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

ROTOSTAR UV/LED 366 877 FLEXO INK

Version 6.0

Revision Date 22.01.2024

Print Date 23.01.2024

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

1.1 Product identifier

Trade name	:	ROTOSTAR UV/LED 366 877 FLEXO INK
Material number	:	025914U20

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	: ECKART GmbH
	Guentersthal 4
	91235 Hartenstein
Telephone	: +499152770
Telefax	: +499152777008
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

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	Short-term (acute) aquatic hazard, Cat Long-term (chronic) aquatic hazard, Ca	
GHS-Labelling		
Symbol(s)	!	
Signal word	: Warning	
Hazard statements	 H315: Causes skin irritation. H317: May cause an allergic skin reacting H319: Causes serious eye irritation. H411: Toxic to aquatic life with long lastic life with life with long lastic life with long lastic life with long lastic life with life wi	
Precautionary statements	 Prevention: P261 Avoid breathing mist or vapour P264 Wash skin thoroughly after har P272 Contaminated work clothing sh of the workplace. P273 Avoid release to the environme P280 Wear protective gloves/ eye pr Response: P302 + P352 IF ON SKIN: Wash wit P305 + P351 + P338 IF IN EYES: R water for several minutes. Remove cor and easy to do. Continue rinsing. P333 + P317 If skin irritation or rash help. P337 + P317 If eye irritation persists P391 Collect spillage. Disposal: P501 Dispose of contents/ container disposal plant. 	ndling. nould not be allowed out ent. rotection/ face protection. h plenty of water. tinse cautiously with ntact lenses, if present occurs: Get medical s: Get medical help.

Hazardous components which must be listed on the label

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Identification Propylidynetrimethanol, ethoxylated, esters	CAS-No. 28961-43-5
with acrylic acid	20901-43-3
Bisphenol A epoxy acrylate	55818-57-0
phenyl bis(2,4,6-trimethylbenzoyl)-	162881-26-7
phosphine oxide	
hexamethylene diacrylate	13048-33-4
Glycerol, propoxylated, esters with acrylic	52408-84-1
acid	

SECTION 3: Composition/information on ingredients

:

Substance No.

Hazardous components

Chemical name	CAS-No. EINECS-No.	Classification and labelling	Concentration[%]
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)	51728-26-8	Skin Irrit.;2;H315 Eye Irrit.;2;H319 Aquatic Chronic;2;H411	25 - 50
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	28961-43-5	;2A;H319 Skin Sens.;1;H317	10 - 20
(1-methyl-1,2- ethanediyl)bis[oxy(methyl-2,1- ethanediyl)] diacrylate	42978-66-5 256-032-2	;2;H315 ;2A;H319	10 - 20
Bisphenol A epoxy acrylate	55818-57-0	Skin Sens.;1;H317 Aquatic Chronic;2;H411	10 - 20

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aluminium	7429-90-5 231-072-3	Flam. Sol.;1;H228	1 - 10
phenyl bis(2,4,6- trimethylbenzoyl)-phosphine oxide	162881-26-7	Acute Tox.;5;H303 Acute Tox.;5;H313 Skin Sens.;1;H317 Aquatic Chronic;4;H413	2,5 - 10
hexamethylene diacrylate	13048-33-4 235-921-9	Acute Tox.;5;H313 ;2;H315 ;2A;H319 Skin Sens.;1;H317 Aquatic Acute;1;H400 Aquatic Chronic;2;H411	2,5 - 10
Glycerol, propoxylated, esters with acrylic acid	52408-84-1	;2A;H319 Skin Sens.;1;H317	1 - 10

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. 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.
In case of skin contact	If symptoms persist, call a physician. : Wash off immediately with soap and plenty of water.
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	If skin irritation persists, call a physicia If on skin, rinse well with water. If on clothes, remove clothes.	
In case of eye contact	 Immediately flush eye(s) with plenty o Immediately flush eye(s) with plenty o Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a spece 	f water.
If swallowed	 Keep respiratory tract clear. Do not give milk or alcoholic beverage Never give anything by mouth to an unil f symptoms persist, call a physician. 	2S.

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

Suitable extinguishing media	:	Dry sand, ABC powder, Foam
Unsuitable extinguishing media	:	High volume water jet, Carbon dioxide (CO2)

5.2 Special hazards arising from the substance or mixture

Specific hazards during	:	Do not allow run-off from fire fighting to enter drains or water
firefighting		courses.

5.3 Advice for firefighters

Special protective equipment	:	Wear self-contained breathing apparatus for firefighting if
forfirefighters		necessary.

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Further information	: Collect contaminated fire extinguishin must not be discharged into drains. F contaminated fire extinguishing water accordance with local regulations.	Fire residues and
SECTION 6: Accidental releas	se measures	
6.1 Personal precautions, protec	tive equipment and emergency proced	ures
Personal precautions	: Evacuate personnel to safe areas. Use personal protective equipment.	
6.2 Environmental precautions		
General advice	 The product should not be allowed to courses or the soil. Prevent product from entering drains Prevent further leakage or spillage if If the product contaminates rivers and respective authorities. 	safe to do so.
This information is not availab	•	
6.3 Methods and materials for co	ontainment and cleaning up	
Methods for cleaning up	: Use mechanical handling equipment. Soak up with inert absorbent material acid binder, universal binder, sawdus Soak up with inert absorbent material acid binder, universal binder, sawdus Do not flush with water. Keep in suitable, closed containers for	l (e.g. sand, silica gel, it). I (e.g. sand, silica gel, it).
6.4 Reference to other sections		
For personal protection see se	ection 8.	
SECTION 7: Handling and sto	orage	
7.1 Precautions for safe handling	9	

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Advice on safe handling	: Do not breathe vapours/dust. Av instructions before use. Avoid co personal protection see section 8 drinking should be prohibited in t of rinse water in accordance with regulations. Persons susceptible problems or asthma, allergies, ch disease should not be employed mixture is being used.	ontact with skin and eyes. For B. Smoking, eating and he application area. Dispose n local and national to skin sensitisation pronic or recurrent respiratory
Advice on protection against fire and explosion	: Normal measures for preventive	fire protection.
Hygiene measures	: When using do not eat or drink. Wash hands before breaks and a	
7.2 Conditions for safe storage,	ncluding any incompatibilities	
Requirements for storage areas and containers	: Earthing of containers and appar with water liberates extremely fla measures to prevent the build up explosion-proof equipment. Store containers tightly closed in a coo away from sources of ignition - N closed when not in use.	ammable gas (hydrogen) Take o of electrostatic charge. Use e in original container. Keep I, well-ventilated place. Keep
	Keep container tightly closed in a place. Containers which are open resealed and kept upright to previnstallations / working materials n technological safety standards.	ned must be carefully vent leakage. Electrical
Further information on storage conditions	: Protect from humidity and water.	
Advice on common storage	: Do not store near acids. Do not s and self-igniting products. Never contact with water during storage agents, strongly alkaline and stro	allow product to get in e. Keep away from oxidizing
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avoid exothermic reactions.

Other data

: No decomposition if stored and applied as directed.

7.3 Specific end use(s)

This information is not available.

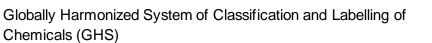
SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Germany:

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
Bisphenol A epoxy acrylate	55818-57- 0	AGW (Inhalable fraction)	10 mg/m3	2020-03-30	DE TRGS 900
Peak-limit: exc factor (categor		2;(II)			
Bisphenol A epoxy acrylate	55818-57- 0	AGW (Alveolate fraction)	1,25 mg/m3	2020-03-30	DE TRGS 900
Peak-limit: excursion		2;(II)			
factor (categor	у)				
aluminium	7429-90-5	AGW (Inhalable fraction)			DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information			ompliance with the no risk of harming t	•	ical tolerance
aluminium	7429-90-5	AGW (Alveolate 1,25 mg/m3 2021-07-02 DE TRO		DE TRGS 900	
Peak-limit: excursion		2;(II)			
factor (category)					
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Further information	When there is compliance with the OEL and biologi	cal tolerance

values, there is no risk of harming the unborn child

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)		
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

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General advice	 The product should not be allowed to courses or the soil. Prevent product from entering drains. Prevent further leakage or spillage if s If the product contaminates rivers and respective authorities. 	safe to do so.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: liquid
Colour	: silver
Odour	: characteristic
рН	: 6 - 8, 100 %
Melting point/range	: Not applicable
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	: 1,1 g/cm3
Solubility(ies)	
Water solubility	: insoluble



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Miscibility with water	: immiscible
Solubility in other solvents	: No data available
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 sto	orage conditions.
10.4 Conditions to avoid		
Conditions to avoid	: Do not allow evaporation to dry No data available	/ness.
10.5 Incompatible materials		
Materials to avoid	: Acids Bases	
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	Oxidizing agents	
10.6 Hazardous decomposition	n products	
Other information	: No data available	
SECTION 11: Toxicological	information	
11.1 Information on toxicologi	cal effects	
Acute toxicity		
Components:		
(1-methyl-1,2-ethanediyl)bis[ox Acute oral toxicity	y(methyl-2,1-ethanediyl)] diacrylate : : Rat: 2 000 mg/kg	
Acute inhalation toxicity	: Rat: 0,000545 mg/l	
	Exposure time: 7 h	
	Test atmosphere: vapour	
Acute dermal toxicity	: Rabbit: 2 000 mg/kg	
	Method: OECD Test Guideline 402	
phenyl bis(2,4,6-trimethylbenzo		
Acute oral toxicity	: LD50 Rat: > 2 000 mg/kg	
	Method: OECD Test Guideline 401	
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Acute dermal toxicity	: LD50 Rat: > 2 000 mg/kg	
	Method: OECD Test Guideline 4	02
hexamethylene diacrylate :		
Acute oral toxicity	: LD50 Rat: > 5 000 mg/kg	
	Method: OECD Test Guideline 4	01
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 4	02
Skin corrosion/irritation		
<u>Product</u>		
May cause skin irritation and/	'or dermatitis.	
Serious eye damage/eye irritatio	on	
Product		
Eye irritation		
	n	
Respiratory or skin sensitisation		
Product		





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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

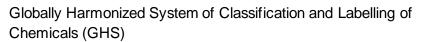
No data available

Further information

Product

No data available

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SECTION 12: Ecological information

12.1 Toxicity

<u>Components:</u> Bisphenol A epoxy acrylate (55818-57-0) :			
Ecotoxicology Assessment			
Short-term (acute) aquatic hazard	: Toxic to aquatic life.		
Long-term (chronic) aquatic hazard	: Toxic to aquatic life with long lasting effects.		
phenyl bis(2,4,6-trimethylben	zoyl)-phosphine oxide (162881-26-7) :		
Ecotoxicology Assessment			
Long-term (chronic) aquatic hazard	: May cause long lasting harmful effects to aquatic life.		
hexamethylene diacrylate (13048-33-4) :			
M-Factor Ecotoxicology Assessment	: 1		
Short-term (acute) aquatic hazard	: Very toxic to aquatic life.		
Long-term (chronic) aquatic hazard	: Toxic to aquatic life with long lasting effects.		

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

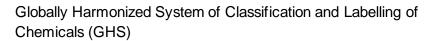
No data available

12.4 Mobility in soil

No data available

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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., Toxic 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 chemical or used container. Send to a licensed waste management company.
Contaminated packaging	 In accordance with local and national regulations. 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

ADR

: 3082

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TDG		
Not dangerous goods		
CFR		
-		
Not dangerous goods IMDG	: 3082	
	: 3082	
14.2 Proper shipping name		
ADR	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	
	(Alkoxylated Pentaerythritol Tetraacrylate)	
TDG		
Not dangerous goods		
CFR		
Not dangerous goods		
IMDG	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	
	(,Alkoxylated Pentaerythritol Tetraacrylate)	
ΙΑΤΑ	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	
	(Alkoxylated Pentaerythritol Tetraacrylate)	
14.3 Transport hazard class		
ADR TDG	: 9	
Not dangerous goods		
CFR		
Not dangerous goods		
IMDG	: 9	
	: 9	
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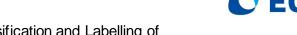
14.4 Packing group

IMDG

ADR		
Packaging group	:	III
Classification Code	:	M6
Hazard Identification Number	:	90
Labels	:	9
Tunnel restriction code	:	(-)
TDG		
Not dangerous goods		
CFR		
Not dangerous goods		
IMDG		
Packaging group	:	III
Labels	:	9
EmS Code	:	F-A, S-F
ΙΑΤΑ		
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

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: Marine pollutant





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14.6 Special precautions for user

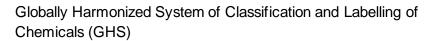
For single packagings <=5L / 5 kg, or combination packagings containing inner packagings <= 5L / 5 kg net per inner packaging, SV375 ADR, 2.10.2.7 IMDG-Code, A197 IATA-DGR may be applied.

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 : Not applicable Concern for Authorisation (Article 59). REACH - List of substances subject to authorisation : Not applicable (Annex XIV) Regulation (EC) No 1005/2009 on substances that : Not applicable deplete the ozone layer Regulation (EU) 2019/1021 on persistent organic : Not applicable pollutants (recast) REACH - Restrictions on the manufacture, placing on : the market and use of certain dangerous substances, mixtures and articles (Annex XVII) REACH - Restrictions on the manufacture, placing on : Banned and/or restricted the market and use of certain dangerous substances, (Propylidynetrimethanol, mixtures and articles (Annex XVII) ethoxylated, esters with acrylic acid) ((1-methyl-1,2ethanediyl)bis[oxy(methyl-2,1ethanediyl)] diacrylate) (Bisphenol A epoxy acrylate) (aluminium powder (stabilised)) (hexamethylene diacrylate) (Glycerol, propoxylated, esters with acrylic acid) Page 19 / 20 102000032603 A member of C ALTANA



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15.2 Chemical safety assessment

No data available

SECTION 16: Other information

H228 :	Flammable solid.
H303 :	May be 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.
H400 :	Very toxic to aquatic life.
H401 :	Toxic to aquatic life.
H411 :	Toxic to aquatic life with long lasting effects.
H413 :	May cause long lasting harmful effects to aquatic life.

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.

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