Safety Data Sheet

according to Regulation (EC) No 1907/2006

LuxaPrint Cast

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

1.1. Product identifier

LuxaPrint Cast

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

Uses advised against

pregnant or breastfeeding people should not work with hazardous substances

1.3. Details of the supplier of the safety data sheet

Company name:	DMG Digital Enterprises SE	
Street:	Elbgaustrasse 248	
Place:	D-22547 Hamburg	
Telephone:	+49 40 84006-0	Telefax: +49 40 84006-222
e-mail:	info@dmg-digital.com	
Contact person:	A. Brunner	
Internet:	www.dmg-digital.com	
Responsible Department:	Quality Management	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin Irrit. 2; H315
Eye Dam. 1; H318
Skin Sens. 1; H317
Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

7,7,9-(resp. 7,9,9-)Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecane-1,16-diol dimethacrylate (mixture of isomers)
Oxybis(methyl-2,1-ethanediyl) diacrylate
Glycerol, propoxylated, esters with acrylic acid
phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

Signal word: Danger

Pictograms:

Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P273	Avoid release to the environment.
P280	Wear protective gloves and eye/face protection.
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/doctor.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
72869-86-4	7,7,9-(resp. 7,9,9-)Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecane-1,16-diol dimethacrylate (mixture of isomers)			35 - < 40 %
	276-957-5		01-2120751202-68	
	Skin Sens. 1B, Aquatic Chronic 2; H317 H411			
57472-68-1	Oxybis(methyl-2,1-ethanediyl) diacrylate			35 - < 40 %
	260-754-3		01-2119484629-21	
	Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1; H315 H318 H317			
52408-84-1	Glycerol, propoxylated, esters with acrylic acid			10 - < 15 %
	500-114-5		01-2119487948-12	
	Eye Irrit. 2, Skin Sens. 1B; H319 H317			
112-07-2	2-butoxyethyl acetate; butylglycol acetate			10 - < 15 %
	203-933-3	607-038-00-2	01-2119475112-47	
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4; H332 H312 H302			
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide			1 - < 5 %
	423-340-5	015-189-00-5		
	Skin Sens. 1A, Aquatic Chronic 4; H317 H413			

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
72869-86-4	276-957-5	7,7,9-(resp. 7,9,9-)Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecane-1,16-diol dimethacrylate (mixture of isomers)	35 - < 40 %
	oral: LD50 = >5000 mg/kg		
57472-68-1	260-754-3	Oxybis(methyl-2,1-ethanediyl) diacrylate	35 - < 40 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = 3530 mg/kg		
52408-84-1	500-114-5	Glycerol, propoxylated, esters with acrylic acid	10 - < 15 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2000 mg/kg		
112-07-2	203-933-3	2-butoxyethyl acetate; butylglycol acetate	10 - < 15 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = >1500 mg/kg; oral: LD50 = 1880 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Medical treatment necessary.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

Do NOT induce vomiting.

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

No information available.

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 fog. Extinguishing powder. Sand. Foam. Carbon dioxide (CO2).

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Non-flammable. COx, NOx

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Wear suitable protective clothing.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Keep container tightly closed. Wear suitable protective clothing and gloves. Avoid contact with eyes.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Store only in original container.

Hints on joint storage

No special measures are necessary.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
128-37-0	2,6-Ditertiary-butyl-para-cresol	-	2		TWA (8 h)	
112-07-2	2-Butoxyethyl acetate (EGBEA)	20	133		TWA (8 h)	
		50	333		STEL (15 min)	

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
72869-86-4	7,7,9-(resp. 7,9,9-)Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecane-1,16-diol dimethacrylate (mixture of isomers)			
Worker DNEL, long-term		inhalation	systemic	3,3 mg/m³
Worker DNEL, long-term		dermal	systemic	1,3 mg/kg bw/day
57472-68-1	Oxybis(methyl-2,1-ethanediyl) diacrylate			
Worker DNEL, long-term		inhalation	systemic	24,48 mg/m³
Worker DNEL, long-term		dermal	systemic	2,77 mg/kg bw/day
52408-84-1	Glycerol, propoxylated, esters with acrylic acid			
Worker DNEL, long-term		inhalation	systemic	7,4 mg/m³
Worker DNEL, long-term		dermal	systemic	2,1 mg/kg bw/day
112-07-2	2-butoxyethyl acetate; butylglycol acetate			
Worker DNEL, long-term		dermal	systemic	169 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	133 mg/m³
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide			
Worker DNEL, long-term		inhalation	systemic	21 mg/m³
Worker DNEL, long-term		dermal	systemic	3,3 mg/kg bw/day
128-37-0	2,6-Di-tert-butyl-4-methylphenol			
Worker DNEL, long-term		inhalation	systemic	3,5 mg/m³
Worker DNEL, long-term		dermal	systemic	0,5 mg/kg bw/day

PNEC values

CAS No	Substance
Environmental compartment	Value
72869-86-4	7,7,9-(resp. 7,9,9-)Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecane-1,16-diol dimethacrylate (mixture of isomers)
Freshwater	0,01 mg/l
Marine water	0,001 mg/l
Freshwater sediment	4,56 mg/kg
Marine sediment	0,456 mg/kg
Micro-organisms in sewage treatment plants (STP)	3,61 mg/l
Soil	0,91 mg/kg
57472-68-1	Oxybis(methyl-2,1-ethanediyl) diacrylate
Freshwater	0,003 mg/l
Freshwater (intermittent releases)	0,034 mg/kg
Marine water	0 mg/l
Freshwater sediment	0,009 mg/kg
Micro-organisms in sewage treatment plants (STP)	100 mg/l
Soil	0,001 mg/kg
52408-84-1	Glycerol, propoxylated, esters with acrylic acid
Freshwater	0,006 mg/l
Freshwater (intermittent releases)	0,057 mg/l
Marine water	0,001 mg/l
Freshwater sediment	0,017 mg/kg
Marine sediment	0,002 mg/kg
Secondary poisoning	5,6 mg/kg
Micro-organisms in sewage treatment plants (STP)	10 mg/l
Soil	0,001 mg/kg
112-07-2	2-butoxyethyl acetate; butylglycol acetate
Freshwater	0,304 mg/l
Freshwater (intermittent releases)	0,56 mg/l
Marine water	0,0304 mg/l
Freshwater sediment	2,03 mg/kg
Marine sediment	0,203 mg/kg
Micro-organisms in sewage treatment plants (STP)	90 mg/l
Soil	0,42 mg/l
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide
Freshwater	0,001 mg/l
Freshwater (intermittent releases)	0,001 mg/l
Marine water	0,001 mg/l
Freshwater sediment	0,712 mg/kg
Marine sediment	0,712 mg/kg
Micro-organisms in sewage treatment plants (STP)	1 mg/l
Soil	20 mg/kg
128-37-0	2,6-Di-tert-butyl-4-methylphenol

Freshwater	0,000199 mg/l
Freshwater (intermittent releases)	0,00199 mg/l
Marine water	0,000199 mg/l
Freshwater sediment	0,0996 mg/kg
Marine sediment	0,00996 mg/kg
Soil	0,04769 mg/kg

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Ensure adequate ventilation of the storage area.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tightly sealed safety glasses.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Tested protective gloves are to be worn: Suitable material: NBR (Nitrile rubber).

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	yellow
Odour:	like: ester

		Test method
Melting point/freezing point:	not determined	
Boiling point or initial boiling point and boiling range:	not determined	
Flammability:	not determined	
Lower explosion limits:	not determined	
Upper explosion limits:	not determined	
Flash point:	> 100 °C	
Auto-ignition temperature:	not determined	
Decomposition temperature:	not determined	
pH-Value:	not determined	
Water solubility: (at 20 °C)	not determined	

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:	not determined	
Vapour pressure:	not determined	
Density (at 20 °C):	1,1 g/cm³	calc.
Relative vapour density:	> 1	

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

Evaporation rate:	not determined	
Solid content:	not determined	
Sublimation point:	not determined	
Softening point:	not determined	
Pour point:	not determined	
point of decomposition:	> 200 °C	estim.

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Light. heat.

Decompostion takes place from temperatures above: 200 °C

Decomposition under formation of: Acrylate.

10.5. Incompatible materials

Keep away from strong acids, leachates, heavy metal salts and reducing materials.

10.6. Hazardous decomposition products

In case of fire may be liberated: Gas / vapours, irritant. (Acrylate., pungent)

Further information

Substances sensitive to light.

SECTION 11: Toxicological information

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

Acute toxicity

Based on available data, the classification criteria are not met.

LD50: Rat > 5000 mg/kg (calc.)

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
72869-86-4	7,7,9-(resp. 7,9,9-)Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecane-1,16-diol dimethacrylate (mixture of isomers)					
	oral	LD50 mg/kg	>5000	Rat	supplier SDS	OECD 401
57472-68-1	Oxybis(methyl-2,1-ethanediyl) diacrylate					
	oral	LD50 mg/kg	3530	Rat	supplier SDS	OECD 401
	dermal	LD50 mg/kg	> 2000	Rabbit	ECHA	OECD 402
52408-84-1	Glycerol, propoxylated, esters with acrylic acid					
	oral	LD50 mg/kg	> 2000	Rat	supplier SDS	OECD 401
	dermal	LD50 mg/kg	> 2000	Rabbit	supplier SDS	OECD 402
112-07-2	2-butoxyethyl acetate; butylglycol acetate					
	oral	LD50 mg/kg	1880	Rat	supplier SDS	literature value
	dermal	LD50 mg/kg	>1500	Rabbit	supplier SDS	literature value
	inhalation vapour	ATE	11 mg/l			
	inhalation dust/mist	ATE	1,5 mg/l			

Irritation and corrosivity

Causes skin irritation.
Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction. (7,7,9-(resp. 7,9,9-)Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecane-1,16-diol dimethacrylate (mixture of isomers); Oxybis(methyl-2,1-ethanediyl) diacrylate; Glycerol, propoxylated, esters with acrylic acid; phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide)
May cause sensitization by skin contact.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information on tests

Contains Methacrylic esters.: May produce an allergic reaction.

11.2. Information on other hazards

Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

Toxic to aquatic life with long lasting effects. Preparation not tested.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] | [d]	Species	Source	Method
57472-68-1	Oxybis(methyl-2,1-ethanediyl) diacrylate					
	Acute fish toxicity	LC50 2,2 - 4,64 mg/l	96 h	Leucidus idus	supplier SDS	
	Acute algae toxicity	ErC50 16,7 mg/l	72 h	Desmodesmus subspicatus	supplier SDS	
	Acute crustacea toxicity	EC50 22,3 mg/l	48 h	Daphnia magna (Big water flea)	supplier SDS	
	Algae toxicity	NOEC 2,2 mg/l	3 d	Desmodesmus subspicatus	supplier SDS	
52408-84-1	Glycerol, propoxylated, esters with acrylic acid					
	Acute fish toxicity	LC50 5,74 mg/l	96 h	Danio rerio (zebrafish)	supplier SDS	OECD 203
	Acute algae toxicity	ErC50 12,2 mg/l	72 h	Desmodesmus subspicatus	supplier SDS	OECD 201
	Acute crustacea toxicity	EC50 91,4 mg/l	48 h	Daphnia magna (Big water flea)	supplier SDS	OECD 202
	Algae toxicity	NOEC 2,06 mg/l	3 d	Desmodesmus subspicatus	supplier SDS	OECD 201
	Acute bacteria toxicity	(EC50 > 1000 mg/l)		Activated sludge	supplier SDS	OECD 209
112-07-2	2-butoxyethyl acetate; butylglycol acetate					
	Acute fish toxicity	LC50 28,3 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	supplier SDS	OECD 203
	Acute crustacea toxicity	EC50 37 mg/l	48 h	Daphnia magna (Big water flea)	supplier SDS	DIN 38412 / part 11
	Algae toxicity	NOEC 300 mg/l		Scenedesmus subspicatus	ECHA	
	Crustacea toxicity	NOEC 30 mg/l	7 d	Ceriodaphnia spec	ECHA	

12.2. Persistence and degradability

Preparation not tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
72869-86-4	7,7,9-(resp. 7,9,9-)Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecane-1,16-diol dimethacrylate (mixture of isomers)			
	OECD 301F	22%	28	
	Not readily biodegradable (according to OECD criteria)			
57472-68-1	Oxybis(methyl-2,1-ethanediyl) diacrylate			
	OECD 301A	90-100%	28	
	Easily biodegradable (concerning to the criteria of the OECD)			
52408-84-1	Glycerol, propoxylated, esters with acrylic acid			
	OECD 301B	79%	28	
	Easily biodegradable (concerning to the criteria of the OECD)			
112-07-2	2-butoxyethyl acetate; butylglycol acetate			
		88%	28	
	Easily biodegradable (concerning to the criteria of the OECD)			
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide			
	OECD 301B	1 %	28	
	Not readily biodegradable (according to OECD criteria)			

12.3. Bioaccumulative potential

Preparation not tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
72869-86-4	7,7,9-(resp. 7,9,9-)Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecane-1,16-diol dimethacrylate (mixture of isomers)	3,39
57472-68-1	Oxybis(methyl-2,1-ethanediyl) diacrylate	0,01-0,39
52408-84-1	Glycerol, propoxylated, esters with acrylic acid	2,52
112-07-2	2-butoxyethyl acetate; butylglycol acetate	1,51
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	5,8

BCF

CAS No	Chemical name	BCF	Species	Source
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl) -phosphine oxide	< 5	Cyprinus carpio (Common Carp)	

12.4. Mobility in soil

Preparation not tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
Preparation not tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

Preparation not tested.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Can be burnt together with household waste in compliance with official regulations in contact with approved waste disposal companies and with authorities in charge.
Paste: Carry out a burning of harzardous waste according to official regulations.

List of Wastes Code - residues/unused products

180106 WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (EXCEPT KITCHEN AND RESTAURANT WASTES NOT ARISING FROM IMMEDIATE HEALTH CARE); wastes from natal care, diagnosis, treatment or prevention of disease in humans; chemicals consisting of or containing hazardous substances; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. 7,7,9-(resp. 7,9,9-)Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecane-1,16-diol dimethacrylate (mixture of isomers)

14.3. Transport hazard class(es): 9

14.4. Packing group: III

Hazard label: 9

Classification code:	M6
Special Provisions:	274 335 375 601
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	90
Tunnel restriction code:	-

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 75

Information according to 2012/18/EU (SEVESO III): E2 Hazardous to the Aquatic Environment

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
Water hazard class (D):	1 - slightly hazardous to water
Skin resorption/Sensitization:	Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the international carriage of dangerous goods by rail
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
SVHC: Substance of Very High Concern
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. -

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)