Printing date 22.02.2012

Revision: 09.12.2010

# 1 Identification of the substance/mixture and of the company/undertaking

· Product identifier

· Trade name: Opaquer combo.lign

· Article number: CO1X4KAT, CO1X4OPG, CO1X4OPI, CO1X4OPL, CO1X4OPM

· Relevant identified uses of the substance or mixture and uses advised against

 $\cdot$  Application of the substance / the preparation

 $\cdot$  Details of the supplier of the safety data sheet

- · Further information obtainable from:
- R & D
- e-mail: R.D@bredent.com
- Emergency telephone number: (001) 352 323 3500

# 2 Hazards identification

- · Classification of the substance or mixture
- *Classification according to Regulation (EC) No 1272/2008* The product is not classified according to the CLP regulation.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xi; Irritant

R36/38: Irritating to eyes and skin.

A O; Oxidising

*R7: May cause fire.* 

· Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· Label elements

· Labelling according to EU guidelines:

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

- · Code letter and hazard designation of product:
- *Xi Irritant O Oxidising*

· Risk phrases:

7 May cause fire. 36/38 Irritating to eyes and skin.

· Safety phrases:

3/7 *Keep container tightly closed in a cool place.* 

23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- 60 This material and its container must be disposed of as hazardous waste.

· Special labelling of certain preparations:

Contains dibenzoyl peroxide. May produce an allergic reaction.

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

(Contd. on page 2)



Printing date 22.02.2012

Revision: 09.12.2010

Trade name: Opaquer combo.lign

(Contd. of page 1)

# 3 Composition/information on ingredients

#### · Chemical characterization: Mixtures

• Description: Mixture of substances listed below with nonhazardous additions.

| · Dangerous components:   |         |
|---|---------|
| 1565-94-2 Bisphenol-A-Diglycidyl-Methacrylate   | 2.5-10% |
| <b>Xi</b> R36/38  |         |
| 🚺 Skin Irrit. 2, H315; Eye Irrit. 2, H319   |         |
| 42594-17-2 Tricyclodecane Dimethanol Diacrylate   | 2.5-10% |
| <b>Xi</b> R36/38  |         |
| 🚺 Skin Irrit. 2, H315; Eye Irrit. 2, H319   |         |
| • Additional information: For the wording of the listed risk phrases refer to section 16. |         |

# 4 First aid measures

· Description of first aid measures

- · After inhalation: Supply fresh air.
- After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing:
- Seek immediate medical advice.
- Rinse out mouth and then drink plenty of water.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed Allergic reactions
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

# **5** Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents:
- Foam

Fire-extinguishing powder

- Carbon dioxide
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture No further relevant information available.
- · 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 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).
- Dispose of the material collected according to regulations.
- 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.

(Contd. on page 3)



Printing date 22.02.2012

Revision: 09.12.2010

#### Trade name: Opaquer combo.lign

(Contd. of page 2)

# 7 Handling and storage

- · Handling:
- · Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- · Information about fire and explosion protection: Keep ignition sources away Do not smoke.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store only in unopened original receptacles.
- · Information about storage in one common storage facility: Store away from foodstuffs.
- · Further information about storage conditions: Protect from heat and direct sunlight.
- *Specific end use(s) No further relevant information available.*

#### 8 Exposure controls/personal protection

- · Control parameters
- · Ingredients 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 valid during the making were used as basis.
- · Exposure controls

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- · Personal protective equipment:
- *General protective and hygienic measures: Be sure to clean skin thoroughly after work and before breaks. Keep away from foodstuffs, beverages and feed.*
- **Respiratory protection:** Not required.
- **Protection of hands:** Solvent resistant gloves
- Eye protection: Safety glasses
- · **Body protection:** Light weight protective clothing

#### 9 Physical and chemical properties

| Appearance:Form:PastyColoure:ColouredOdour:Characteristic• Change in condition<br>Melting point/Melting range:Undetermined.boiling point/Boiling range:Undetermined.• Flash point:> 150°C• Flammability (solid, gaseous):Undetermined.• Self-igniting:Product is not selfigniting.• Danger of explosion:Not determined.• Explosion limits:<br>Lower:IndeterminadoIndeterminadoUndetermined.  | • Information on basic physical<br>• General Information | and chemical properties      |
|--|--|------------------------------|
| Form:Pasty<br>Colour:ColouredOdour:ColouredOdour:CharacteristicChange in condition<br>Melting point/Melting range:Undetermined.Boiling point/Melting range:Undetermined.Boiling point/Boiling range:Undetermined.• Flash point:> 150°C• Flash point:> 150°C• Flammability (solid, gaseous):Undetermined.• Ignition temperature:Undetermined.• Self-igniting:Product is not selfigniting.• Danger of explosion:Not determined.<br>Undetermined• Explosion limits:<br> |  |                              |
| Odour:Characteristic• Odour:Characteristic• Change in condition<br>Melting point/Melting range:Undetermined.Boiling point/Boiling range:Undetermined.• Flash point:> 150°C• Flammability (solid, gaseous):Undetermined.• Ignition temperature:Undetermined.• Self-igniting:Product is not selfigniting.• Danger of explosion:Not determined.<br>Undetermined.• Explosion limits:<br>Lower:<br>Upper:IndeterminadoIndeterminadoIndeterminado                          |  | Pasty                        |
| <ul> <li>Change in condition<br/>Melting point/Melting range: Undetermined.<br/>Boiling point/Boiling range: Undetermined.</li> <li>Flash point: &gt; 150°C</li> <li>Flammability (solid, gaseous): Undetermined.</li> <li>Ignition temperature: Undetermined.</li> <li>Self-igniting: Product is not selfigniting.</li> <li>Self-igniting: Not determined.<br/>Undetermined.</li> <li>Explosion limits:<br/>Lower: Indeterminado</li> <li>Indeterminado</li> </ul>  | Colour:  | Coloured                     |
| Melting point/Melting range:Undetermined.Boiling point/Boiling range:Undetermined.Flash point:> 150°CFlammability (solid, gaseous):Undetermined.Ignition temperature:Undetermined.Self-igniting:Product is not selfigniting.Danger of explosion:Not determined.<br>Undetermined.Explosion limits:<br>Lower:<br>Upper:IndeterminadoIdeterminadoIndeterminado  | · Odour:   | Characteristic               |
| Boiling point/Boiling range:Undetermined.• Flash point:> 150°C• Flammability (solid, gaseous):Undetermined.• Ignition temperature:Undetermined.• Self-igniting:Product is not selfigniting.• Danger of explosion:Not determined.<br>Undetermined• Explosion limits:<br>Lower:<br>Upper:IndeterminadoIndeterminadoIndeterminado   | · Change in condition                                    |                              |
| • Flash point:       > 150°C         • Flammability (solid, gaseous):       Undetermined.         • Ignition temperature:       Undetermined.         • Self-igniting:       Product is not selfigniting.         • Danger of explosion:       Not determined.<br>Undetermined.         • Explosion limits:       Indeterminado         Lower:       Indeterminado         Upper:       Indeterminado  | Melting point/Melting range:                             | Undetermined.                |
| • Flammability (solid, gaseous):       Undetermined.         • Ignition temperature:       Undetermined.         • Self-igniting:       Product is not selfigniting.         • Danger of explosion:       Not determined.<br>Undetermined.         • Explosion limits:       Indeterminado         Lower:       Indeterminado         Upper:       Indeterminado   | Boiling point/Boiling range:                             | Undetermined.                |
| • Ignition temperature:       Undetermined.         • Self-igniting:       Product is not selfigniting.         • Danger of explosion:       Not determined.<br>Undetermined         • Explosion limits:       Indeterminado         Lower:       Indeterminado         Upper:       Indeterminado   | · Flash point:   | > 150°C                      |
| • Self-igniting:       Product is not selfigniting.         • Danger of explosion:       Not determined.<br>Undetermined         • Explosion limits:       Indeterminado         Lower:       Indeterminado         Upper:       Indeterminado   | · Flammability (solid, gaseous):                         | Undetermined.                |
| • Danger of explosion:       Not determined.<br>Undetermined         • Explosion limits:       Indeterminado         Lower:       Indeterminado         Upper:       Indeterminado   | · Ignition temperature:                                  | Undetermined.                |
| Undetermined         • Explosion limits:         Lower:       Indeterminado         Upper:       Indeterminado   | · Self-igniting:   | Product is not selfigniting. |
| Undetermined         • Explosion limits:         Lower:       Indeterminado         Upper:       Indeterminado   | · Danger of explosion:                                   | Not determined.              |
| Lower:IndeterminadoUpper:Indeterminado   |  | Undetermined                 |
| Upper: Indeterminado   | · Explosion limits:                                      |                              |
|  | Lower:   | Indeterminado                |
|  | Upper:   | Indeterminado                |
| • Density: 1.8/ g/cm <sup>3</sup>  | · Density:   | 1.87 g/cm <sup>3</sup>       |

Printing date 22.02.2012

Revision: 09.12.2010

Trade name: Opaquer combo.lign

|   | (Contd. of page 3)                                    |
|---|---|
| • Solubility in / Miscibility with water: | Not miscible or difficult to mix.                     |
| · Viscosity:<br>Dynamic:                  | 2000 Pa*s   |
| · Solvent content:<br>Organic solvents:   | 0.0 %   |
| Solids content:<br>• Other information    | >50.0 %<br>No further relevant information available. |

# **10 Stability and reactivity**

· Reactivity

- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions
- Reacts with peroxides.
- Photoreactive.
- Danger of polymerization.
- *Conditions to avoid* No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

#### **11 Toxicological information**

- · Information on toxicological effects
- Acute toxicity:

· LD/LC50 values relevant for classification:

7,7,9-(bzw. 7,9,9)Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecan-1,16-diol-dimethacrylat

 $Oral \ LD50 > 2000 \ mg/kg \ (rat)$ 

LC50 / 96 h 10.1 mg/l (brachidanio rerio)

- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.

#### **12 Ecological information**

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- · Persistence and degradability Not easily biodegradable
- · Behaviour 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.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

(Contd. on page 5)



Printing date 22.02.2012

Revision: 09.12.2010

Trade name: Opaquer combo.lign

(Contd. of page 4)

# **13 Disposal considerations**

#### · Waste treatment methods

#### · Recommendation

Can be disposed of with household garbage after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

#### · Uncleaned packaging:

· Recommendation:

Non contaminated packagings may be recycled.

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

| UN-Number                                       |                 |  |
|---|-----------------|--|
| ADR, ADN, IMDG, IATA                            | Void            |  |
| UN proper shipping name<br>ADR, ADN, IMDG, IATA | Void            |  |
| Transport hazard class(es)                      |                 |  |
| ADR, ADN, IMDG, IATA                            |                 |  |
| Class   | Void            |  |
| Packing group                                   |                 |  |
| ADR, IMDG, IATA                                 | Void            |  |
| Special precautions for user                    | Not applicable. |  |
| Transport in bulk according to Annex            | II of           |  |
| MARPOL73/78 and the IBC Code                    | Not applicable. |  |

# **15 Regulatory information**

#### · Safety, health and environmental regulations/legislation specific for the substance or mixture

#### · Labelling according to EU guidelines:

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

- · Code letter and hazard designation of product:
- Xi Irritant O Oxidising

#### · Risk phrases:

7 May cause fire. 36/38 Irritating to eyes and skin.

#### · Safety phrases:

3/7 Keep container tightly closed in a cool place.

23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer). 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

60 This material and its container must be disposed of as hazardous waste.

#### $\cdot$ Special labelling of certain preparations:

Contains dibenzoyl peroxide. May produce an allergic reaction.

(Contd. on page 6)

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

Printing date 22.02.2012

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Revision: 09.12.2010

Trade name: Opaquer combo.lign

(Contd. of page 5)

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| Other information |  |  |
|-------------------|--|--|
|                   | nformation is based on our present knowledge. However, this shall not constitute a guarantee for a<br>c product features and shall not establish a legally valid contractual relationship. |  |
| Releve            | unt phrases  |  |
|                   | Causes skin irritation.  |  |
| H319              | Causes serious eye irritation.   |  |
| · · ·             | 8 Irritating to eyes and skin.   |  |
| Depar             | tment issuing MSDS: R & D  |  |
| Conta             | ct: R & D  |  |
| Abbre             | viations and acronyms:   |  |
| ADR: A            | ccord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the Internatio<br>e of Dangerous Goods by Road)                                      |  |
|                   | eglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning ional Transport of Dangerous Goods by Rail)                          |  |
| IMDG:             | International Maritime Code for Dangerous Goods  |  |
|                   | nternational Air Transport Association   |  |
|                   | International Civil Aviation Organization  |  |
|                   | lobally Harmonized System of Classification and Labelling of Chemicals<br>Lethal concentration, 50 percent   |  |
|                   | Lethal dose, 50 percent  |  |
|                   | compared to the previous version altered.  |  |