

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



PRINTPERFEKT LAC FLEX

Version 1.1

Revision Date 29.07.2014

Print Date 15.09.2015

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

1.1 Product identifier

Trade name : PRINTPERFEKT LAC FLEX

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

Use of the Sub-
stance/Mixture : Textile auxiliary

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier

CHT R. BEITLICH GMBH
Bismarckstraße 102
72072 Tübingen
Germany
Tel.: +49(0)70 71 15 40
info@cht.com

BEZEMA AG
Kriessernstrasse 20
9462 Montlingen
Switzerland
Tel.: +41(0)71 763 88 11
bezema@bezema.com

Importer : -
-
-
-
-
-

Responsible Department : CHT R. BEITLICH GMBH
BEZEMA AG
Product Safety
msds@cht.com
product.safety@bezema.com

1.4 Emergency telephone number

Emergency telephone : +49(0)70 71 15 40 (Germany, 24 hours)
number : +41(0)71 763 88 11 (Switzerland, 24 hours)

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture.

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2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Additional Labelling:

EUH210 Safety data sheet available on request.

2.3 Other hazards

According to our present knowledge the product does not contain persistent, bioaccumulative and toxic substances (PBT substances) or very persistent and very bioaccumulative (vPvB substances) as defined in Annex XIII of the Regulation (EG) No 1907/2006 (REACH), respectively.

3. Composition/information on ingredients

3.2 Mixtures

Chemical nature : Dispersion based on polyacrylate and polyurethane, containing titanium dioxide.

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
2,2'-oxybisethanol	111-46-6 203-872-2 01- 2119457857- 21	Xn; R22	Acute Tox. 4; H302 STOT RE 2; H373	>= 2 - < 3

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. First aid measures

4.1 Description of first aid measures

General advice : Take off all contaminated clothing immediately.

If inhaled : Move to fresh air.
If symptoms persist, call a physician.

In case of skin contact : Wash off immediately with soap and plenty of water.
If symptoms persist, call a physician.

In case of eye contact : Immediately flush eye(s) with plenty of water.

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If symptoms persist, call a physician.

If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do NOT induce vomiting.
Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Risks : Refer to section 2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO₂)
Water spray jet
Dry powder
Foam

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Hazardous decomposition products formed under fire conditions.
Can be released in case of fire:
Carbon oxides
Nitrogen oxides (NO_x)
acrylic monomers

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Further information : In case of fire do not inhale smoke, conflagration gases and steams.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
The product itself does not burn.
The residual polymer after volatilizing the watery phase is combustible.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Contaminated surfaces will be extremely slippery.

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6.2 Environmental precautions

Environmental precautions : The product should not be allowed to enter drains, water courses or the soil.
Pay attention to local or official regulations.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Close drains (risk of blockage caused by polymer precipitation).
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Clean contaminated surface thoroughly.
Dispose of in accordance with local regulations.

6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.
Advice on protection against fire and explosion : No special protective measures against fire required.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Do always store in containers which correspond to the original ones.
Keep container tightly closed.
Inappropriate material for containers and conduit:
Metals
Suitable material for containers and conduit:
Polyethylene

Further information on storage conditions : Stir well before use.
Protect from temperatures below + 5 °C.
Protect from temperatures over + 40 °C.

Advice on common storage : No special precautions required.

German storage class : 12 Non Combustible Liquids

7.3 Specific end use(s)

Note : Consult the technical guidelines for the use of this substance/mixture.

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8. Exposure controls/personal protection

8.1 Control parameters

DNEL

2,2'-oxybisethanol

: End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 106 mg/kg

End Use: Consumers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 53 mg/kg

End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Long-term local effects
Value: 12 mg/m³

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term local effects
Value: 60 mg/m³

PNEC

2,2'-oxybisethanol

: Soil
Value: 1,53 mg/kg

Waste water treatment plant
Value: 199,5 mg/kg

Fresh water sediment
Value: 20,9 mg/kg

Intermittent use/release
Value: 10 mg/l

Marine water
Value: 1 mg/l

Fresh water
Value: 10 mg/l

8.2 Exposure controls

Engineering measures

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Solids with occupational exposure limits in liquid preparations do not cause an exposure in the work-place, because they are not present in a respirable form. Exposure can occur in the form of aerosols or after drying of the liquid the solids remain, possibly in a finely dispersed form.
Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Respiratory protection : In case the work place is not ventilated sufficiently and during spray processing, it is necessary to wear respiratory protective equipment.
Recommended Filter type:
Combination filter A/P

Hand protection : Nitrile rubber
Protective index Class 6
Break through time: > 480 min
Glove thickness: $\geq 0,35$ mm

: Neoprene
Protective index Class 6
Break through time: > 480 min
Glove thickness: $\geq 0,5$ mm

: The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.
The obtained break through times according to EN 374 Part III are not measured under normal operating conditions. Therefore a maximum usage time of 50% of the break through time is recommended.

Eye protection : Safety glasses

Skin and body protection : Wear suitable protective clothing.

Hygiene measures : Avoid contact with skin, eyes and clothing.
Do not breathe vapours, aerosols.
Take off all contaminated clothing immediately.
Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls

General advice : The product should not be allowed to enter drains, water courses or the soil.
Pay attention to local or official regulations.

9. Physical and chemical properties

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9.1 Information on basic physical and chemical properties

Appearance	: paste
Colour	: white
Odour	: characteristic
Flash point	: Not applicable
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Oxidizing properties	: Not applicable
Auto-ignition temperature	: not auto-flammable
pH	: 7,6 - 10,0 at 20 °C (undiluted)
Melting point/range	: No data available
Boiling point/boiling range	: ca. 100 °C
Vapour pressure	: ca. 23 hPa Water
Density	: ca. 1 g/cm ³ at 20 °C
Water solubility	: miscible
Partition coefficient: n-octanol/water	: Not applicable
Viscosity, dynamic	: 9.500 - 15.750 mPa.s at 20 °C Brookfield RVT, spindle 5, 20 rpm
Relative vapour density	: Not applicable
Evaporation rate	: Not applicable

9.2 Other information

Conductivity	: Not determined
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10. Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : Not applicable

10.5 Incompatible materials

Materials to avoid : Not applicable

10.6 Hazardous decomposition products

Hazardous decomposition products : No decomposition if stored and applied as directed.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg
Method: Calculation method

Acute oral toxicity
2,2'-oxybisethanol : LD50: 12.565 mg/kg
Species: Rat

LD50: 1.120 mg/kg
Species: Humans

Acute dermal toxicity : No data is available on the product itself.

Acute dermal toxicity
2,2'-oxybisethanol : LD50: 13.300 mg/kg
Species: Rabbit

Skin corrosion/irritation

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Skin irritation : Prolonged skin contact may cause skin irritation.

Skin irritation
2,2'-oxybisethanol : Species: Rabbit
Result: No skin irritation
Method: OECD Test Guideline 404

Serious eye damage/eye irritation

Eye irritation : Contact with eyes may cause irritation.

Eye irritation
2,2'-oxybisethanol : Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405

Respiratory or skin sensitisation

Sensitisation : No known sensitising effect.

Sensitisation
2,2'-oxybisethanol : Maximisation Test (GPMT)
Species: Guinea pig
Result: Does not cause skin sensitisation.

Germ cell mutagenicity

Assessment
2,2'-oxybisethanol : No indication for a mutagenic effect; in vitro and in vivo examinations.

Carcinogenicity

Assessment
2,2'-oxybisethanol : Animal testing did not show any carcinogenic effects.

Reproductive toxicity

Assessment
2,2'-oxybisethanol : Animal testing did not show any effects on fertility.

Teratogenicity

Assessment
2,2'-oxybisethanol : Animal testing did not show any effects on foetal development.

Target Organ Systemic Toxicant - Repeated exposure

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2,2'-oxybisethanol : Exposure routes: Ingestion
Target Organs: Kidney
May cause damage to organs through prolonged or repeated exposure.

Further information : If used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12. Ecological information

12.1 Toxicity

Toxicity to fish : No data is available on the product itself.

Toxicity to fish
2,2'-oxybisethanol : LC50: 75.200 mg/l
Exposure time: 96 h
Species: Pimephales promelas (fathead minnow)

Toxicity to daphnia and other aquatic invertebrates : EC50: > 100 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 202
Argument by analogy

Toxicity to daphnia and other aquatic invertebrates
2,2'-oxybisethanol : EC50: > 10.000 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
Method: DIN 38412

Toxicity to algae : No data is available on the product itself.

Toxicity to bacteria : EC50: > 1.000 mg/l
Species: activated sludge
Method: Retarded respiration test (OECD 209)
Argument by analogy

12.2 Persistence and degradability

Biodegradability : DOC measuring
> 70 %
Method: OECD 302 B (elimination)

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Argument by analogy
The product is "inherently biodegradable" according to the criteria of the OECD.

Physico-chemical removability : Can be eliminated from water by precipitation.

12.3 Bioaccumulative potential

Bioaccumulation : No data is available on the product itself.

Bioaccumulation
2,2'-oxybisethanol : Species: Leuciscus idus (Golden orfe)
Exposure time: 3 d
Bioconcentration factor (BCF): 100
Does not bioaccumulate.

12.4 Mobility in soil

Mobility : No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Adsorbed organic bound halogens (AOX) : The product does not increase the AOX-value of the waste water.

Additional ecological information : According to our knowledge, the product does not contain heavy metals and other compounds of EC directive 2000/60 EC.

13. Disposal considerations

13.1 Waste treatment methods

Product : Pay attention to local or official regulations.

Contaminated packaging : Pay attention to local or official regulations.

14. Transport information

14.1 UN number

ADR : Not dangerous goods
IMDG : Not dangerous goods

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IATA : Not dangerous goods

14.2 Proper shipping name

ADR : Not dangerous goods
IMDG : Not dangerous goods
IATA : Not dangerous goods

14.3 Transport hazard class

ADR : Not dangerous goods
IMDG : Not dangerous goods
IATA : Not dangerous goods

14.4 Packing group

ADR : Not dangerous goods
IMDG : Not dangerous goods
Segregation group : -
IATA : Not dangerous goods

14.5 Environmental hazards

ADR : Not dangerous goods
IMDG : Not dangerous goods
IATA : Not dangerous goods

14.6 Special precautions for user

see chapter 6 - 8

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks : Not applicable

15. Regulatory information

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

Components In accordance with Regulation (EC) No. 648/2004 on detergents : This product is not subject to the Regulation on Detergents.

15.2 Chemical Safety Assessment

not required

16. Other information

Full text of R-phrases referred to under sections 2 and 3

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R22 Harmful if swallowed.

Full text of H-Statements referred to under sections 2 and 3.

H302 Harmful if swallowed.

H373 May cause damage to organs through prolonged or repeated exposure if swallowed.

Further information

Other information : This data sheet contains changes from the previous version in section(s):
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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.