









## Safety Data Sheet dated 23/12/2019, version 1

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

- 1.1. Product identifier  
Mixture identification:  
Trade name: SPINNER DOLPHIN EPOXY  
Trade code: 15603
- 1.2. Relevant identified uses of the substance or mixture and uses advised against  
Recommended use:  
Exclusive use professional user / industrial user.
- 1.3. Details of the supplier of the safety data sheet  
HIJOS DE A. FERRER DALMAU, S.A.,  
Rosalia de Castro, 21 08025 Barcelona SPAIN  
Competent person responsible for the safety data sheet:  
[jaime@ferrer-dalmau.com](mailto:jaime@ferrer-dalmau.com)
- 1.4. Emergency telephone number  
Emergency Tel. +34 934874015 (office hours)

### SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture  
EC regulation criteria 1272/2008 (CLP)
-  Warning, Acute Tox. 4, Harmful in contact with skin.
  -  Warning, Skin Irrit. 2, Causes skin irritation.
  -  Warning, Acute Tox. 4, Harmful if inhaled.
  -  Warning, Eye Irrit. 2, Causes serious eye irritation.
  -  Warning, Skin Sens. 1, May cause an allergic skin reaction.
  -  Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

- H312+H332 Harmful in contact with skin or if inhaled.
- 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.

Precautionary statements:



# SPINNER DOLPHIN

## EPOXY

P264 Wash with water, Thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Special Provisions:

None

Contains

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

1,4-bis(2,3 epoxypropoxy)butane; butanedioldiglycidyl ether

Sebacato de bis(1,2,2,6,6-pentametil-4-piperidilo)

Sebacato de metilo y 1,2,2,6,6-pentametil-4-piperidilo

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   |
|------------------|--|--|--|
| >= 70% - < 80%   | reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) | Index number: 603-074-00-8<br>CAS: 25068-38-6<br>EC: 500-033-5 | 3.3/2 Eye Irrit. 2 H319<br>3.2/2 Skin Irrit. 2 H315<br>3.4.2/1-1A-1B Skin Sens. 1, 1A, 1B H317<br>4.1/C2 Aquatic Chronic 2 H411<br>Specific Concentration Limits:<br>C >= 5%: Eye Irrit. 2 H319<br>C >= 5%: Skin Irrit. 2 H315 |
| >= 10% - < 12.5% | oxirane, mono[(C12-14-alkyloxy)methyl] derivs.   | Index number: 603-103-00-4<br>CAS: 68609-97-2<br>EC: 271-846-8 | 3.2/2 Skin Irrit. 2 H315<br>3.4.2/1-1A-1B Skin Sens. 1, 1A, 1B H317  |
| >= 7% - < 10%    | 1,4-bis(2,3 epoxypropoxy)butane; butanedioldiglycidyl ether  | Index number: 603-072-00-7<br>CAS: 2425-79-8<br>EC: 219-371-7  | 3.3/2 Eye Irrit. 2 H319<br>3.2/2 Skin Irrit. 2 H315<br>3.4.2/1-1A-1B Skin Sens. 1, 1A, 1B H317<br>3.1/4/Dermal Acute Tox. 4 H312<br>3.1/4/Inhal Acute Tox. 4 H332  |
| >= 0.5% - < 1%   | Sebacato de bis(1,2,2,6,6-pentametil-4-piperidilo)   | CAS: 41556-26-7<br>EC: 255-437-1                               | 4.1/A1 Aquatic Acute 1 H400<br>4.1/C1 Aquatic Chronic 1 H410   |



Safety Data Sheet

# SPINNER DOLPHIN

## EPOXY

|                   |   |                                  |   |
|-------------------|---|----------------------------------|---|
|                   |   |                                  | 3.4.2/1 Skin Sens. 1 H317   |
| >= 0.5% -<br>< 1% | Sebacato de metilo y<br>1,2,2,6,6-pentametil-4-<br>piperidilo | CAS: 82919-37-7<br>EC: 280-060-4 | 4.1/A1 Aquatic Acute 1 H400<br>4.1/C1 Aquatic Chronic 1 H410<br>3.4.2/1 Skin Sens. 1 H317 |

## 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:

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media:

Spray water.

Carbon dioxide (CO<sub>2</sub>).

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.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.



Safety Data Sheet

# SPINNER DOLPHIN

EPOXY

- 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

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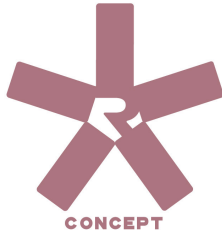
## SECTION 7: Handling and storage

- 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

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## SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters  
No occupational exposure limit available
- DNEL Exposure Limit Values
- Sebacato de bis(1,2,2,6,6-pentametil-4-piperidilo) - CAS: 41556-26-7  
Worker Professional: 2.5 mg/kg - Consumer: 1.25 mg/kg - Exposure: Human Dermal -  
Frequency: Short Term, systemic effects  
Worker Professional: 2.5 mg/kg - Consumer: 1.25 mg/kg - Exposure: Human Dermal -  
Frequency: Long Term, systemic effects  
Worker Professional: 2.35 mg/m<sup>3</sup> - Consumer: 0.58 mg/m<sup>3</sup> - Exposure: Human Inhalation -  
Frequency: Short Term, systemic effects  
Worker Professional: 2.35 mg/m<sup>3</sup> - Consumer: 0.58 mg/m<sup>3</sup> - Exposure: Human Inhalation -  
Frequency: Long Term, systemic effects  
Worker Professional: 2.35 mg/m<sup>3</sup> - Consumer: 0.58 mg/m<sup>3</sup> - Exposure: Human Inhalation -  
Frequency: Short Term, local effects
- Sebacato de metilo y 1,2,2,6,6-pentametil-4-piperidilo - CAS: 82919-37-7  
Worker Professional: 2.5 mg/kg - Consumer: 1.25 mg/kg - Exposure: Human Dermal -  
Frequency: Short Term, systemic effects  
Worker Professional: 2.35 mg/m<sup>3</sup> - Consumer: 0.58 mg/m<sup>3</sup> - Exposure: Human Inhalation -  
Frequency: Short Term, systemic effects  
Worker Professional: 2.5 mg/kg - Consumer: 1.25 mg/kg - Exposure: Human Dermal -  
Frequency: Long Term, systemic effects  
Worker Professional: 2.35 mg/m<sup>3</sup> - Consumer: 0.58 mg/m<sup>3</sup> - Exposure: Human Inhalation -  
Frequency: Long Term, systemic effects



Safety Data Sheet

# SPINNER DOLPHIN

EPOXY

Worker Professional: 2.35 mg/cm<sup>3</sup> - Consumer: 0.58 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, local effects  
Consumer: 1.25 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects  
Consumer: 1.25 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

## PNEC Exposure Limit Values

Sebacato de bis(1,2,2,6,6-pentametil-4-piperidilo) - CAS: 41556-26-7

Target: Fresh Water - Value: 0.0022 mg/l

Target: Marine water - Value: 0.00022 mg/l

Target: Freshwater sediments - Value: 1.05 mg/kg

Target: Marine water sediments - Value: 0.11 mg/kg

Target: Plant wastewater treatment - Value: 1 mg/l

Target: Soil (agricultural) - Value: 0.21 mg/kg

Target: Intermittent / sporadic - Value: 0.009 mg/l

Sebacato de metilo y 1,2,2,6,6-pentametil-4-piperidilo - CAS: 82919-37-7

Target: Water - Value: 0.0022 mg/l

Target: Marine water - Value: 0.00022 mg/l

Target: Freshwater sediments - Value: 1.05 mg/kg

Target: Marine water sediments - Value: 0.11 mg/kg

Target: Plant wastewater treatment - Value: 1 mg/l

Target: Soil (agricultural) - Value: 0.21 mg/kg

Target: Intermittent / sporadic - Value: 0.009 mg/l

## 8.2. Exposure controls

### Eye protection:

Eye glasses with side protection.

### 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.

### Respiratory protection:

Use adequate protective respiratory 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

| Properties                                    | Value           | Method: | Notes: |
|---|-----------------|---------|--------|
| Appearance and colour:                        | Viscous, yellow | --      | --     |
| Odour:  | Characteristic  | --      | --     |
| Odour threshold:                              | N.A.            | --      | --     |
| pH:   | N.A.            | --      | --     |
| Melting point / freezing point:               | N.A.            | --      | --     |
| Initial boiling point and boiling range:      | 294°C           | --      | --     |
| Flash point:                                  | > 60 ° C        | --      | --     |
| Evaporation rate:                             | N.A.            | --      | --     |
| Solid/gas flammability:                       | N.A.            | --      | --     |
| Upper/lower flammability or explosive limits: | N.A.            | --      | --     |
| Vapour pressure:                              | 6,118E-2 Pa     | --      | --     |



Safety Data Sheet

# SPINNER DOLPHIN

## EPOXY

|  |              |    |    |
|--|--------------|----|----|
|  | 20°C         |    |    |
| Vapour density:                          | N.A.         | -- | -- |
| Relative density:                        | 1.102        | -- | -- |
| Solubility in water:                     | N.A.         | -- | -- |
| Solubility in oil:                       | N.A.         | -- | -- |
| Partition coefficient (n-octanol/water): | N.A.         | -- | -- |
| Auto-ignition temperature:               | 260°C °C     | -- | -- |
| Decomposition temperature:               | N.A.         | -- | -- |
| Viscosity:                               | 500 - 900 cP | -- | -- |
| Explosive properties:                    | N.A.         | -- | -- |
| Oxidizing properties:                    | N.A.         | -- | -- |

### 9.2. Other information

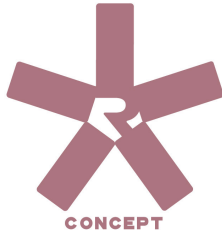
| Properties                           | Value | Method: | Notes: |
|--------------------------------------|-------|---------|--------|
| Miscibility:                         | N.A.  | --      | --     |
| Fat Solubility:                      | N.A.  | --      | --     |
| Conductivity:                        | 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 product:  
SPINNER DOLPHIN EPOXY
  - a) acute toxicity  
The product is classified: Acute Tox. 4 H312; Acute Tox. 4 H332  
ATEmix - Dermal 12222,2 mg/kg  
ATEmix - Inhalation (Mist) 16,6667 mg/l
  - b) skin corrosion/irritation  
The product is classified: Skin Irrit. 2 H315
  - c) serious eye damage/irritation  
The product is classified: Eye Irrit. 2 H319
  - d) respiratory or skin sensitisation  
The product is classified: Skin Sens. 1 H317
  - e) germ cell mutagenicity  
Not classified  
Based on available data, the classification criteria are not met



# SPINNER DOLPHIN

EPOXY

- f) carcinogenicity
    - Not classified
    - Based on available data, the classification criteria are not met
  - g) reproductive toxicity
    - Not classified
    - Based on available data, the classification criteria are not met
  - h) STOT-single exposure
    - Not classified
    - Based on available data, the classification criteria are not met
  - i) STOT-repeated exposure
    - Not classified
    - Based on available data, the classification criteria are not met
  - j) aspiration hazard
    - Not classified
    - Based on available data, the classification criteria are not met
- Toxicological information of the main substances found in the product:  
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. - CAS: 68609-97-2
- a) acute toxicity:
    - Test: LD50 - Route: Oral - Species: Rat 17100 mg/kg
    - Test: LD50 - Route: Oral 19200 mg/kg
  - Sebacato de bis(1,2,2,6,6-pentametil-4-piperidilo) - CAS: 41556-26-7
  - a) acute toxicity:
    - Test: LD50 - Route: Oral - Species: Rat 2615 mg/kg

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## SECTION 12: Ecological information

- 12.1. Toxicity
  - Adopt good working practices, so that the product is not released into the environment.
  - SPINNER DOLPHIN EPOXY
  - The product is classified: Aquatic Chronic 2 - H411
  - Sebacato de bis(1,2,2,6,6-pentametil-4-piperidilo) - CAS: 41556-26-7
    - a) Aquatic acute toxicity:
      - Endpoint: LC50 - Species: Fish 0.97 mg/l - Duration h: 96
      - Endpoint: EC50 - Species: Daphnia 20 mg/l - Duration h: 24
  - Sebacato de metilo y 1,2,2,6,6-pentametil-4-piperidilo - CAS: 82919-37-7
    - a) Aquatic acute toxicity:
      - Endpoint: LC50 - Species: Fish 0.1-1 mg/l - Duration h: 96
      - Endpoint: EC50 - Species: Daphnia 0.1-1 mg/l
      - Endpoint: EC50 - Species: Algae 0.1-1 mg/l
- 12.2. Persistence and degradability
  - None
- 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

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## 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.



Safety Data Sheet

# SPINNER DOLPHIN

EPOXY

## SECTION 14: Transport information

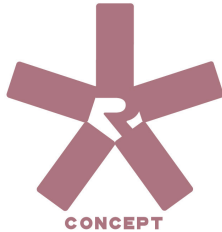


- 14.1. UN number  
ADR-UN Number: 3082  
IATA-UN Number: 3082  
IMDG-UN Number: 3082
- 14.2. UN proper shipping name  
ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700))  
IATA-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700))  
IMDG-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700))
- 14.3. Transport hazard class(es)  
ADR-Class: 9  
ADR - Hazard identification number: 90  
IATA-Class: 9  
IATA-Label: 9  
IMDG-Class: 9
- 14.4. Packing group  
ADR-Packing Group: III  
IATA-Packing group: III  
IMDG-Packing group: III
- 14.5. Environmental hazards  
ADR-Environmental Pollutant: No  
IMDG-Marine pollutant: No
- 14.6. Special precautions for user  
ADR-Subsidiary risks: -  
ADR-S.P.: 274 335 375 601  
ADR-Transport category (Tunnel restriction code): 3 (-)  
IATA-Passenger Aircraft: 964  
IATA-Subsidiary risks: -  
IATA-Cargo Aircraft: 964  
IATA-S.P.: A97 A158 A197  
IATA-ERG: 9L  
IMDG-EmS: F-A , S-F  
IMDG-Subsidiary risks: -  
IMDG-Stowage and handling: Category A  
IMDG-Segregation: -
- 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)





# SPINNER DOLPHIN

EPOXY

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. 2015/830  
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)  
Regulation (EU) n. 2015/1221 (ATP 7 CLP)  
Regulation (EU) n. 2016/918 (ATP 8 CLP)  
Regulation (EU) n. 2016/1179 (ATP 9 CLP)  
Regulation (EU) n. 2017/776 (ATP 10 CLP)

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

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)  
Regulation (EC) nr 648/2004 (detergents).  
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1  
Product belongs to category: E2

## 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

## SECTION 16: Other information

Full text of phrases referred to in Section 3:

H319 Causes serious eye irritation.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H411 Toxic to aquatic life with long lasting effects.  
H312 Harmful in contact with skin.  
H332 Harmful if inhaled.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

| Hazard class and hazard category | Code          | Description                                    |
|----------------------------------|---------------|--|
| Acute Tox. 4                     | 3.1/4/Dermal  | Acute toxicity (dermal), Category 4            |
| Acute Tox. 4                     | 3.1/4/Inhal   | Acute toxicity (inhalation), Category 4        |
| Skin Irrit. 2                    | 3.2/2         | Skin irritation, Category 2                    |
| Eye Irrit. 2                     | 3.3/2         | Eye irritation, Category 2                     |
| Skin Sens. 1                     | 3.4.2/1       | Skin Sensitisation, Category 1                 |
| Skin Sens. 1,1A,1B               | 3.4.2/1-1A-1B | Skin Sensitisation, Category 1,1A,1B           |
| Aquatic Acute 1                  | 4.1/A1        | Acute aquatic hazard, category 1               |
| Aquatic Chronic 1                | 4.1/C1        | Chronic (long term) aquatic hazard, category 1 |
| Aquatic Chronic 2                | 4.1/C2        | Chronic (long term) aquatic hazard, category 2 |



**SPINNER  
DOLPHIN**  
EPOXY

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

| Classification according to Regulation (EC) Nr. 1272/2008 | Classification procedure |
|---|--------------------------|
| Acute Tox. 4, H312  | Calculation method       |
| Skin Irrit. 2, H315                                       | Calculation method       |
| Acute Tox. 4, H332  | Calculation method       |
| Eye Irrit. 2, H319  | Calculation method       |
| Skin Sens. 1, H317  | Calculation method       |
| Aquatic Chronic 2, H411                                   | Calculation method       |

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

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. |
| ATE:        | Acute Toxicity Estimate  |
| ATEmix:     | Acute toxicity Estimate (Mixtures)   |
| 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.                                      |
| PNEC:       | Predicted No Effect Concentration.   |
| RID:        | Regulation Concerning the International Transport of Dangerous Goods by Rail.        |
| STEL:       | Short Term Exposure limit.   |
| STOT:       | Specific Target Organ Toxicity.  |
| TLV:        | Threshold Limiting Value.  |
| TWA:        | Time-weighted average  |
| WGK:        | German Water Hazard Class.   |