with acrylic acid	28961-43-5	;2A;H319 Skin Sens.;1;H317	20 - 25
Epoxy acrylate	55818-57-0	Skin Sens.;1;H317	10 - 20
2-hydroxy-2-methylpropiophenone	7473-98-5 231-272-0	Acute Tox.;4;H302 Aquatic Chronic;3;H412	2,5 - 10
polyester acrylate oligomer	223463-47-6	Skin Irrit.;2;H315 Eye Irrit.;2A;H319	1 - 10

**ULTRASTAR UV FP-8220 Silver**

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

aluminium powder (stabilised)	7429-90-5 231-072-3	Flam. Sol.;1;H228	1 - 10
Glycerol, propoxylated, esters with acrylic acid	52408-84-1	Eye Irrit.;2A;H319 Skin Sens.;1;H317	1 - 10
Propoxylated neopentyl glycol diacrylate esters	84170-74-1	Skin Sens.;1;H317 Aquatic Chronic;2;H411	0,25 - 1
2-hydroxy-1-(4-(4-(2-hydroxy-2-methylpropionyl)benzyl)phenyl)-2-methylpropan-1-one	474510-57-1	STOT RE;2;H373 Aquatic Acute;1;H400 Aquatic Chronic;1;H410	0,25 - 1
2-ethylhexyl acrylate	103-11-7 203-080-7	Flam. Liq.;4;H227 Skin Irrit.;2;H315 Skin Sens.;1;H317 STOT SE;3;H335	0,1 - 1

For the full text of the H-Statements mentioned in this Section, see Section 16.

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

- General advice : Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.
- If inhaled : If unconscious, place in recovery position and seek medical advice.  
If symptoms persist, call a physician.

**ULTRASTAR UV FP-8220 Silver**

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

- In case of skin contact : 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.  
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**

This information is not available.

**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**

- Unsuitable extinguishing media : High volume water jet

**5.2 Special hazards arising from the substance or mixture**

- Specific hazards during firefighting : 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.

**ULTRASTAR UV FP-8220 Silver**

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

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.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Use personal protective equipment.

**6.2 Environmental precautions**

Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

**6.3 Methods and materials for containment and cleaning up**

Methods for cleaning up : 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**

This information is not available.

**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

**ULTRASTAR UV FP-8220 Silver**

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

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 : 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.

Other data : No decomposition if stored and applied as directed.

**7.3 Specific end use(s)**

This information is not available.

**SECTION 8: Exposure controls/personal protection**
**8.1 Control parameters**
**Germany:**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
Epoxy acrylate	55818-57-0	AGW (Inhalable fraction)	10 mg/m <sup>3</sup>	2014-04-02	DE TRGS 900

**ULTRASTAR UV FP-8220 Silver**

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

Peak-limit: excursion factor (category)		2;(II)			
Further information		General dust value. For this substance no specific occupational exposure limit value is established, since the AGS does not yet have information regarding unspecific action on the respiratory organs in excess of the normal values. Commission for dangerous substances Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).			
Epoxy acrylate	55818-57-0	AGW (Alveolate fraction)	1,25 mg/m <sup>3</sup>	2014-04-02	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information		General dust value. For this substance no specific occupational exposure limit value is established, since the AGS does not yet have information regarding unspecific action on the respiratory organs in excess of the normal values. Commission for dangerous substances Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).			
aluminium powder (stabilised)	7429-90-5	AGW (Inhalable fraction)	10 mg/m <sup>3</sup>	2014-04-02	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information		Commission for dangerous substances Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).			
aluminium powder (stabilised)	7429-90-5	AGW (Alveolate fraction)	1,25 mg/m <sup>3</sup>	2014-04-02	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information		Commission for dangerous substances Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).			



Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

## ULTRASTAR UV FP-8220 Silver

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

2-ethylhexyl acrylate	103-11-7	AGW	5 ppm 38 mg/m <sup>3</sup>	2009-02-16	DE TRGS 900
Peak-limit: excursion factor (category)		1;(l)			
Further information		Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn childSubstance sensitizing through the skin			
2-ethylhexyl acrylate	103-11-7	AGW (Vapour and aerosols)	5 ppm 38 mg/m <sup>3</sup>	2013-09-19	DE TRGS 900
Peak-limit: excursion factor (category)		1;(l)			
Further information		Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).Sum of vapor and aerosols.When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn childSubstance sensitizing through the skin			

### United States of America (USA):

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
hexamethylene diacrylate	13048-33-4	TWA	1 mg/m <sup>3</sup>	2008-01-01	
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	50 Million particles per cubic foot	2012-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable)	5 mg/m <sup>3</sup>	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	15 mg/m <sup>3</sup>	2012-07-01	
aluminium	7429-90-5	TWA (total)	10 mg/m <sup>3</sup>	2013-10-08	

**ULTRASTAR UV FP-8220 Silver**

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

powder (stabilised)					
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	5 mg/m <sup>3</sup>	2012-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	15 Million particles per cubic foot	2012-07-01	
aluminium powder (stabilised)	7429-90-5	PEL (Total dust)	10 mg/m <sup>3</sup>	2014-11-26	
aluminium powder (stabilised)	7429-90-5	PEL (respirable dust fraction)	5 mg/m <sup>3</sup>	2014-11-26	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	1 mg/m <sup>3</sup>	2008-01-01	
aluminium powder (stabilised)	7429-90-5	TWA	5 mg/m <sup>3</sup>	2005-09-01	
aluminium powder (stabilised)	7429-90-5	TWA (Total)	15 mg/m <sup>3</sup>	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	5 mg/m <sup>3</sup>	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	15 mg/m <sup>3</sup>	2011-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	5 mg/m <sup>3</sup>	2011-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (Total dust)	15 mg/m <sup>3</sup>	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (respirable dust fraction)	5 mg/m <sup>3</sup>	1989-01-19	

**ULTRASTAR UV FP-8220 Silver**

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

aluminium powder (stabilised)	7429-90-5	TWA (welding fumes)	5 mg/m <sup>3</sup>	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (pyro powders)	5 mg/m <sup>3</sup>	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	1 mg/m <sup>3</sup>	2013-03-01	
aluminium powder (stabilised)	7429-90-5	TWA (Fumes)	5 mg/m <sup>3</sup>	1989-01-19	
aluminium powder (stabilised)	7429-90-5	PEL (Welding fumes)	5 mg/m <sup>3</sup>	2017-10-02	
aluminium powder (stabilised)	7429-90-5	PEL (Pyro powders)	5 mg/m <sup>3</sup>	2017-10-02	

## 8.2 Exposure controls

### Personal protective equipment

Eye protection : 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 : Choose body protection according to the amount and concentration of the dangerous substance at the work place.

### Environmental exposure controls

General advice : Prevent product from entering drains.

**ULTRASTAR UV FP-8220 Silver**

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform  
respective authorities.

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

Appearance	: liquid
Colour	: No data available
Odour	: characteristic
pH	: No data available
Freezing point	: No data available
Boiling point/boiling range	: 101 °C
Flash point	: 101 °C
Bulk density	: No data available
Flammability (solid, gas)	: No data available
Auto-flammability	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Density	: No data available
Water solubility	: No data available
Miscibility with water	: immiscible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available

**ULTRASTAR UV FP-8220 Silver**

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

Ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Flow time	: 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 : No decomposition if stored and applied as directed.

**10.4 Conditions to avoid**

Conditions to avoid : No data available

**10.5 Incompatible materials**

Materials to avoid : No data available

**10.6 Hazardous decomposition products**

Hazardous decomposition products : No data available

**ULTRASTAR UV FP-8220 Silver**

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

Other information : No data available

**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity****Components:****hexamethylene diacrylate :**Acute oral toxicity : LD50 Rat: > 5 000 mg/kg  
Method: OECD Test Guideline 401Acute inhalation toxicity : Rat: 0,14 mg/l  
Exposure time: 7 hAcute dermal toxicity : LD50 Rabbit: 3 650 mg/kg  
Method: OECD Test Guideline 402**2-hydroxy-1-(4-(4-(2-hydroxy-2-methylpropionyl)benzyl)phenyl)-2-methylpropan-1-one :**

Acute oral toxicity : LD50 Rat: &gt; 2 000 mg/kg

Acute dermal toxicity : LD50 Rat: &gt; 2 000 mg/kg

**Skin corrosion/irritation****Product**

Globally Harmonized System of Classification and Labelling of  
Chemicals (GHS)

**ULTRASTAR UV FP-8220 Silver**

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

May cause skin irritation and/or dermatitis.

**Serious eye damage/eye irritation****Product**

Eye irritation

**Respiratory or skin sensitisation****Product**

Causes sensitisation.

May cause sensitisation of susceptible persons by skin contact.

**Carcinogenicity**

No data available

**Toxicity to reproduction/fertility**

No data available

**Reprod.Tox./Development/Teratogenicity**

No data available

**STOT - single exposure**

No data available

**STOT - repeated exposure**

No data available

**Aspiration toxicity**

**ULTRASTAR UV FP-8220 Silver**

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

No data available

**Further information****Product**

No data available

**SECTION 12: Ecological information****12.1 Toxicity****Components:****hexamethylene diacrylate (13048-33-4) :****Ecotoxicology Assessment**

Short-term (acute) aquatic hazard : Very toxic to aquatic life.

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

**Propylidynetrimethanol, ethoxylated, esters with acrylic acid (28961-43-5) :**

Toxicity to daphnia and other aquatic invertebrates : (Daphnia (water flea)): 10 232,73 mg/l

**12.2 Persistence and degradability**

No data available

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available



**ULTRASTAR UV FP-8220 Silver**

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

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**12.5 Results of PBT and vPvB assessment**

No data available

**12.6 Other adverse effects****Product:**

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Harmful to aquatic life with long lasting effects.

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**SECTION 13: Disposal considerations****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.  
In accordance with local and national regulations.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.  
In accordance with local and national regulations.

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**SECTION 14: Transport information****14.1 UN number**

**ULTRASTAR UV FP-8220 Silver**

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

**ADR** : 3082**TDG**

Not dangerous goods

**CFR**

Not dangerous goods

**IMDG** : 3082**IATA** : 3082**14.2 Proper shipping name****ADR** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S.  
(hexane-1,6-diol diacrylate )**TDG**

Not dangerous goods

**CFR**

Not dangerous goods

**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****ADR** : 9**TDG**

Not dangerous goods

**CFR**

Not dangerous goods

**IMDG** : 9

**ULTRASTAR UV FP-8220 Silver**

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

**IATA** : 9

**14.4 Packing group**
**ADR**

 Packaging group : III  
 Classification Code : M6  
 Hazard Identification Number : 90  
 Labels : 9

**TDG**

Not dangerous goods

**CFR**

Not dangerous goods

**IMDG**

 Packaging group : III  
 Labels : 9  
 EmS Number : F-A, S-F

**IATA**

 Packing instruction (cargo aircraft) : 964  
 Packing instruction (passenger aircraft) : 964  
 Packing instruction (LQ) : Y964  
 Packaging group : III  
 Labels : 9

**14.5 Environmental hazards**
**ADR** : Environmentally hazardous

**IMDG** : Marine pollutant

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

## ULTRASTAR UV FP-8220 Silver

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

### 14.6 Special precautions for user

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.

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

## SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

### 15.2 Chemical safety assessment

No data available

## SECTION 16: Other information

### Full text of H-Statements

H227 : Combustible liquid.

H228 : Flammable solid.

Globally Harmonized System of Classification and Labelling of  
Chemicals (GHS)

**ULTRASTAR UV FP-8220 Silver**

Version 8.1

Revision Date 06.12.2019

Print Date 07.08.2020

H302	: Harmful if swallowed.
H313	: May be harmful in contact with skin.
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H319	: Causes serious eye irritation.
H335	: May cause respiratory irritation.
H373	: May cause damage to organs through prolonged or repeated exposure.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.
H411	: Toxic to aquatic life with long lasting effects.
H412	: Harmful to aquatic life with long lasting effects.

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.