



Trade name: Fotoplast S IO colored transparent

Substance number: S0020

Version: 1 / GB

Date revised: 10.07.2023

Replaces Version: - / GB

Print date: 10.07.2023

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

1.1. Product identifier

Fotoplast S IO colored transparent

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

Use of the substance/preparation

Light-curing material for the production of earmolds

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

Dreve Otoplastik GmbH

Max-Planck-Straße 31

59423 Unna

Telephone no. +49 2303 8807-0

Fax no. +49 2303 8807-29

Information provided by / telephone Department Research & Development: Fax: +49 2303 8807-562

E-mail address of person responsible sicherheitsdatenblatt@dreve.de

for this SDS

1.4. Emergency telephone number

Henkel Fire Department / 24h-Emergency-Contact-No.: +49 211 797-3350

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

Aquatic Chronic 4 H413

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008

For explanation of abbreviations see section 16.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard statements

H413 May cause long lasting harmful effects to aquatic life.

Precautionary statements

P273 Avoid release to the environment.

P501.1 Dispose of contents/container to industrial incineration plant.

2.3. Other hazards

No special hazards have to be mentioned.

The Substance does not meet PBT-criteria. This substance does not meet the vPvB-criteria. This substance does not have endocrine disrupting properties with respect to humans. This substance does



Trade name: Fotoplast S IO colored transparent

Substance number: S0020

Version: 1 / GB

Date revised: 10.07.2023

Replaces Version: - / GB

Print date: 10.07.2023

not have endocrine disrupting properties with respect to non-target organisms.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients

Bisphenol A, ethoxylated, dimethacrylate

CAS No.	41637-38-1			
EINECS no.	609-946-4			
Registration no.	01-2119980659-17			
Concentration	>= 50			%
Classification (Regulation (EC) No. 1272/2008)	Aquatic Chronic 4	H413		

Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

CAS No.	75980-60-8			
EINECS no.	278-355-8			
Registration no.	01-2119972295-29			
Concentration	>= 0,1	< 1		%
Classification (Regulation (EC) No. 1272/2008)	Repr. 2	H361f		

Supplemental information

The substance is contained in the Candidate List for inclusion in Annex XIV of Regulation (EC) No. 1907/2006 (REACH).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated clothing immediately and dispose of safely. Adhere to personal protective measures when giving first aid

After inhalation

Remove the casualty into fresh air and keep him calm. In the event of symptoms take medical treatment.

After skin contact

After contact with skin, wash immediately with plenty of water and soap. Consult a doctor if skin irritation persists.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Take medical treatment.

After ingestion

Call in a physician immediately and show him the Safety Data Sheet. Rinse mouth thoroughly with water. Let plenty of water be drunk in small gulps. Do not induce vomiting.

Adhere to personal protective measures when giving first aid

First aider: Pay attention to self-protection!

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

Until now no symptoms known so far.

Trade name: Fotoplast S IO colored transparent

Substance number: S0020

Version: 1 / GB

Date revised: 10.07.2023

Replaces Version: - / GB

Print date: 10.07.2023

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

Hints for the physician / hazards

In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Recommended: alcohol resistant foam, CO₂, powders, water spray/mist, Extinguishing measures to suit surroundings

Non suitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of combustion evolution of dangerous gases possible.

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Do not inhale explosion and/or combustion gases. In case of combustion use a suitable breathing apparatus. Wear full protective suit.

Other information

Collect contaminated fire-fighting water separately, must not be discharged into the drains. Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations. Observe manufacturer's / distributor's instructions.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep away sources of ignition. Ensure adequate ventilation. Use breathing apparatus if exposed to vapours/dust/aerosol. Avoid contact with skin, eyes and clothing. Use personal protective clothing. Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers). Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil. Retain and dispose of contaminated wash water. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Pick up rest with suitable absorbent materials. Do not pick up with the help of saw-dust or other combustible substances. Clean contaminated floors and objects thoroughly, observing environmental regulations. Containers in which spilt substance has been collected must be adequately labelled. Dispose of as prescribed.

6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.



Trade name: Fotoplast S IO colored transparent

Substance number: S0020

Version: 1 / GB

Date revised: 10.07.2023

Replaces Version: - / GB

Print date: 10.07.2023

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation if necessary). Avoid formation of aerosols. Avoid impact, friction and electro-static loading; risk of ignition!. Keep container tightly closed.

Advice on protection against fire and explosion

Keep away from sources of heat and ignition. No smoking. Take action to prevent static discharges. Avoid impact and friction. Use only explosion-proof equipment. Keep away from combustible material. Wear shoes with conductive soles.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in original packaging, tightly closed. Storage rooms must be properly ventilated. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Hints on storage assembly

Do not store together with foodstuffs. Do not store with strong oxidizing agents.

Further information on storage conditions

Keep under lock and key or accessible only to specialists or people who are authorized. Keep container tightly closed and in a well-ventilated place. Keep in a cool place

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Other information

Contains no substances with occupational exposure limit values.

Derived No/Minimal Effect Levels (DNEL/DMEL)

Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	0,233	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	0,145	mg/m ³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	0,0833	mg/kg/d



Trade name: Fotoplast S IO colored transparent

Substance number: S0020

Version: 1 / GB

Date revised: 10.07.2023

Replaces Version: - / GB

Print date: 10.07.2023

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	0,0833	mg/kg/d

Bisphenol A, ethoxylated, dimethacrylate

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	3,52	mg/m ³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	2	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	0,87	mg/m ³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	1	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	0,5	mg/kg

Predicted No Effect Concentration (PNEC)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

Type of value	PNEC	
Type	Saltwater	
Concentration	0,00014	mg/l

Type of value	PNEC	
Type	Freshwater sediment	
Concentration	0,115	mg/kg

Type of value	PNEC	
Type	Marine sediment	
Concentration	0,0115	mg/kg



Trade name: Fotoplast S IO colored transparent

Substance number: S0020

Version: 1 / GB

Date revised: 10.07.2023

Replaces Version: - / GB

Print date: 10.07.2023

Type of value	PNEC		
Type	Soil		
Concentration	0,0222		mg/kg

8.2. Exposure controls

General protective and hygiene measures

Do not smoke during work time. Hold emergency shower available. Hold eye wash fountain available. Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes. Take off immediately all contaminated clothing. Do not eat or drink during work time. Storage of foodstuffs in work rooms is forbidden. Wash hands before breaks and after work. Clean skin thoroughly after work; apply skin cream.

Respiratory protection

Do not inhale vapours; Use suitable respiratory protective device in case of insufficient ventilation

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Hand protection must comply with EN 374.

Appropriate Material nitrile

Eye protection

Safety glasses

Body protection

Clothing as usual in the chemical industry.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid	
Colour	Various, depending on coloration	
Odour	characteristic	
Melting point		
Remarks	not determined	
Freezing point		
Remarks	not determined	
Boiling point or initial boiling point and boiling range		
Value	290	°C
Flammability		
evaluation	not determined	
Upper and lower explosive limits		
Remarks	not determined	
Flash point		
Value	211	°C
Method	closed cup	
Ignition temperature		



Trade name: Fotoplast S IO colored transparent

Substance number: S0020

Version: 1 / GB

Date revised: 10.07.2023

Replaces Version: - / GB

Print date: 10.07.2023

Remarks not determined

Decomposition temperature

Remarks not determined

pH value

Remarks not determined

Viscosity

Remarks not determined

Solubility(ies)

Remarks not determined

Partition coefficient n-octanol/water (log value)

Remarks not determined

Vapour pressure

Remarks not determined

Density and/or relative densityValue 1,12 g/cm³

Temperature 20 °C

Relative vapour density

Remarks not determined

9.2. Other information**Odour threshold**

Remarks not determined

Evaporation rate (ether = 1) :

Remarks not determined

Solubility in water

Remarks virtually insoluble

Explosive properties

evaluation not determined

Oxidising properties

Remarks not determined

Other information

None known

SECTION 10: Stability and reactivity**10.1. Reactivity**

No hazardous reactions when stored and handled according to prescribed instructions.

10.2. Chemical stability

No hazardous reactions known.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

Protect from heat and direct sunlight

10.5. Incompatible materials



Trade name: Fotoplast S IO colored transparent

Substance number: S0020

Version: 1 / GB

Date revised: 10.07.2023

Replaces Version: - / GB

Print date: 10.07.2023

None known

10.6. Hazardous decomposition products

Irritant gases/vapours

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute oral toxicity**

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

Acute oral toxicity (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

Species	rat	
LD50	> 5000	mg/kg
Method	OECD 401	

Bisphenol A, ethoxylated, dimethacrylate

Species	rat	
LD50	> 2000	mg/kg
Remarks	Test conducted with a similar formulation.	

Acute dermal toxicity

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

Acute dermal toxicity (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

Species	rat	
LD50	> 2000	mg/kg
Method	OECD 402	

Bisphenol A, ethoxylated, dimethacrylate

Species	rat	
LD50	> 2000	mg/kg
Method	OECD 402	
Remarks	Test conducted with a similar formulation.	

Acute inhalational toxicity

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

Skin corrosion/irritation

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

Serious eye damage/irritation

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

Sensitization

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

Sensitization (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

Route of exposure	dermal	
Species	mouse	
evaluation	May cause sensitization by skin contact.	

Subacute, subchronic, chronic toxicity

Remarks not determined

Mutagenicity



Trade name: Fotoplast S IO colored transparent

Substance number: S0020

Version: 1 / GB

Date revised: 10.07.2023

Replaces Version: - / GB

Print date: 10.07.2023

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

Reproductive toxicity

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

Reproduction toxicity (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

evaluation Suspected of damaging fertility.

Carcinogenicity

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

Specific Target Organ Toxicity (STOT)**Single exposure**

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

Repeated exposure

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

Aspiration hazard

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

11.2 Information on other hazards**Endocrine disrupting properties with respect to humans**

This substance does not have endocrine disrupting properties with respect to humans.

Experience in practice

Inhalation may lead to irritation of the respiratory tract.

Other information

No toxicological data are available.

SECTION 12: Ecological information**12.1. Toxicity****General information**

not determined

Fish toxicity (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

Species	carp (Cyprinus carpio)		
LC50	1,4		mg/l
Duration of exposure	96	h	
Method	OECD 203		

Bisphenol A, ethoxylated, dimethacrylate

Species	rainbow trout (Oncorhynchus mykiss)		
LL50	> 100		mg/l
Method	OECD 203		
Remarks	Test conducted with a similar formulation.		

Daphnia toxicity (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

Species	Daphnia magna		
EC50	3,53		mg/l
Duration of exposure	48	h	
Method	OECD 202		

Bisphenol A, ethoxylated, dimethacrylate



Trade name: Fotoplast S IO colored transparent

Substance number: S0020

Version: 1 / GB

Date revised: 10.07.2023

Replaces Version: - / GB

Print date: 10.07.2023

Species	Daphnia magna		
EL50	> 100		mg/l
Duration of exposure	48	h	
Method	OECD 202		

Algae toxicity (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

Species	Pseudokirchneriella subcapitata		
EC50	> 2,01		mg/l
Duration of exposure	72	h	
Method	OECD 201		

Bisphenol A, ethoxylated, dimethacrylate

Species	Pseudokirchneriella subcapitata		
EL50	> 100		mg/l
Duration of exposure	72	h	
Method	OECD 201		
Remarks	Test conducted with a similar formulation.		

Bacteria toxicity (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

Species	activated sludge		
EC50	> 1000		mg/l
Duration of exposure	3	h	
Method	OECD 209		

Bisphenol A, ethoxylated, dimethacrylate

Species	activated sludge		
NOEC	14,3		mg/l
Duration of exposure	28	d	
Remarks	Test conducted with a similar formulation.		

12.2. Persistence and degradability**General information**

not determined

Biodegradability (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

Value	< 0	to	10	%
Duration of test	28	d		
evaluation	not readily degradable			

Bisphenol A, ethoxylated, dimethacrylate

Value	24		%
Duration of test	28	d	
evaluation	Readily biodegradable (according to OECD criteria)		

12.3. Bioaccumulative potential**General information**

not determined

Partition coefficient n-octanol/water (log value)

Remarks not determined

Octanol/water partition coefficient (log Pow) (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

log Pow	3,1		
Temperature	23	°C	

Bisphenol A, ethoxylated, dimethacrylate



Trade name: Fotoplast S IO colored transparent

Substance number: S0020

Version: 1 / GB

Date revised: 10.07.2023

Replaces Version: - / GB

Print date: 10.07.2023

log Pow 4,39

Bioconcentration factor (BCF) (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

BCF	47	to	55
Concentration	0,1	mg/l	
Duration of exposure	8	Weeks	
Medium	Freshwater		
Species	carp (Cyprinus carpio)		

12.4. Mobility in soil**General information**

not determined

12.5. Results of PBT and vPvB assessment**General information**

not determined

Results of PBT and vPvB assessment

The Substance does not meet PBT-criteria.

This substance does not meet the vPvB-criteria.

12.6 Endocrine disrupting properties**Endocrine disrupting properties with respect to the environment**

This substance does not have endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects**General information**

not determined

General information / ecology

Do not allow to enter soil, waterways or waste water canal. Avoid release into the atmosphere.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations for the product**

Must not be disposed together with household garbage.

Dispose of waste according to applicable legislation.

Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off as product waste.

SECTION 14: Transport information



Trade name: Fotoplast S IO colored transparent

Substance number: S0020

Version: 1 / GB

Date revised: 10.07.2023

Replaces Version: - / GB

Print date: 10.07.2023

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number or ID number	The product does not constitute a hazardous substance in land transport.	The product does not constitute a hazardous substance in sea transport.	The product does not constitute a hazardous substance in air transport.
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)		-	-
Label			
14.4. Packing group		-	-

SECTION 15: Regulatory information

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

Other information

All components are contained in the TSCA inventory or exempted.

15.2. Chemical safety assessment

For this preparation a chemical safety assessment has not been carried out.

SECTION 16: Other information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification (Regulation (EC) No. 1272/2008)

Aquatic Chronic 4

H413

Calculation method

Hazard statements listed in Chapter 2/3

H361f

Suspected of damaging fertility.

H413

May cause long lasting harmful effects to aquatic life.

CLP categories listed in Chapter 2/3

Aquatic Chronic 4

Hazardous to the aquatic environment, chronic, Category 4

Repr. 2

Reproductive toxicity, Category 2

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.