

UV REPLICATION SYSTEMS FOR NANO & MICRO STRUCTURES

XRD/TCM

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Reference number: EHC: 28611000002358

Issue date: 31/01/2022Version: 1.0

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

1.1. Product identifier

Product form Mixture Product name XRD/TCM

NFH6-C069-Y00G-6M7C

Product code XRD/TCM Type of product Adhesives Product group Blend

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

1.2.1. Relevant identified uses

Main use category : Professional use

Industrial/Professional use spec : For professional use only Use of the substance/mixture : Adhesives, binding agents Function or use category : Adhesives, binding agents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

XRD Nano Limited

A-8, Spithead Business Centre,

Newport Road, Sandown,

PO36 9PH, United Kingdom

Tel: +44 7562 987952

www.xrdnano.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315 Serious eye damage/eye irritation, Category 1 H318 H317 Skin sensitisation, Category 1 Hazardous to the aquatic environment - Acute Hazard, Category 1 H400 Hazardous to the aquatic environment - Chronic Hazard, Category 1 H410

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



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Precautionary statements (CLP)

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

GHS05 GHS07 GHS09

Signal word (CLP) : Danger

Hazardous ingredients : 2-Oxazolidinone, 3-ethenyl-5-methyl-, hexamethylene diacrylate, 1,1,1-trimethylolpropane

triacrylate, 2,4,6-trimethylbenzoylphenylphosphinic acid ethyl ester

Hazard statements (CLP) : H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction. H318 - Causes serious eye damage.

H410 - Very toxic to aquatic life with long lasting effects.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 - Wash hands, forearms and face thoroughly after handling.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P302+P352 - IF ON SKIN: Wash with plenty of water.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor.

P321 - Specific treatment (see supplemental first aid instruction on this label).
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.

P391 - Collect spillage.

 $\ensuremath{\mathsf{P501}}$ - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

Labelling according to: exemption for packages of a capacity of 125ml or less

Hazard pictograms (CLP)







GHS05 GHS07

Signal word (CLP) : Danger

Hazardous ingredients : 2-Oxazolidinone, 3-ethenyl-5-methyl-, hexamethylene diacrylate, 1,1,1-trimethylolpropane

triacrylate, 2,4,6-trimethylbenzoylphenylphosphinic acid ethyl ester

Hazard statements (CLP) : H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

Precautionary statements (CLP) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

 $\ensuremath{\mathsf{P302+P352}}$ - IF ON SKIN: Wash with plenty of water.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor.

P321 - Specific treatment (see supplemental first aid instruction on this label).
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
hexamethylene diacrylate	(CAS-No.) 13048-33-4 (EC-No.) 235-921-9 (EC Index-No.) 607-109-00-8	≥ 25 - < 50	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
1,1,1-trimethylolpropane triacrylate	(CAS-No.) 15625-89-5 (EC-No.) 239-701-3 (EC Index-No.) 607-111-00-9	≥ 25 - < 50	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2-Oxazolidinone, 3-ethenyl-5-methyl-	(CAS-No.) 3395-98-0 (EC-No.) 809-852-5	≥ 10 – < 15	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
2,4,6-trimethylbenzoylphenylphosphinic acid ethyl ester	(CAS-No.) 84434-11-7 (EC-No.) 282-810-6	≥ 0.1 – < 5	Skin Sens. 1, H317 Aquatic Chronic 2, H411

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash

occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Serious damage to eyes.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing

dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station, ventilate curing ovens to prevent emissions in

the workplace. Avoid contact with skin and eyes. Wear personal protective equipment.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be

allowed out of the workplace. Do not eat, drink or smoke when using this product. Always

wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station, ventilate curing ovens to prevent emissions in the workplace.

Hand protection:

Protective gloves

Eye protection:

Safety glasses with side shields

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Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition	Standard
Full face mask		If conc. in air > exposure limit	

Personal protective equipment symbol(s):









Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Color : Colourless.
Odor : Acrylate.
Odour threshold : No data available

pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : Not applicable
Freezing point : No data available

Boiling point : > 98 °C Flash point : > 93 °C : > 93 °C

Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability : Not applicable
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available

Relative density : 1.06

Solubility : No data available
Partition coefficient n-octanol/water (Log Pow) : No data available
Viscosity : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

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10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

2-Oxazolidinone, 3-ethenyl-5-methyl- (3395-98-0)	
LD50 oral rat	300 – 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), Guideline: EU Method B.1 tris (Acute Oral Toxicity - Acute Toxic Class Method), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity), Guideline: other:
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity), Guideline: other:

hexamethylene diacrylate (13048-33-4)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	3650 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

1,1,1-trimethylolpropane triacrylate (15625-89-5)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat

2,4,6-trimethylbenzoylphenylphosphinic acid ethyl ester (84434-11-7)	
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	≥ 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	≥ 0 mg/l air (IRT (inhalation risk test), 7 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))

 Skin corrosion/irritation
 : Causes skin irritation.

 Serious eye damage/irritation
 : Causes serious eye damage.

 Respiratory or skin sensitisation
 : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

STOT-single exposure

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1,1,1-trimethylolpropane triacrylate (15625-89-5)	
IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity :	Not classified (Based on available data, the classification criteria are not met)

: Not classified (Based on available data, the classification criteria are not met)

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

2-Oxazolidinone, 3-ethenyl-5-methyl- (3395-98-0)		
NOAEL (oral, rat, 90 days)	15 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents), Guideline: other:, Guideline: other:	

hexamethylene diacrylate (13048-33-4)		
	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)	

1,1,1-trimethylolpropane triacrylate (15625-89-5)	
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEL (dermal, rat/rabbit, 90 days)	> 500 mg/kg bodyweight Animal: rabbit

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.

Ecology - water : Very toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short–term : Very toxic to aquatic life.

(acute)

Hazardous to the aquatic environment, long-term : Very toxic to aquatic life with long lasting effects.

(chronic)

Not rapidly degradable

2-Oxazolidinone, 3-ethenyl-5-methyl- (3395-98-0)		
LC50 - Fish [1]	> 113 mg/l Test organisms (species): other:	
EC50 - Crustacea [1]	> 120 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	> 120 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	

hexamethylene diacrylate (13048-33-4)	
LC50 - Fish [1]	4.6 – 10 mg/l Test organisms (species): Leuciscus idus
EC50 - Crustacea [1]	2.6 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	1.5 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

1,1,1-trimethylolpropane triacrylate (15625-89-5)	
LC50 - Fish [1]	1.47 mg/l Test organisms (species): Leuciscus idus

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EC50 72h - Algae [1]	18.8 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	7.2 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 96h - Algae [1]	4.86 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

2,4,6-trimethylbenzoylphenylphosphinic acid ethyl ester (84434-11-7)		
LC50 - Fish [1]	1.89 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP)	
EC50 - Crustacea [1]	2.26 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)	
EC50 72h - Algae [1]	1.01 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	
EC50 72h - Algae [2]	0.239 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	
ErC50 algae	1.01 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)	

12.2. Persistence and degradability

1,1,1-trimethylolpropane triacrylate (15625-89-5)	
Persistence and degradability	Biodegradability in water: no data available.
ThOD	1.835 g O₂/g substance

2,4,6-trimethylbenzoylphenylphosphinic acid ethyl ester (84434-11-7)	
Persistence and degradability	Not readily biodegradable in water.

12.3. Bioaccumulative potential

1,1,1-trimethylolpropane triacrylate (15625-89-5)	
Bioaccumulative potential	No bioaccumulation data available.

2,4,6-trimethylbenzoylphenylphosphinic acid ethyl ester (84434-11-7)		
Partition coefficient n-octanol/water (Log Pow) 2.91 (Experimental value, EU Method A.8: Partition Coefficient, 25 °C)		
Bioaccumulative potential Low potential for bioaccumulation (Log Kow < 4).		

12.4. Mobility in soil

2,4,6-trimethylbenzoylphenylphosphinic acid ethyl ester (84434-11-7)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc) 3.37 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil a Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experit value, GLP)	
Ecology - soil	Low potential for mobility in soil.

12.5. Results of PBT and vPvB assessment

Component	
2,4,6-trimethylbenzoylphenylphosphinic acid ethyl ester (84434-11-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number	1			
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shippin	g name			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (hexamethylene diacrylate; 1,1,1- trimethylolpropane triacrylate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (hexamethylene diacrylate; 1,1,1- trimethylolpropane triacrylate)	Environmentally hazardous substance, liquid, n.o.s. (hexamethylene diacrylate; 1,1,1-trimethylolpropane triacrylate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (hexamethylene diacrylate; 1,1,1- trimethylolpropane triacrylate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (hexamethylene diacrylate; 1,1,1- trimethylolpropane triacrylate)
Transport document descr	ription			
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (hexamethylene diacrylate; 1,1,1- trimethylolpropane triacrylate), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (hexamethylene diacrylate; 1,1,1- trimethylolpropane triacrylate), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (hexamethylene diacrylate; 1,1,1-trimethylolpropane triacrylate), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (hexamethylene diacrylate; 1,1,1- trimethylolpropane triacrylate), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (hexamethylene diacrylate; 1,1,1- trimethylolpropane triacrylate), 9, III
14.3. Transport hazard	class(es)			
9	9	9	9	9
				¥2
14.4. Packing group	,			
III	III	III	111	III
14.5. Environmental haz	zards			
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information	on available			

14.6. Special precautions for user

Overland transport

Classification code (ADR)

Special provisions (ADR) : 274, 335, 375, 601

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Limited quantities (ADR) : 5I Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001

Special packing provisions (ADR) : PP1
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions : TP1, TP29

(ADR)

Tank code (ADR) : LGBV
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Special provisions for carriage - Loading, unloading : CV13

and handling (ADR)

Hazard identification number (Kemler No.) : 90

Orange plates :

90 3082

Tunnel restriction code (ADR) : EAC code : •3Z

Transport by sea

Special provisions (IMDG) : 274, 335, 969

Limited quantities (IMDG) 5 L Excepted quantities (IMDG) E1 Packing instructions (IMDG) LP01, P001 Special packing provisions (IMDG) PP1 IBC packing instructions (IMDG) IBC03 Tank instructions (IMDG) T4 Tank special provisions (IMDG) TP1, TP29 F-A EmS-No. (Fire)

EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-F
Stowage category (IMDG) : A

Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 964
PCA max net quantity (IATA) : 450L
CAO packing instructions (IATA) : 964
CAO max net quantity (IATA) : 450L

Special provisions (IATA) : A97, A158, A197, A215

ERG code (IATA) : 9L

Inland waterway transport

Classification code (ADN) : M6

Special provisions (ADN) : 274, 335, 375, 601

Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Carriage permitted (ADN) : T
Equipment required (ADN) : PP
Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : M6

Special provisions (RID) : 274, 335, 375, 601

Limited quantities (RID) : 5L Excepted quantities (RID) : E1

Packing instructions (RID) : P001, IBC03, LP01, R001

Special packing provisions (RID) : PP1
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T4
Portable tank and bulk container special provisions : TP1, TP29

(RID)

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Tank codes for RID tanks (RID) : LGBV

Transport category (RID) : 3

Special provisions for carriage – Packages (RID) : W12

Special provisions for carriage - Loading, unloading : CW13, CW31

and handling (RID)

Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 90

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following res	The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:	
Reference code	Reference code Applicable on	
3(b)	XRD/TCM; 2-Oxazolidinone, 3-ethenyl-5-methyl-; hexamethylene diacrylate; 1,1,1-trimethylolpropane triacrylate; 2,4,6-trimethylbenzoylphenylphosphinic acid ethyl ester	
3(c) XRD/TCM; hexamethylene diacrylate; 1,1,1-trimethylolpropane triacrylate; 2,4,6-trimethylbenzoylphenylphosphinic acid ethyl ester		

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard

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IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
voc	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
H302	Harmful if swallowed.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H335	May cause respiratory irritation.	
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.	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

SDS EU (REACH Annex II) - EU date format

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.