

Printing date 09/10/2015

Reviewed on 09/10/2015

### 1 Identification

- · Product identifier
- · Trade name: FotoTec Repair opaque
- Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture UV-curing acrylate/methacrylate formulation
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Dreve Otoplastik GmbH Max-Planck-Straße 31 59423 Unna / Germany

Tel.: ++49 2303 / 8807-0 Fax.: ++49 2303 / 8807-29

· Information department:

Department Research & Development

Fax.: +49 2303 8807-562

Email: sicherheitsdatenblatt@dreve.de

· Emergency telephone number:

+49 211 797-3350

Plant Fire Department Henkel

### 2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Repr. 2 H361 Suspected of damaging fertility or the unborn child.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms





GHS07 GHS08

- · Signal word Warning
- · Hazard-determining components of labeling:

hydroxypropylmethacrylate, monoester with propane-1,2-diol Acrylic resin

2-hydroxypropyl methacrylate

2-hydroxyethyl methacrylate

(Contd. on page 2)



Printing date 09/10/2015

Reviewed on 09/10/2015

### Trade name: FotoTec Repair opaque

(Contd. of page 1)

#### · Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Suspected of damaging fertility or the unborn child.

May cause respiratory irritation.

### · Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves.

Wear eye protection / face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 1 Fire = 1 Reactivity = 0

### · HMIS-ratings (scale 0 - 4)



Health = 1 Fire = 1

Reactivity = 0

#### · Other hazards

Uncontrollable exothermic product polymerisation possible in case of storage above 60  $^{\circ}\text{C}$  or exposure to direct sunlight.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

## 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:				
	Acrylic resin	25-50%		
1	hydroxypropylmethacrylate, monoester with propane-1,2-diol	25-50%		
923-26-2	2-hydroxypropyl methacrylate	10-25%		
1	2-hydroxyethyl methacrylate	10-25%		
55818-57-0	Vinylester resin	≤ 2.5%		
1	Diphenyl(2,4,6-trimethylbenzoyl)phosphinoxide	≤ 2.5%		
	tripropylene glycol diacrylate	≤ 2.5%		
818-61-1	2-hydroxyethyl acrylate	≤ 2.5%		

• Additional information: For the wording of the listed risk phrases refer to section 16.

- US



Printing date 09/10/2015 Reviewed on 09/10/2015

Trade name: FotoTec Repair opaque

(Contd. of page 2)

### 4 First-aid measures

- · Description of first aid measures
- · After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Do not induce vomiting.

Call a doctor immediately.

- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed

No further relevant information available.

· Indication of any immediate medical attention and special treatment needed

No further relevant information available.

# 5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture

The thermal decomposition may cause the formation of irritating vapours or gases or even fire.

- · Advice for firefighters
- **Protective equipment:** Wear self-contained respiratory protective device.

### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Keep away from ignition sources

Wear protective clothing.

- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7 Handling and storage

- · Handling:
- · Precautions for safe handling

Avoid contact with skin and eyes.

Ensure good ventilation/exhaustion at the workplace.

(Contd. on page 4)



Printing date 09/10/2015 Reviewed on 09/10/2015

Trade name: FotoTec Repair opaque

(Contd. of page 3)

Prevent formation of aerosols.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Protect from heat and direct sunlight.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

## 8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eves and skin.

· Breathing equipment:

Not necessary if room is well-ventilated.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

Protective gloves should be changed regularly, especially after intensive contact with the product. For every workplace a suitable type of protective gloves must be selected.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

#### Material of gloves

Nitrile rubber, NBR

As there are many different conditions in every day work these indications can only serve as an aid to orientation for the selection of suitable gloves for the handling of chemical products. By no means they can replace qualifying examinations by the end-user.

These recommendations only apply to the product mentioned in the safety data sheet. When mixing with other substances or under conditions deviant from norm EN 374 a manufacturer of CE-approved gloves should be referred to.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

(Contd. on page 5)



Printing date 09/10/2015 Reviewed on 09/10/2015

Trade name: FotoTec Repair opaque

(Contd. of page 4)

### · Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

			l		
9 Ph	vsicai	land c	hemica	nro	nerries
<b>V</b> 1 11)	Joioui	and o	Hommou	Piv	portioo

· Information on basic physical and chemical properties					
· General Information					
· Appearance:					
Form:	Viscous				
Color:	Beige				
· Odor:	Characteristic				
· Odour threshold:	Not determined.				
· pH-value:	Not determined.				
· Change in condition					
Melting point/Melting range:	Undetermined.				
Boiling point/Boiling range:	205 °C (401 °F)				
· Flash point:	101 °C (214 °F)				
· Flammability (solid, gaseous):	Not applicable.				
· Ignition temperature:	355 °C (671 °F)				
· Decomposition temperature:	Not determined.				
· Auto igniting:	Product is not selfigniting.				
· Danger of explosion:	Product does not present an explosion hazard.				
· Explosion limits:					
Lower:	Not determined.				
Upper:	Not determined.				
<ul> <li>Oxidizing properties</li> </ul>	Not determined				
· Vapor pressure:	Not determined.				
· Density at 20 °C (68 °F):	1.09 g/cm³ (9.096 lbs/gal)				
· Relative density `	Not determined.				
· Vapour density	Not determined.				
· Evaporation rate	Not determined.				
· Solubility in / Miscibility with					
Water:	Not miscible or difficult to mix.				
· Partition coefficient (n-octanol/water): Not determined.					

(Contd. on page 6)



Printing date 09/10/2015 Reviewed on 09/10/2015

Trade name: FotoTec Repair opaque

(Contd. of page 5)

· Viscosity:

**Dynamic:** Not determined. **Kinematic:** Not determined.

· Solvent content:

Organic solvents: 0.0 %

Other information
 No further relevant information available.

## 10 Stability and reactivity

- · Reactivity No dangerous reactions if used according to specifications.
- · Chemical stability Stable if used according to specifications.
- · Thermal decomposition / conditions to be avoided: Protect from heat and direct sunlight.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: Reacts with peroxides and other radical forming substances.
- · Hazardous decomposition products: No decomposition if used according to specifications.

## 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

**Irritant** 

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

102-71-6 2,2',2"-nitrilotriethanol

3

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

## 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Do not allow product to reach ground water, water course or sewage system.

(Contd. on page 7)



Printing date 09/10/2015 Reviewed on 09/10/2015

Trade name: FotoTec Repair opaque

(Contd. of page 6)

Danger to drinking water if even small quantities leak into the ground.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

## 13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Disposal must be made according to official regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information	
· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void
<ul> <li>UN proper shipping name</li> <li>DOT, ADR, ADN, IMDG, IATA</li> </ul>	Void
· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA · Class	Void
· Packing group · DOT, ADR, IMDG, IATA	Void
<ul><li>Environmental hazards:</li><li>Marine pollutant:</li></ul>	No
· Special precautions for user	Not applicable.
<ul> <li>Transport in bulk according to Annex MARPOL73/78 and the IBC Code</li> </ul>	II of Not applicable.
· UN "Model Regulation":	-

### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

(Contd. on page 8)

Printing date 09/10/2015 Reviewed on 09/10/2015

Trade name: FotoTec Repair opaque

(Contd. of page 7)

### · Proposition 65

#### · Chemicals known to cause cancer:

None of the ingredients is listed.

#### · Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

#### · Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

### · Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

#### · Cancerogenity categories

### · EPA (Environmental Protection Agency)

None of the ingredients is listed.

### · TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

### · MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

## · NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

### · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms





GHS07 GHS08

### · Signal word Warning

### · Hazard-determining components of labeling:

hydroxypropylmethacrylate, monoester with propane-1,2-diol Acrylic resin

2-hydroxypropyl methacrylate

2-hydroxyethyl methacrylate

### · Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Suspected of damaging fertility or the unborn child.

May cause respiratory irritation.

#### · Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves.

Wear eye protection / face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 9)

Printing date 09/10/2015 Reviewed on 09/10/2015

Trade name: FotoTec Repair opaque

(Contd. of page 8)

- · National regulations:
- · Technical instructions (air):

Class	Share in %
I	≤ 2,5

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Department Research & Development
- · Contact: Dr. Thomas Veit, Lothar Sutor
- · Date of preparation / last revision 09/10/2015 / 1
- Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Repr. 2: Reproductive toxicity, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3