

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.01.2021

Version number 113

Revision: 22.01.2021

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

- 1.1 Product identifier

- Trade name **Emulsionsspalter 52**

- UFI: -

- 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 Water treatment

- 1.3 Details of the supplier of the safety data sheet

- **Manufacturer/Supplier:**

PERKUTE - Maschinenbau GmbH
Düsterbergstr. 10
D-48432 Rheine

Tel. ++ 49 / 59 71 / 80 81 68 - 0

Fax ++ 49 / 59 71 / 80 81 68 - 1

E-Mail: info@perkute.de

- **Informing department:** Product safety department

- 1.4 Emergency telephone number:

National Poisons Information Service (NPIS) - Emergency call (healthcare professionals): (+44) 844 892 0111 - 0344 892 0111

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture

- **Classification according to Regulation (EC) No 1272/2008**

Flam. Liq. 3	H226 Flammable liquid and vapour.
Acute Tox. 4	H302 Harmful if swallowed.
Skin Corr. 1B	H314 Causes severe skin burns and eye damage.
Eye Dam. 1	H318 Causes serious eye damage.
STOT SE 3	H336 May cause drowsiness or dizziness.
Aquatic Acute 1	H400 Very toxic to aquatic life.
Aquatic Chronic 2	H411 Toxic to aquatic life with long lasting effects.

- 2.2 Label elements

- **Labelling according to Regulation (EC) No 1272/2008**

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

- **Hazard pictograms**



GHS02 GHS05 GHS07 GHS09

- **Signal word** Danger

- **Hazard-determining components of labelling:**

didecyldimethylammonium chloride
propan-2-ol

- **Hazard statements**

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H336 May cause drowsiness or dizziness.
H410 Very toxic to aquatic life with long lasting effects.

- **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.01.2021

Version number 113

Revision: 22.01.2021

Trade name **Emulsionsspalter 52**

(Contd. of page 1)

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
 P281 Use personal protective equipment as required.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 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).
 P403+P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of the substances listed below with harmless additions

- **Dangerous components:**

CAS: 7173-51-5 EINECS: 230-525-2 Reg.nr.: 01-2119945987-15	didecyldimethylammonium chloride Skin Corr. 1B, H314; Aquatic Acute 1, H400; Aquatic Chronic 2, H411; Acute Tox. 4, H302	50%
CAS: 67-63-0 EINECS: 200-661-7 Reg.nr.: 01-2119457558-25	propan-2-ol Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	10-25%

- **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 advice:**
 Instantly remove any clothing soiled by the product.
 Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact**
 Instantly wash with water and soap and rinse thoroughly. If skin irritation persists, seek medical advice.
- **After eye contact**
 Use eye protection.
 Rinse immediately opened eye for several minutes under running water. Then consult doctor.
- **After swallowing**
 Rinse out mouth and then drink plenty of water.
 Do not induce vomiting; instantly call for medical help.
- **4.2 Most important symptoms and effects, both acute and delayed**
 Irritant effect to skin, eyes and respiratory organs.
- **4.3 Indication of any immediate medical attention and special treatment needed**
 No further relevant information available.

— GB —

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.01.2021

Version number 113

Revision: 22.01.2021

Trade name **Emulsionsspalter 52**

(Contd. of page 2)

SECTION 5: Firefighting measures

- 5.1 Extinguishing media

- Suitable extinguishing agents

CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

- For safety reasons unsuitable extinguishing agents

Water with a full water jet.

- 5.2 Special hazards arising from the substance or mixture

Can form explosive gas-air mixtures. In case of incomplete combustion carbon monoxide can arise. Fumes are heavier than air and distributed over ground. Inflammation is possible from a far distance.

Formation of toxic gases is possible during heating or in case of fire.

Can be released in case of fire:

Nitrogen oxides (NO_x)

carbon monoxide (CO)

- 5.3 Advice for firefighters

- Protective equipment: Wear self-contained breathing apparatus.

- Additional information

Endangered containers in the surrounding area should be cooled with a water-hose.

Collect contaminated fire fighting water separately. It must not enter drains.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep off unprotected persons

Keep away from ignition sources

Ensure adequate ventilation

- 6.2 Environmental precautions:

Prevent material from reaching sewage system, holes and cellars.

Inform respective authorities in case product reaches water or sewage system.

- 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

- 6.4 Reference to other sections

Danger of explosion

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling

Keep containers tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Avoid contact with eyes and skin.

- Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- 7.2 Conditions for safe storage, including any incompatibilities

- Storage

Protect against direct sunlight, other sources of heat and ignition.

Store in cool, dry conditions in well sealed containers.

- Requirements to be met by storerooms and containers:

Observe official regulations on storage and handling of water hazardous substances

- Information about storage in one common storage facility:

Pay attention to regulations / technical guidelines on mixed storage of flammable liquids.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.01.2021

Version number 113

Revision: 22.01.2021

Trade name **Emulsionsspalter 52**

(Contd. of page 3)

- **Further information about storage conditions:**
Store container in a well ventilated position.
Store in a cool place.
- **Storage class 3** (VCI - Konzept, 2007)
- **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 systems:**
Room ventilation i.e. vacuum suction. Measures to be taken against electro-static sparks.

- Components with critical values that require monitoring at the workplace:

67-63-0 propan-2-ol

WEL	Short-term value: 1250 mg/m ³ , 500 ppm Long-term value: 999 mg/m ³ , 400 ppm
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- DNELs

67-63-0 propan-2-ol

Oral	DNEL (population)	26 mg/kg bw/day (Long-term, systemic effects)
Dermal	DNEL (worker)	888 mg/kg bw/day (Long-term, systemic effects)
	DNEL (population)	319 mg/kg bw/day (Long-term, systemic effects)
Inhalative	DNEL (worker)	500 mg/m ³ (Long-term, systemic effects)
	DNEL (population)	89 mg/m ³ (Long-term, systemic effects)

- PNECs

67-63-0 propan-2-ol

PNEC water	140.9 mg/l (freshwater)
	140.9 mg/l (marine water)
PNEC	2,251 mg/l (sewage plant)
PNEC sediment	552 mg/kg dw (freshwater)
	552 mg/kg dw (marine water)
PNEC	140.9 (intermittent releases)
PNEC soil	28 mg/kg (soil)

- **Additional information:** The lists that were valid during the compilation were used as basis.

- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from food, beverages and fodder.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
Gases, fumes and aerosols should not be inhaled.
- **Breathing equipment:** Use breathing protection in case of insufficient ventilation.
- **Recommended filter device for short term use:**
Combination filter A-P2
Take care of limitations and rules for the use of breathing protection equipment (DGUV Regel 112-190).
- **Protection of hands:**
Protective gloves.
Check the permeability prior to each renewed use of the glove.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.01.2021

Version number 113

Revision: 22.01.2021

Trade name **Emulsionsspalter 52**

(Contd. of page 4)

- Material of gloves

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.7 mm

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.

- Penetration time of glove material

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

Change gloves if notice sign of disenchantment.

Material of gloves is recommended for a short-term single use to protect from splashes. For permanent usage contact manufacturer of gloves.

- Eye protection: Tightly sealed safety glasses.**- Body protection:**

Standard protective clothing. Chemical resistant safety-shoes or boots. If skin contact is possible, wear impenetrable protective clothing against this solvent.

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties**- General Information****- Appearance:**

Form:	Fluid
Colour:	Light yellow
Smell:	like isopropanol

- pH-value at 20 °C:	8
- Melting point/freezing point:	< 0 °C
- Initial boiling point and boiling range:	> 80 °C

- Flash point:	29 °C (DIN 51755)
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- Ignition temperature:	350 °C
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- Self-inflammability:	Product is not selfigniting.
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- Explosive properties:	Product is not explosive. However, formation of explosive air/steam mixtures is possible.
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- Critical values for explosion:

Lower:	2.0 Vol %
Upper:	12.7 Vol %
	(Higher and lower level for individual components)

- Vapour pressure at 20 °C:	43 hPa
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- Density at 20 °C	0.89 g/cm ³ (DIN 51757)
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- Solubility in / Miscibility with Water:	Fully miscible
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- Viscosity: dynamic at 20 °C:	25 mPas
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- 9.2 Other information	No further relevant information available.
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Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.01.2021

Version number 113

Revision: 22.01.2021

Trade name **Emulsionsspalter 52**

(Contd. of page 5)

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** strong oxidizing agents
- **10.6 Hazardous decomposition products:** Formation of nitrogen oxides (NO_x) in case of fire.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**
Harmful if swallowed.

- **LD/LC50 values that are relevant for classification:**

7173-51-5 didecyldimethylammonium chloride

Oral	LD50	238 mg/kg (rat)
Dermal	LD50	3,342 mg/kg (rabbit)

67-63-0 propan-2-ol

Oral	LD50	4,570 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit) 13,400 mg/kg (rab)
Inhalative	LC 50 / 4 h	30 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Other information (about experimental toxicology):**
No experimental indications of mutagenic effects (Ames test negative).
- **Subacute to chronic toxicity:**

- **STOT-repeated exposure:**

67-63-0 propan-2-ol

Oral	NOAEL	900 mg/kg (rat) ((90d) OECD 408)
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- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**
May cause drowsiness or dizziness.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

GB

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.01.2021

Version number 113

Revision: 22.01.2021

Trade name **Emulsionsspalter 52**

(Contd. of page 6)

SECTION 12: Ecological information

- 12.1 Toxicity

- Aquatic toxicity:

7173-51-5 didecyldimethylammonium chloride

LC 50 / 96 h	0.19 mg/l (<i>Pimephales promelas</i>)
EC 50 / 48 h	0.062 mg/l (<i>Daphnia magna</i>)
EC 50 / 96 h	0.026 mg/l (<i>Pseudokirchneriella subcapitata</i>)
EC 50 / 72 h	0.33 mg/l (<i>Scenedesmus subspicatus</i>)
NOEC	0.032 mg/l (<i>Danio rerio</i>) (34d)
	0.01 mg/l (<i>Daphnia magna</i>) (21d)
EC 10 / 12 h	0.1 mg/l (<i>Pseudomonas putida</i>)
EC 10 / 16 h	0.13 mg/l (<i>Pseudomonas putida</i>)

67-63-0 propan-2-ol

LC 50 / 48 h	>100 mg/l (<i>Leuciscus idus</i>)
EC 50 / 48 h	>100 mg/l (<i>Daphnia magna</i>)
EC 50 / 72 h	>100 mg/l (<i>Scenedesmus subspicatus</i>)

- 12.2 Persistence and degradability

The surfactant(s) contained in this preparation complies (comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

7173-51-5 didecyldimethylammonium chloride

DOC - Elimination	90 % (OECD 301A)
Biodegradability	72 % (OECD 301 B)

- **Other information:** The product is readily biodegradable.

- **12.3 Bioaccumulative potential** No bioaccumulation

- **12.4 Mobility in soil** No further relevant information available.

- **Ecotoxicological effects:**

- Respiratory inhibition of communal activated sludge EC 20 (mg/l according to ISO 8192 B):

7173-51-5 didecyldimethylammonium chloride

EC 50	11 mg/l (activated sludge (method OECD 209))
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- Additional ecological information:

- General notes:

Also poisonous for fish and plankton in water bodies.

Danger to drinking water if even small quantities leak into soil.

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

Do not allow product to reach ground water, water bodies or sewage system.

- 12.5 Results of PBT and vPvB assessment

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **12.6 Other adverse effects** No further relevant information available.

— GB —

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.01.2021

Version number 113

Revision: 22.01.2021

Trade name **Emulsionsspalter 52**

(Contd. of page 7)

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods

The following advice is related to new material and not to any processed products. In case of a mixture with other products other disposal methods may become necessary. If in doubt seek advice from product supplier or from local authorities.

- Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. If possible, send to be recycled, otherwise burn or deposit in a certified facility.

- Waste disposal key number:

Since 01/01/99 the waste code numbers have not only been product-related but are also essentially application-related. The valid waste code number of the application can be obtained from the European waste catalogue.

- Uncleaned packagings:

- Recommendation:

Rented packaging: After optimal emptying, close immediately and return to the supplier without cleaning. Care should be taken that no other materials get into the packaging.

Other containers: After complete emptying and cleaning, send to be reconditioned or recycled.

Caution: Leftovers in the containers may cause the risk of explosion.

Uncleaned containers should not be perforated, cut or welded.

- Recommended cleaning agent: Water, if necessary with cleaning agent.

SECTION 14: Transport information

- 14.1 UN-Number - ADR, IMDG, IATA	UN2920
- 14.2 UN proper shipping name - ADR - IMDG - IATA	2920 CORROSIVE LIQUID, FLAMMABLE, N.O.S. (didecyldimethylammonium chloride, ISOPROPANOL (ISOPROPYL ALCOHOL)), ENVIRONMENTALLY HAZARDOUS CORROSIVE LIQUID, FLAMMABLE, N.O.S. (didecyldimethylammonium chloride, ISOPROPANOL (ISOPROPYL ALCOHOL)), MARINE POLLUTANT CORROSIVE LIQUID, FLAMMABLE, N.O.S. (didecyldimethylammonium chloride, ISOPROPANOL (ISOPROPYL ALCOHOL))
- 14.3 Transport hazard class(es) - ADR - Class - Label	8 (CF1) Corrosive substances. 8+3
- IMDG - Class - Label	8 Corrosive substances. 8/3
- IATA - Class - Label	8 Corrosive substances. 8 (3)

(Contd. on page 9)

— GB —

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.01.2021

Version number 113

Revision: 22.01.2021

Trade name **Emulsionsspalter 52**

(Contd. of page 8)

- 14.4 Packing group - ADR, IMDG, IATA	II
- 14.5 Environmental hazards: - Marine pollutant: - Special marking (ADR):	Product contains environmentally hazardous substances: didecyldimethylammonium chloride Yes Symbol (fish and tree) Symbol (fish and tree)
- 14.6 Special precautions for user - Kemler Number: - EMS Number: - Stowage Category - Stowage Code	Warning: Corrosive substances. 83 F-E,S-C E SW1 Protected from sources of heat. SW2 Clear of living quarters.
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
- Transport/Additional information:	
- ADR - Limited quantities (LQ) - Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
- Transport category - Tunnel restriction code	2 D/E
- IMDG - Limited quantities (LQ) - Excepted quantities (EQ)	1L Código E4 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
- UN "Model Regulation":	UN 2920 CORROSIVE LIQUID, FLAMMABLE, N.O.S. (DIDECYLDIMETHYLAMMONIUM CHLORIDE, ISOPROPANOL (ISOPROPYL ALCOHOL)), 8 (3), II, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

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

- Labelling according to Regulation (EC) No 1272/2008

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

- Hazard pictograms



GHS02 GHS05 GHS07 GHS09

- Signal word *Danger*

- Hazard-determining components of labelling:

didecyldimethylammonium chloride

(Contd. on page 10)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.01.2021

Version number 113

Revision: 22.01.2021

Trade name Emulsionsspalter 52

(Contd. of page 9)

propan-2-ol

- Hazard statements

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H336 May cause drowsiness or dizziness.

H410 Very toxic to aquatic life with long lasting effects.

- Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P281 Use personal protective equipment as required.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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).

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Directive 2012/18/EU- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

- National regulations**- Information about limitation of use:**

Employment restrictions concerning young persons must be observed.

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Application:** Directions for use: please refer to the Technical Information Sheet**- UFI market placements:****- Relevant phrases**

Complete wording of hazard statements and risk phrases (H- and R-phrases) mentioned in section 3.

These phrases refer to the constituents. The labelling for this product is stated in section 2.

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

- **Department issuing data specification sheet:** see item 1: Informing department

(Contd. on page 11)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.01.2021

Version number 113

Revision: 22.01.2021

Trade name Emulsionsspalter 52

(Contd. of page 10)

- 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)

ICAO: International Civil Aviation Organisation

LEV: Local Exhaust Ventilation

NOAEL: No Observed Adverse Effect Level

RPE: Respiratory Protective Equipment

RCR: Risk Characterisation Ratio (RCR= PEC/PNEC)

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 Harmonized System of Classification and Labelling of Chemicals

CLP: Classification, Labelling and Packaging (Regulation (EC) No. 1272/2008)

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)

TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Dangerous Substances, BAuA, Germany)

ISO: International Organisation for Standardisation

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

- * Data compared to the previous version altered.
