

Safety Data Sheet dated 29/01/2019, version 2

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

1.1. Product identifier

Mixture identification:

Trade name: LEGNOCOL EP (A+B)

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

Recommended use:

Two-component polyurethane adhesive for wooden floors: **COMPONENT A**

Uses advised against:

All uses not included in the recommended uses

1.3. Details of the supplier of the safety data sheet

Company:

COLMEF SRL

Ponte d'Assi

06024 - GUBBIO (PG)

Tel. +39-075-923561 (8:00-13:00;14:30-18:00)

Competent person responsible for the safety data sheet:

ufficiotecnico@colmef.com

1.4. Emergency telephone number

COLMEF SRL Tel. +39-075-923561 (8:00-13:00;14:30-18:00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Symbols:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

None.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No occupational exposure limit available

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles certified in accordance with EN 166, don't use eye lens.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber. certified in accordance with EN 374, part 1,2,3.

Respiratory protection:

In case of insufficient ventilation or prolonged exposure wear suitable respiratory protection equipment certified in accordance with EN 149-FFP2.

The life of the protection devices against the chemical agents depends on various factors (the way they are used, climatic factors and storage conditions), that can reduce also the life foreseen by CE standards.

Always consult the manufacturer's instructions.

Instruct the worker in the correct use of the equipment.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|-----------|
| Appearance | PASTE |
| Colour: | WHITE |
| Odour: | N.A. |
| Odour threshold: | N.A. |
| pH: | N.A. |
| Melting point / freezing point: | N.A. |
| Initial boiling point and boiling range: | N.A. |
| Solid/gas flammability: | N.A. |
| Upper/lower flammability or explosive limits: | N.A. |
| Vapour density: | N.A. |
| Flash point: | > 100 ° C |
| Evaporation rate: | N.A. |
| Vapour pressure: | N.A. |
| Relative density: | N.A. |
| Solubility in water: | N.A. |
| Solubility in oil: | N.A. |
| Apparent density (g/cm ³): | 1.60 |
| Auto-ignition temperature: | N.A. |

| | |
|--------------------------------------|-------------|
| Decomposition temperature: | N.A. |
| Viscosity: | 80000 mPa·s |
| Explosive properties: | N.A. |
| Oxidizing properties: | N.A. |
| 9.2. Other information | |
| Miscibility: | N.A. |
| Fat Solubility: | N.A. |
| Conductivity: | N.A. |
| Substance Groups relevant properties | N.A. |

SECTION 10: Stability and reactivity

- 10.1. Reactivity
Stable under normal conditions
- 10.2. Chemical stability
Stable under normal conditions
- 10.3. Possibility of hazardous reactions
None
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
None in particular.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
Toxicological information of the substance:
N.A.

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

- 12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
N.A.
- 12.2. Persistence and degradability
N.A.
- 12.3. Bioaccumulative potential
N.A.
- 12.4. Mobility in soil
N.A.
- 12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None
- 12.6. Other adverse effects
None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number

14.2. UN proper shipping name

ADR-Shipping Name: --

IATA-Shipping Name: --

IMDG-Shipping Name: --

14.3. Transport hazard class(es) --

14.4. Packing group --

14.5. Environmental hazards --

14.6. Special precautions for user --

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

N.A.

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 453/2010 (Annex II)

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

None

Where applicable, refer to the following regulatory provisions :

Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.

Regulation (EC) nr 648/2004 (detergents).

1999/13/EC (VOC directive)

Provisions related to directives 82/501/EC(Seveso), 96/82/EC(Seveso II):

N.A.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification

SECTION 3: Composition/information on ingredients

SECTION 4: First aid measures

SECTION 6: Accidental release measures

SECTION 7: Handling and storage

SECTION 8: Exposure controls/personal protection

SECTION 9: Physical and chemical properties

SECTION 11: Toxicological information

SECTION 12: Ecological information

SECTION 15: Regulatory information

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
Nostrand Reinold

CCNL - Appendix 1

Insert further consulted bibliography

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of
Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical
Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of
Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport
Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"
(ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods
by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day.
(ACGIH Standard).

WGK: German Water Hazard Class.

Safety Data Sheet dated 29/01/2019, version 2



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

1.1. Product identifier

Mixture identification:

Trade name: LEGNOCOL EP (A+B)

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

Recommended use:

Two-component polyurethane adhesive for wooden floors: **COMPONENT B**

Uses advised against:

All uses not included in the recommended uses

1.3. Details of the supplier of the safety data sheet

Company:

COLMEF SRL

Ponte d'Assi

06024 - GUBBIO (PG)

Tel. +39-075-923561 (8:00-13:00;14:30-18:00)

Competent person responsible for the safety data sheet:

ufficiotecnico@colmef.com









1.4. Emergency telephone number

COLMEF SRL Tel. +39-075-923561 (8:00-13:00;14:30-18:00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

-  Warning, Acute Tox. 4, Harmful if inhaled.
-  Warning, Skin Irrit. 2, Causes skin irritation.
-  Warning, Eye Irrit. 2, Causes serious eye irritation.
-  Danger, Resp. Sens. 1, May cause allergy or asthma symptoms or breathing difficulties if inhaled.
-  Warning, Skin Sens. 1, May cause an allergic skin reaction.
-  Warning, Carc. 2, Suspected of causing cancer.
-  Warning, STOT SE 3, May cause respiratory irritation.
-  Warning, STOT RE 2, May cause damage to organs through prolonged or repeated exposure.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Symbols:



Danger

Hazard statements:

- H332 Harmful if inhaled.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H317 May cause an allergic skin reaction.
- H351 Suspected of causing cancer.
- H335 May cause respiratory irritation.
- H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements:

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P321 Specific treatment (see on this label).
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Contents

Polymethylene polyphenyl isocyanate
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate;
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate;

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards














SECTION 3: Composition/information on ingredients











3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

| Qty | Name | Ident. Number | Classification |
|------------|--|--|--|
| 50% - 100% | Polymethylene polyphenyl isocyanate | CAS: 9016-87-9 EC: 247-714-0 |  3.1/4/Inhal Acute Tox. 4 H332  3.3/2 Eye Irrit. 2 H319  3.8/3 STOT SE 3 H335  3.2/2 Skin Irrit. 2 H315  3.4.1/1-1A-1B Resp. Sens. 1,1A,1B H334  3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317  3.9/2 STOT RE 2 H373 |
| 5% - 10% | 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate; | Index number: 615-005-00-9 CAS: 26447-40-5 EC: 247-714-0 |  3.1/4/Inhal Acute Tox. 4 H332  3.3/2 Eye Irrit. 2 H319  3.8/3 STOT SE 3 H335  3.2/2 Skin Irrit. 2 H315  3.4.1/1-1A-1B Resp. Sens. 1,1A,1B H334  3.4.2/1-1A-1B Skin Sens. |

| | | | |
|---------|--|--|---|
| | | | 1,1A,1B H317  3.9/2 STOT RE 2 H373  3.6/2 Carc. 2 H351 |
| 3% - 7% | 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate; | Index number: 615-005-00-9 CAS: 101-68-8 EC: 202-966-0 |  3.1/4/Inhal Acute Tox. 4 H332  3.3/2 Eye Irrit. 2 H319  3.8/3 STOT SE 3 H335  3.2/2 Skin Irrit. 2 H315  3.4.1/1-1A-1B Resp. Sens. 1,1A,1B H334  3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317  3.9/2 STOT RE 2 H373  3.6/2 Carc. 2 H351 |

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment.
Remove all sources of ignition.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Provide adequate ventilation.
Use appropriate respiratory protection.
See protective measures under point 7 and 8.
- 6.2. Environmental precautions
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up
Wash with plenty of water.
- 6.4. Reference to other sections
See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
Use localized ventilation system.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Adequately ventilated premises.
- 7.3. Specific end use(s)
None in particular

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
Difenilmetanodiisocianato - CAS: 9016-87-9
ACGIH - LTE: 0.005 ppm
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate; - CAS: 101-68-8
TLV TWA - 0,01 ppm - 0,05 mg/m³
- DNEL Exposure Limit Values
N.A.
- PNEC Exposure Limit Values
N.A.
- 8.2. Exposure controls
Eye protection:
Use close fitting safety goggles certified in accordance with EN 166, don't use eye lens.
- Protection for skin:
Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber. certified in accordance with EN 374, part 1,2,3.

Respiratory protection:

In case of insufficient ventilation or prolonged exposure wear suitable respiratory protection equipment certified in accordance with EN 149-FFP2.

The life of the protection devices against the chemical agents depends on various factors (the way they are used, climatic factors and storage conditions), that can reduce also the life foreseen by CE standards.

Always consult the manufacturer's instructions.

Instruct the worker in the correct use of the equipment.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|--------------|
| Appearance | FLUID LIQUID |
| Colour: | LIGHT |
| Odour: | N.A. |
| Odour threshold: | N.A. |
| pH: | N.A. |
| Melting point / freezing point: | N.A. |
| Initial boiling point and boiling range: | N.A. |
| Solid/gas flammability: | N.A. |
| Upper/lower flammability or explosive limits: | N.A. |
| Vapour density: | N.A. |
| Flash point: | 220 ° C |
| Evaporation rate: | N.A. |
| Vapour pressure: | N.A. |
| Relative density: | N.A. |
| Solubility in water: | N.A. |
| Solubility in oil: | N.A. |
| Apparent density (g/cm ³): | 1.23 |
| Auto-ignition temperature: | N.A. |
| Decomposition temperature: | N.A. |
| Viscosity: | 2600 mPa·s |
| Explosive properties: | N.A. |
| Oxidizing properties: | N.A. |

9.2. Other information

| | |
|--------------------------------------|------|
| Miscibility: | N.A. |
| Fat Solubility: | N.A. |
| Conductivity: | N.A. |
| Substance Groups relevant properties | N.A. |

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:

N.A.

Toxicological information of the main substances found in the mixture:

N.A.

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

N.A.

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number

14.2. UN proper shipping name

ADR-Shipping Name: --

IATA-Shipping Name: --

IMDG-Shipping Name: --

14.3. Transport hazard class(es) --

14.4. Packing group --

14.5. Environmental hazards --

14.6. Special precautions for user --

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

N.A.

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 453/2010 (Annex II)
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
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Regulation (EU) n. 605/2014 (ATP 6 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:
None

Where applicable, refer to the following regulatory provisions :
Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.
Regulation (EC) nr 648/2004 (detergents).
1999/13/EC (VOC directive)

Provisions related to directives 82/501/EC(Seveso), 96/82/EC(Seveso II):
N.A.

15.2. Chemical safety assessment
No

SECTION 16: Other information

Full text of phrases referred to in Section 3:
H332 Harmful if inhaled.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H315 Causes skin irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H373 May cause damage to organs through prolonged or repeated exposure if inhaled.
H351 Suspected of causing cancer.

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification
SECTION 3: Composition/information on ingredients
SECTION 4: First aid measures
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This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
Nostrand Reinold
CCNL - Appendix 1

Insert further consulted bibliography

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This MSDS cancels and replaces any preceding release.

| | |
|-------------|--|
| ADR: | European Agreement concerning the International Carriage of Dangerous Goods by Road. |
| CAS: | Chemical Abstracts Service (division of the American Chemical Society). |
| CLP: | Classification, Labeling, Packaging. |
| DNEL: | Derived No Effect Level. |
| EINECS: | European Inventory of Existing Commercial Chemical Substances. |
| GefStoffVO: | Ordinance on Hazardous Substances, Germany. |
| GHS: | Globally Harmonized System of Classification and Labeling of Chemicals. |
| IATA: | International Air Transport Association. |
| IATA-DGR: | Dangerous Goods Regulation by the "International Air Transport Association" (IATA). |
| ICAO: | International Civil Aviation Organization. |
| ICAO-TI: | Technical Instructions by the "International Civil Aviation Organization" (ICAO). |
| IMDG: | International Maritime Code for Dangerous Goods. |
| INCI: | International Nomenclature of Cosmetic Ingredients. |
| KSt: | Explosion coefficient. |
| LC50: | Lethal concentration, for 50 percent of test population. |
| LD50: | Lethal dose, for 50 percent of test population. |
| LTE: | Long-term exposure. |
| PNEC: | Predicted No Effect Concentration. |
| RID: | Regulation Concerning the International Transport of Dangerous Goods by Rail. |
| STE: | Short-term exposure. |
| STEL: | Short Term Exposure limit. |
| STOT: | Specific Target Organ Toxicity. |
| TLV: | Threshold Limiting Value. |
| TWATLV: | Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard). |
| WGK: | German Water Hazard Class. |