

The image shows a variety of Akemi products, primarily two-part epoxies. In the foreground, there are several small bottles of AKEPOX 1005 in different colors (yellow, green, blue, red, brown, white) and sizes (30ml, 60ml, 120ml, 240ml). Behind them are larger containers of AKEMI MARMORKITT 1000, including a large white can and several smaller bottles in various colors. The labels on the products are in both German and English, providing information about the product name, volume, and application. The background is a solid blue color.

[illegible][illegible]

AKEMI® Colouring pastes or alternatively AKEMI® Colouring tint liquid
AKEMI® Pastas de color o alternativo AKEMI® Concentrados de color líquidos
Paste coloranti AKEMI® oppure in alternativa concentrati coloranti AKEMI® liquidi

In addition to the tried and tested colouring pastes in the tube, AKEMI's product range now alternatively contains **Colouring tint liquid** in squeeze bottles which, on account of their excellent flowability, can be quickly and easily mixed into AKEMI's low-viscosity adhesives and fillers.

Areas of application:

To colour the AKEMI adhesives and fillers so they match the respective colour of the stone.

Colouring tint liquid

in 50 ml squeeze bottles

For the AKEPOX® adhesive (on an epoxy basis) and Marble Filler (on a polyester or acrylic basis) product lines there are colouring tint liquid which are only suitable for the respective product line.

Colours: red, red-brown, white, black, ochre, green, brown, blue, beige and grey

Colouring pastes

in 30 ml tubes

Here there are also two different colouring paste lines which are suitable for either the AKEPOX® adhesive (on an epoxy basis) or Marble Filler (on a polyester or acrylic basis) product lines.

Colours: red, red-brown, white, black, ochre, green, brown, blue

Properties:

General

Both the colouring tint liquid and the colouring pastes have excellent characteristics:

- high concentration of colour pigments which means they are economical in use
- extremely UV and light-resistant pigments, i.e. no fading
- no impairment of the properties of the coloured adhesives
- the colours can be mixed together

Advantages of the Colouring tint liquid

- easy and homogeneous miscibility in liquid and low-viscosity AKEMI adhesives
- exact dosage on account of the handy squeeze bottle
- also available in the tones beige and grey

Advantages of the colouring pastes

- easy to mix into the gel and paste-like AKEMI adhesives
- exact dosage from the plastic tube

Junto a las Pastas de color en tubos ofrece AKEMI ahora los **Concentrados de color líquidos** en botellas „squeeze“. Debido a su excelente fluidez se dejan mezclar rápida- y fácilmente en las en los pegamentos y las masillas AKEMI.

Campo de aplicación:

Para adaptar el tono de color del la masilla AKEMI al correspondiente tono de la piedra.

Concentrados de color líquidos

en botellas „squeeze“ de 50 ml

Para las líneas de productos AKEPOX® (a base de epoxi) y masillas (a base de poliéster resp. acrílica) hay diferentes Concentrados de color solamente aptos para la línea de productos correspondiente.

Colores: rojo, marrón rojizo, blanco, negro, ocre, verde, marrón, azul, beige y gris

Pastas de color

en tubos de 30 ml

Aquí también hay distintas Pastas de color para las líneas de productos AKEPOX® (a base de epoxi) y masillas (a base de poliéster resp. acrílica).

Colores: rojo, marrón rojizo, blanco, negro, ocre, verde, marrón y azul

Características:

General

Los Concentrados de pastas así como las Pastas de color tienen características sobresalientes:

- alta concentración de pigmentos de color, por eso alto rendimiento
- pigmentos altamente resistentes a los rayos UVA y la luz, o sea no pierden el color
- no dañan las características del pegamento teñido
- se puede mezclar el uno con el otro

Ventajas de los Concentrados de color líquidos

- se dejan mezclar fácil y homogéneamente en pegamentos AKEMI líquidos
- dosificación exacta debido a las botellas manejables „squeeze“
- también se consiguen en los colores beige y gris

Ventajas de las Pastas de color

- se dejan emplear bien en pegamentos AKEMI gelatinosos y pastos
- dosificación exacta con el tubo de plástico

Oltre alle ormai provate paste coloranti in tubo, AKEMI dispone ora in alternativa nel suo programma di **concentrati coloranti liquidi** in flaconi „squeeze“, che grazie all'eccellente fluidità si incorporano velocemente e con facilità negli adesivi e mastici AKEMI fluidi.

Campo di applicazione:

Per tingere e conformare gli adesivi o i mastici AKEMI alla rispettiva tonalità della pietra.

Concentrati coloranti liquidi

in falcione „squeeze“ da 50 ml

Per le linee di adesivi AKEPOX® (a base epossidica) e mastici marmo (a base di poliestere e base acrilico) esistono diversi concentrati coloranti adatti esclusivamente alla rispettiva linea di prodotto.

Colori: rosso, rosso-bruno, bianco, nero, ocre, verde, marrone, blu, beige e grigio

Paste coloranti

in tubo da 30 ml

Anche in questo caso esistono a parte diverse paste coloranti che seguono le linee adesivo AKEPOX® (a base epossidica) e mastice marmo (a base di poliestere e acrilico).

Colori: rosso, rosso-bruno, bianco, nero, ocre, verde, marrone, blu

Caratteristiche:

A livello generale

Sia i concentrati coloranti che le paste coloranti possiedono caratteristiche eccellenti:

- elevata concentrazione di pigmenti cromatici, quindi resa elevata
- pigmenti estremamente resistenti agli UV e fotostabili, vale a dire niente sbiadimenti
- non vengono compromesse le caratteristiche degli adesivi tinti
- sono miscelabili a vicenda

Vantaggi dei concentrati coloranti liquidi

- miscelabilità facile e omogenea con gli adesivi liquidi e fluidi AKEMI
- dosaggio preciso grazie al pratico flacone „squeeze“
- disponibili anche nei colori secondari beige e grigio

Vantaggi delle paste coloranti

- buona lavorabilità con gli adesivi AKEMI in gel e in pasta
- dosaggio preciso con il tubo in plastica

Colours Colores Colori	Colouring tint liquid in 50 ml squeeze bottle (sales unit: 10 bottles) Concentrados de color líquidos en botellas „squeeze“ de 50 ml (Unidad de venta 10 piezas) Concentrati coloranti liquidi in falcione „squeeze“ da 50 ml (Unità di spedizione 10 pz.)		Colouring pastes in 30 ml tube (sales unit: 8 tubes) Pastas de color en tubos de 30 ml (Unidad de venta 8 piezas) Paste coloranti in tubo da 30 ml (Unità di spedizione 8 pz.)	
	for polyester and acrylic fillers para masillas de poliéster y acrílica per mastici in poliestere e acrilico	for AKEPOX®-Epoxy adhesives para pegamentos epoxi AKEPOX® per adesivi epossidico AKEPOX®	for polyester and acrylic fillers para masillas de poliéster y acrílica per mastici in poliestere e acrilico	for AKEPOX®-Epoxy adhesives para pegamentos epoxi AKEPOX® per adesivi epossidico AKEPOX®
red · rojo · rosso	Art.No. 1 10 50	Art.No. 1 12 70	Art.No. 1 10 01	Art.No. 1 12 20
red-brown · marrón rojizo · rosso-bruno	Art.No. 1 10 51	Art.No. 1 12 71	Art.No. 1 10 02	Art.No. 1 12 21
white · blanco · bianco	Art.No. 1 10 52	Art.No. 1 12 72	Art.No. 1 10 03	Art.No. 1 12 28
black · negro · nero	Art.No. 1 10 53	Art.No. 1 12 73	Art.No. 1 10 04	Art.No. 1 12 22
ochre · ocre · ocre	Art.No. 1 10 54	Art.No. 1 12 74	Art.No. 1 10 05	Art.No. 1 12 23
green · verde · verde	Art.No. 1 10 55	Art.No. 1 12 75	Art.No. 1 10 06	Art.No. 1 12 24
brown · marrón · marrone	Art.No. 1 10 56	Art.No. 1 12 76	Art.No. 1 10 11	Art.No. 1 12 25
blue · azul · blu	Art.No. 1 10 57	Art.No. 1 12 77	Art.No. 1 10 12	Art.No. 1 12 27
beige · beige · beige	Art.No. 1 10 58	Art.No. 1 12 78	-	-
grey · gris · grigio	Art.No. 1 10 59	Art.No. 1 12 79	-	-
assorted · mixto · assortiti	Art.No. 1 10 60	Art.No. 1 12 80	Art.No. 1 10 07	Art.No. 1 12 26

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 24.03.2021

Version number 11

Revision: 24.03.2021

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

1.1 Product identifier

Trade name:

COLOURING TINT LIQUID FOR AKEPOX

Article number:

11270, 11271, 11272, 11273, 11274, 11275, 11276, 11277, 11278, 11279,
11280, 11281, 11282, 11283, 11284, 11285, 11286, 11287, 11288, 11289,
11290, 11291, 11235, 11236, 11237, 11238, 11239, 11240, 11241, 11242,
11251, 11252, 11253, 11254, 11255, 11256, 11257

UFI:

MMG4-502J-C000-ER01

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

No further relevant information available.

Application of the substance / the mixture

Stainer

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

AKEMI chemisch technische Spezialfabrik GmbH
Lechstrasse 28
D 90451 Nürnberg

Tel. +49(0)911-642960
Fax. +49(0)911-644456
e-mail info@akemi.de

Further information obtainable from:

Laboratory

1.4 Emergency telephone number:

Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH
Tel. +49(0)911-64296-59
Reachable during the following office hours:
Monday – Thursday from 07:30 a.m. to 16:30 p.m.
Friday from 07:30 a.m. to 13:30 p.m.
+44 (171) 635 91 91
National Poison Inform. Centre
Medical Toxicology Unit
Avalonley Road
London SE14 5ER

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

The product is classified and labelled according to the CLP regulation.



GHS07 GHS09

Signal word

Warning

Hazard-determining components of labelling:

bis[4-(2,3-epoxypropoxy)phenyl]propane
Reaction mass of 2,2'-[methylenbis(4,1-phenyleneoxymethylene)]dioxirane and
[2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane and [2,2'-
[methylenbis(2,1-phenyleneoxymethylene)]dioxirane
Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Hazard statements

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- Precautionary statements
 - P101 If medical advice is needed, have product container or label at hand.
 - P102 Keep out of reach of children.
 - P103 Read carefully and follow all instructions.
 - P261 Avoid breathing vapours.
 - P273 Avoid release to the environment.
 - P280 Wear protective gloves / eye 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.
 - P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 - P337+P313 If eye irritation persists: Get medical advice/attention.
 - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- Additional information: Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
- **2.3 Other hazards**
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

SECTION 3: Composition/information on ingredients**3.2 Chemical characterisation: Mixtures**

- Description: Mixture: consisting of the following components.

· Dangerous components:

CAS: 13463-67-7 EINECS: 236-675-5 Index number: 022-006-00-2 Reg.nr.: 01-2119489379-17-xxxx	titanium dioxide Carc. 2, H351	25-50%
CAS: 1675-54-3 EINECS: 216-823-5 Index number: 603-073-00-2 Reg.nr.: 01-2119456619-26-xxxx	bis[4-(2,3-epoxypropoxy)phenyl]propane Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	25-50%
EC number: 701-263-0 Reg.nr.: 01-2119454392-40-0003	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)] dioxirane and [2-([2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl] oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)] dioxirane Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Skin Sens. 1, H317	12.5-25%
CAS: 933999-84-9 EC number: 618-939-5 Reg.nr.: 01-2119463471-41-0005	Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2) Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 Aquatic Chronic 3, H412	<12.5%

- Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures**4.1 Description of first aid measures**

- General information: Take affected persons out into the fresh air.
Position and transport stably in side position.
- 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: If skin irritation continues, consult a doctor.
Immediately wash with water and soap and rinse thoroughly.

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- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- Information for doctor: The sensitizing effect of epoxide based resins is mainly caused by the concentration of epoxy resin polymers with a specific molecular weight ≤ 300 . The observed allergic dermal and respiratory appearances should be treated symptomatically in dependence of the severity. An epoxy resin based allergic disease belongs to a cell mediated (interaction of lymphocytes) type IV allergy.
- **4.2 Most important symptoms and effects, both acute and delayed** Allergic reactions
- **Hazards** Skin contact with polyester and epoxy resin solutions as ingredient of the product should be avoided due to risks of skin irritations or allergic skin appearances. If occasional hand contact can not be avoided, protection gloves, proper protection ointments and protective agents generating a protective layer on the skin were applied.
- **4.3 Indication of any immediate medical attention and special treatment needed** If swallowed, gastric irrigation with added, activated carbon.

* SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- Suitable extinguishing agents: CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** Formation of toxic gases is possible during heating or in case of fire. In case of fire, the following can be released:
Carbon monoxide (CO)
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **5.3 Advice for firefighters**
- Protective equipment: Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.
Wear fully protective suit.
- Additional information Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

* SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation
Use respiratory protective device against the effects of fumes/dust/aerosol.
- **6.2 Environmental precautions:** Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
- **6.4 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.

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SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Keep receptacles tightly sealed.
Store in cool, dry place in tightly closed receptacles.
Use only in well ventilated areas.
Ensure good ventilation/exhaustion at the workplace.

Information about fire - and explosion protection:

No special measures required.

7.2 Conditions for safe storage, including any incompatibilities**Storage:****Requirements to be met by storerooms and receptacles:**

Store only in the original receptacle.
Prevent any seepage into the ground.

Information about storage in one common storage facility:

Store away from reducing agents.
Store away from foodstuffs.

Further information about storage conditions:

Store receptacle in a well ventilated area.
Protect from frost.
Keep container tightly sealed.

Storage class:

12

7.3 Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Additional information about design of technical facilities:**

No further data; see item 7.

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.

DNELs**13463-67-7 titanium dioxide**

Oral	DNEL (Langzeit-wiederholt)	700 mg/kg bw/day (BEV)
Inhalative	DNEL (Langzeit-wiederholt)	10 mg/m ³ Air (ARB)

1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane

Oral	DNEL (Kurzzeit-akut)	0.5 mg/kg bw/day (BEV)
	DNEL (Langzeit-wiederholt)	0.5 mg/kg bw/day (BEV)
	Dermal	8.33 mg/kg bw/day (ARB)
		3.571 mg/kg bw/day (BEV)
Inhalative	DNEL (Langzeit-wiederholt)	0.75 mg/kg bw/day (ARB)
	Dermal	0.0893 mg/kg bw/day (BEV)
		12.25 mg/m ³ Air (ARB)
		4.93 mg/m ³ Air (ARB)
Inhalative	DNEL (Kurzzeit-akut)	0.87 mg/m ³ Air (BEV)
	DNEL (Langzeit-wiederholt)	0.87 mg/m ³ Air (BEV)

Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane

Oral	DNEL (Langzeit-wiederholt)	6.25 mg/kg bw/day (BEV)
Dermal	DNEL (Langzeit-wiederholt)	104.15 mg/kg bw/day (ARB)
		62.5 mg/kg bw/day (BEV)

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Inhalative	DNEL (Langzeit-wiederholt)	29.39 mg/m ³ Air (ARB) 8.7 mg/m ³ Air (BEV)
933999-84-9 Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)		
Oral	DNEL (Kurzzeit-akut)	0.83 mg/kg bw/day (BEV)
	DNEL (Langzeit-wiederholt)	0.83 mg/kg bw/day (BEV)
Dermal	DNEL (Kurzzeit-akut)	1.7 mg/kg bw/day (BEV)
	DNEL (Langzeit-wiederholt)	2.8 mg/kg bw/day (ARB) 1.7 mg/kg bw/day (BEV)
Inhalative	DNEL (Kurzzeit-akut)	4.9 mg/m ³ Air (ARB) 2.9 mg/m ³ Air (BEV)
	DNEL (Langzeit-wiederholt)	4.9 mg/m ³ Air (ARB) 2.9 mg/m ³ Air (BEV)

· PNECs

13463-67-7 titanium dioxide

PNEC (wässrig)	100 mg/l (KA) 1 mg/l (MW) 0.127 mg/l (SW)
	PNEC (fest) 100 mg/kg Trockengew (BO) 100 mg/kg Trockengew (MWS) 1,000 mg/kg Trockengew (SWS)

1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane

PNEC (wässrig)	10 mg/l (KA) 0.0006 mg/l (MW) 0.006 mg/l (SW) 0.018 mg/l (WAS)
	PNEC (fest) 0.065 mg/kg Trockengew (BO) 0.034 mg/kg Trockengew (MWS) 0.341 mg/kg Trockengew (SWS)

Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane

PNEC (wässrig)	10 mg/l (KA) 0.0003 mg/l (MW) 0.003 mg/l (SW) 0.025 mg/l (WAS)
	PNEC (fest) 0.237 mg/kg Trockengew (BO) 0.029 mg/kg Trockengew (MWS) 0.294 mg/kg Trockengew (SWS)

933999-84-9 Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)

PNEC (wässrig)	1 mg/l (KA) 0.00115 mg/l (MW) 0.0115 mg/l (SW) 0.115 mg/l (WAS)
	PNEC (fest) 0.223 mg/kg Trockengew (BO) 0.0283 mg/kg Trockengew (MWS) 0.283 mg/kg Trockengew (SWS)

· Additional information:

The lists valid during the making were used as basis.

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· **8.2 Exposure controls**

· Personal protective equipment:

· General protective and hygienic measures:

Do not eat, drink, smoke or sniff while working.
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing
 Wash hands before breaks and at the end of work.
 Do not inhale gases / fumes / aerosols.
 Avoid contact with the eyes and skin.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Protection of hands:

Preventive skin protection by use of skin-protecting agents is recommended.

After use of gloves apply skin-cleaning agents and skin cosmetics.

Skin protection agent recommendation for preventive skin shelter without use of protective gloves:

ARRETIL (<http://www.stoko.com>)

Skin protection agent recommendation for preventive skin shelter in application and combination of protective gloves:

STOKO EMULSION (<http://www.stoko.com>)

Skin protection recommendation for skin cleaning after product handling:

Kresto Classic (<http://debstoko.com>)

Skin protection agent recommendation for skin aftercare:

STOKO VITAN (<http://www.stoko.com>)

The protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times' data were generated and verified with material samples of the recommended protection glove type in the scope of laboratory analyses of the company KCL GmbH in compliance with EN374.

This recommendation refers exclusively to the material safety data sheet referenced product delivered by Akemi and the indicated field of application. In case of product dilution or in case of mixture with different substances or chemicals, and in condition of EN374 deviation the producer of CE-approved protection gloves must be contacted for detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell, internet: <http://www.kcl.de>).



Protective gloves

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Butyl rubber, BR

Nitrile rubber, NBR

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.

· Penetration time of glove material

Value for the permeation: Level ≤ 2 , 30 min

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

· For the permanent contact gloves made of the following materials are suitable:

Fluorocarbon rubber (Viton)

Vitoject (KCL, Art_No. 890)

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- As protection from splashes gloves made of the following materials are suitable:
- Not suitable are gloves made of the following materials:
- Eye protection:
- Body protection:

Butoject (KCL, Art_No. 897, 898)
Nitrile rubber, NBR
Camatril (KCL, Art_No. 730, 731, 732, 733)
Butyl rubber, BR

Butoject (KCL, Art_No. 897, 898)
Nitrile rubber, NBR
Camatril (KCL, 730, 731, 732, 733)
Butoject (KCL, Art_No. 897, 898)
Butyl rubber, BR

Leather gloves
Strong material gloves
Nitrile rubber, NBR



Tightly sealed goggles

Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:

Fluid

Colour:

According to product specification

Odour:

Specific type

Odour threshold:

Not determined.

pH-value:

Not applicable

Change in condition

Melting point/freezing point:

Undetermined.

Initial boiling point and boiling range: >200 °C

Flash point:

Not applicable.

Flammability (solid, gas):

Not applicable.

Decomposition temperature:

Not determined.

Auto-ignition temperature:

Product is not selfigniting.

Explosive properties:

Product does not present an explosion hazard.

Explosion limits:

Lower:

Not determined.

Upper:

Not determined.

Vapour pressure at 20 °C:

2 hPa

Density at 20 °C:

1.55 g/cm³ ([1.30 - 1.73 g/cm³])

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.

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· <u>Viscosity:</u>	
Dynamic at 20 °C:	10,000 mPas
Kinematic:	Not determined.
· <u>Solvent content:</u>	
Solids content:	46.0 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity	No further relevant information available.
· 10.2 Chemical stability	
· <u>Thermal decomposition / conditions to be avoided:</u>	No decomposition if used and stored according to specifications.
· 10.3 Possibility of hazardous reactions	Reacts with reducing agents. Reacts with strong acids. Reacts with strong alkali. Violent reactions with -NHx, -OH and -SH- groups.
· 10.4 Conditions to avoid	No further relevant information available.
· 10.5 Incompatible materials:	No further relevant information available.
· 10.6 Hazardous decomposition products:	Carbon monoxide and carbon dioxide Possible in traces.

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects	
· <u>Acute toxicity</u>	Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:**13463-67-7 titanium dioxide**

Oral	LD50	>5,010 mg/kg (rat)
	NOAEL	24,000 mg/kg (rat)
Dermal	LD50	>10,010 mg/kg (rbt)
	NOAEL	10 mg/m³ (rat)
Inhalative	LC50/48h	>100 mg/l (daphnia magna)

1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane

Oral	LD50	15,000 mg/kg (rat)
Dermal	LD50	23,000 mg/kg (rabbit)

Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)

933999-84-9 Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)

Oral	LD50	2,190 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)

· <u>Primary irritant effect:</u>	
· <u>Skin corrosion/irritation</u>	Causes skin irritation.
· <u>Serious eye damage/irritation</u>	Causes serious eye irritation.
· <u>Respiratory or skin sensitisation</u>	May cause an allergic skin reaction.
· <u>Additional toxicological information:</u>	
· <u>CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)</u>	
· <u>Germ cell mutagenicity</u>	Based on available data, the classification criteria are not met.

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- | | |
|---------------------------------|---|
| · <u>Carcinogenicity</u> | Based on available data, the classification criteria are not met. |
| · <u>Reproductive toxicity</u> | Based on available data, the classification criteria are not met. |
| · <u>STOT-single exposure</u> | Based on available data, the classification criteria are not met. |
| · <u>STOT-repeated exposure</u> | Based on available data, the classification criteria are not met. |
| · <u>Aspiration hazard</u> | Based on available data, the classification criteria are not met. |

SECTION 12: Ecological information**· 12.1 Toxicity****· Aquatic toxicity:****13463-67-7 titanium dioxide**

EC50	>1,000 mg/l (bacteria)
EC50/48h	>100 mg/l (daphnia magna)
EC50/72h	16 mg/l (Pseudokirchneriella subcapitata)
LC50/96h	>100 mg/l (Oncorhynchus mykiss)
	>1,000 mg/l (pimephales promelas)

1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane

IC50	>100 mg/l (BES)
EC10/16h	100 mg/l (pseudomonas putida)
EC50/48h	1.8 mg/l (daphnia magna)
NOEC/21d	0.3 mg/l (daphnia magna)
EC50/72h	11 mg/l (selenastrum capricornutum)
LC50/96h	2 mg/l (Oncorhynchus mykiss)

Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane

EC50/48h	2.55 mg/l (daphnia magna)
EC50/72h	1.8 mg/l (green alge)
LC50/96h	2.54 mg/l (piscis)

933999-84-9 Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)

EC50/48h	23.1 mg/l (green alge)
	47 mg/l (daphnia magna)
LC50/96h	30 mg/l (Leuciscus idus)

· 12.2 Persistence and degradability

No further relevant information available.

· 12.3 Bioaccumulative potential

No further relevant information available.

· 12.4 Mobility in soil

No further relevant information available.

· Ecotoxicological effects:**· Remark:**

Toxic for fish

· Additional ecological information:**· General notes:**

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

· 12.5 Results of PBT and vPvB assessment**· PBT:**

Not applicable.

· vPvB:

Not applicable.

· 12.6 Other adverse effects

No further relevant information available.

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SECTION 13: Disposal considerations**13.1 Waste treatment methods**Recommendation

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

Uncleaned packaging:Recommendation:

Disposal must be made according to official regulations.

Recommended cleansing agents:

Alcohol

SECTION 14: Transport information**14.1 UN-Number**ADR, IMDG, IATA

UN3082

14.2 UN proper shipping nameADR

3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis[4-(2,3-epoxypropoxy)phenyl]propane, Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane)

IMDG

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis[4-(2,3-epoxypropoxy)phenyl]propane, Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane), MARINE POLLUTANT

IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis[4-(2,3-epoxypropoxy)phenyl]propane, Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane)

14.3 Transport hazard class(es)ADRClass

9 (M6) Miscellaneous dangerous substances and articles.

Label

9

IMDG, IATAClass

9 Miscellaneous dangerous substances and articles.

Label

9

14.4 Packing groupADR, IMDG, IATA

III

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· 14.5 Environmental hazards:

- Marine pollutant: Yes
Symbol (fish and tree)
- Special marking (ADR): Symbol (fish and tree)
- Special marking (IATA): Symbol (fish and tree)

· 14.6 Special precautions for user

- Warning: Miscellaneous dangerous substances and articles.
- Hazard identification number (Kemler code): 90
- EMS Number: F-A,S-F
- Stowage Category A

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

Not applicable.

· Transport/Additional information:

- ADR
- Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

- IMDG
- Limited quantities (LQ) 5L
- Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

- UN "Model Regulation": UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE, REACTION MASS OF 2,2'-[METHYLENEBIS(4,1-PHENYLENEOXYMETHYLENE)]DIOXIRANE AND [2-({2-[4-(OXIRAN-2-YLMETHOXY)BENZYL]PHENOXY} METHYL)OXIRANE AND [2,2'-[METHYLENEBIS(2,1-PHENYLENEOXYMETHYLENE)]DIOXIRANE), 9, III

SECTION 15: Regulatory information**· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- Seveso category E2 Hazardous to the Aquatic Environment
- Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- National regulations:
- Information about limitation of use: Employment restrictions concerning pregnant and lactating women must be observed.
Employment restrictions concerning juveniles must be observed.
- Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- VOC EU 0.0 g/l

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· **15.2 Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out.

* **SECTION 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.

· Relevant phrases

H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H351 Suspected of causing cancer.
 H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.
 refer to Technical Data Sheet (TDS)

· Recommended restriction of use

· Department issuing SDS:

Laboratory

· Contact:

Elke Hake
 Fon ++49 (0)911 64296-59
 @mail E.Hake@akemi.de

· 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)
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
 ICAO: International Civil Aviation Organisation
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
 ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 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)
 DNEL: Derived No-Effect Level (REACH)
 PNEC: Predicted No-Effect Concentration (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 Skin Sens. 1: Skin sensitisation – Category 1
 Carc. 2: Carcinogenicity – Category 2
 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3
 REACH directive 1907/2006/EC

· Sources

· * Data compared to the previous version altered.

Adaptation in accordance with REACH directive 1907/2006/EC

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