

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

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Trade name : UNIPAK UV 282 004 TC SILVER
Material number : 023882U20

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 1, H318
Skin sensitisation, Category 1, H317

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

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020

Reproductive toxicity, Category 2, H361d
 Short-term (acute) aquatic hazard, Category 3, H402
 Long-term (chronic) aquatic hazard, Category 3, H412

GHS-Labeling

Symbol(s)



Signal word

: Danger

Hazard statements

: H315: Causes skin irritation.
 H317: May cause an allergic skin reaction.
 H318: Causes serious eye damage.
 H361d: Suspected of damaging the unborn child.
 H412: Harmful to aquatic life with long lasting effects.

Precautionary statements

: **Prevention:**
 P201 Obtain special instructions before use.
 P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
 P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.
Disposal:
 P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label

Identification

CAS-No.

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

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020

Propylidynetrimethanol, ethoxylated, esters with acrylic acid	28961-43-5
oxybis(methyl-2,1-ethanediyl) diacrylate	57472-68-1
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate	6846-50-0
4,4'-Isopropylidenediphenol, ethoxylated, esters with acrylic acid and isononanoic acid	
Glycerol, propoxylated, esters with acrylic acid	52408-84-1
dodecylphosphonic acid	5137-70-2

SECTION 3: Composition/information on ingredients

Substance name : Vers 83002553 UNIPAK UV 282 004 silver

Substance No. :

Hazardous components

Chemical name	CAS-No. EINECS-No.	Classification and labelling	Concentration[%]
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	28961-43-5	;2A;H319 Skin Sens.;1;H317	50 - 100
oxybis(methyl-2,1-ethanediyl) diacrylate	57472-68-1 260-754-3	Skin Irrit.;2;H315 Eye Dam.;1;H318 Skin Sens.;1;H317	10 - 20
aluminium powder (stabilised)	7429-90-5 231-072-3	Flam. Sol.;1;H228	10 - 20
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate	6846-50-0 229-934-9	Repr.;2;H361d Aquatic Chronic;3;H412	3 - 10

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020

4,4'-Isopropylidenediphenol, ethoxylated, esters with acrylic acid and isononanoic acid	Not Assigned919-846-5	Skin Sens.;1B;H317 Aquatic Chronic;2;H411	2,5 - 10
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	1 - 2,5
Glycerol, propoxylated, esters with acrylic acid	52408-84-1	Eye Irrit.;2A;H319 Skin Sens.;1;H317	1 - 10
dodecylphosphonic acid	5137-70-2 225-897-8	Skin Corr.;1B;H314 Eye Dam.;1;H318 STOT RE;2;H373 Aquatic Chronic;3;H412	1 - 2,5
Epoxy acrylate	55818-57-0	Skin Sens.;1;H317	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 the victim to fresh air.
Do not leave the victim unattended.

Move out of dangerous area.

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020

- Consult a physician.
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.
- 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.

Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
Remove contact lenses.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

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.

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing media : Dry sand, ABC powder, Foam

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.

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 : Evacuate personnel to safe areas.
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.

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020

6.3 Methods and materials 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).
Do not flush with water.
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. To avoid spills during handling keep bottle on a metal tray. 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

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020

Requirements for storage areas and containers : Earthing of containers and apparatuses is essential. Reaction with water liberates extremely flammable gas (hydrogen) Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. 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.

Further information on storage conditions : Protect from humidity and water.

Advice on common storage : Do not store near acids. Do not store together with oxidizing and self-igniting products. Never allow product to get in contact with water during storage. Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

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
------------	---------	----------------------------------	--------------------	--------	-------

Page 8 / 20	102000029562	A member of  ALTANA
-------------	--------------	---

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020

aluminium powder (stabilised)	7429-90-5	AGW (Inhalable fraction)	10 mg/m ³	2014-04-02	DE TRGS 900
Peak-limit: excursion factor (category)	2;(II)				
Further information	Commission for dangerous substancesSenate 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 ³	2014-04-02	DE TRGS 900
Peak-limit: excursion factor (category)	2;(II)				
Further information	Commission for dangerous substancesSenate commission for the review of compounds at the work place dangerous for the health (MAK-commission).				
Talc (Mg ₃ H ₂ (SiO ₃) ₄)	14807-96-6	AGW (Inhalable fraction)	10 mg/m ³	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 substancesSenate commission for the review of compounds at the work place dangerous for the health (MAK-commission).				
Talc (Mg ₃ H ₂ (SiO ₃) ₄)	14807-96-6	AGW (Alveolate fraction)	1,25 mg/m ³	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 substancesSenate commission for the review of compounds at				

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020

		the work place dangerous for the health (MAK-commission).			
Epoxy acrylate	55818-57-0	AGW (Inhalable fraction)	10 mg/m ³	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).			
Epoxy acrylate	55818-57-0	AGW (Alveolate fraction)	1,25 mg/m ³	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).			

8.2 Exposure controls

Personal protective equipment

Eye protection : Goggles

: Wear face-shield and protective suit for abnormal processing problems.

Hand protection

Material : Solvent-resistant gloves (butyl-rubber)

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020

- Remarks :
- : Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). The exact break through time can be obtained from the protective glove producer and this has to be observed. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Recommended preventive skin protection Skin should be washed after contact. The suitability for a specific workplace should be discussed with the producers of the protective gloves.
 - : 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.
- Respiratory protection :
- : Use suitable breathing protection if workplace concentration requires.

Environmental exposure controls

General advice :

- : 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.

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020

Water : The product should not be allowed to enter drains, water courses or the soil.

:

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

Appearance	: liquid
Colour	: silver
Odour	: characteristic
pH	: No data available
Freezing point	: No data available
Boiling point/boiling range	: > 100 °C
Flash point	: > 100 °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
Solubility(ies)	
Water solubility	: insoluble
Miscibility with water	: immiscible
Solubility in other solvents	: No data available

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020

Partition coefficient: n-octanol/water	: No data available
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 : Contact with acids and alkalis may release hydrogen.

Stable under recommended storage conditions.

10.4 Conditions to avoid

Conditions to avoid : Do not allow evaporation to dryness.

No data available

10.5 Incompatible materialsMaterials to avoid : Acids
Bases
Oxidizing agents

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020

10.6 Hazardous decomposition products

Hazardous decomposition products : No data available

Other information : No data available

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity****Components:****oxybis(methyl-2,1-ethanediyl) diacrylate :**

Acute oral toxicity : LD50 Rat: 3 530 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : Rat: 0,41 mg/l

Exposure time: 7 h

Test atmosphere: vapour

Acute dermal toxicity : Rabbit: 2 000 mg/kg

Method: OECD Test Guideline 402

2-hydroxy-1-(4-(4-(2-hydroxy-2-methylpropionyl)benzyl)phenyl)-2-methylpropan-1-one :

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020

Acute oral toxicity : LD50 Rat: > 2 000 mg/kg

Acute dermal toxicity : LD50 Rat: > 2 000 mg/kg

Skin corrosion/irritation**Product**

May cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation**Product**

May cause irreversible eye damage.

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

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

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product

No data available

SECTION 12: Ecological information

12.1 Toxicity

Components:

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

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

1-isopropyl-2,2-dimethyltrimethylene diisobutyrate (6846-50-0) :

Toxicity to daphnia and other aquatic invertebrates : (Daphnia (water flea)): 2,46 mg/l

Ecotoxicology Assessment

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

dodecylphosphonic acid (5137-70-2) :

Ecotoxicology Assessment

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020

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

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

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.

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

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

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020

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.

SECTION 14: Transport information**14.1 UN number****14.2 Proper shipping name****14.3 Transport hazard class****14.4 Packing group****14.5 Environmental hazards****14.6 Special precautions for user**

Not classified as dangerous in the meaning of transport regulations.

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
Prohibition/Restriction**

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

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020

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

15.2 Chemical safety assessment

No data available

SECTION 16: Other information**Full text of H-Statements**

H228	: Flammable solid.
H314	: Causes severe skin burns and eye damage.
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H318	: Causes serious eye damage.
H319	: Causes serious eye irritation.
H361d	: Suspected of damaging the unborn child.
H373	: May cause damage to organs through prolonged or repeated exposure.
H400	: Very toxic to aquatic life.
H402	: Harmful 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.

SAFETY DATA SHEET



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

UNIPAK UV 282 004 TC SILVER

Version 3.0

Revision Date 07.12.2019

Print Date 06.08.2020
