

SAFETY DATA SHEET ER-BRT RESIN

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name ER-BRT RESIN

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

Identified uses Resin.

Uses advised againstNo specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier Wessex Resins & Adhesives

Cupernham House Cupernham Lane

Romsey Hampshire SO51 7LF ENGLAND

Tel: +44 (0) 1794 521111 Fax: +44 (0) 1794 521271 info@wessex-resins.com

1.4. Emergency telephone number

Emergency telephone +44(0)207 858 1228

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 2 - H411

Human health The liquid is irritating to eyes and skin. The product contains a sensitising substance. See

Section 11 for additional information on health hazards.

Environmental The product contains a substance which may have hazardous effects on the environment.

2.2. Label elements

Pictogram





Signal word Warning

ER-BRT RESIN

Hazard statements H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements P280 Wear protective gloves, eye and face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
P501 Dispose of contents/ container in accordance with national regulations.

Contains bis-[4-(2,3-epoxipropoxi)phenyl]propane, BISPHENOL F EPOXY RESIN, oxirane, mono[(C12-

14-alkyloxy)methyl] derivs.

Supplementary precautionary

statements

P261 Avoid breathing vapour/ spray.

P264 Wash contaminated skin thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P337+P313 If eye irritation persists: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

bis-[4-(2,3-epoxipropoxi)phenyl]propane

CAS number: 1675-54-3 EC number: 216-823-5 REACH registration number: 01-

2119456619-26-XXXX

60-100%

Classification

Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411

BISPHENOL F EPOXY RESIN 10-30%

CAS number: 9003-36-5 EC number: 500-006-8 REACH registration number: 01-

2119454392-40-0000

Classification

Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411

oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

5-10%

CAS number: 68609-97-2 EC number: 271-846-8

REACH registration number: 01-2119485289-22-0004

Classification

Skin Irrit. 2 - H315 Skin Sens. 1 - H317

Propane-1,2-diol

CAS number: 57-55-6 EC number: 200-338-0

Classification
Not Classified

Benzyl alcohol 1-5%

CAS number: 100-51-6 EC number: 202-859-9 REACH registration number: 01-

2119492630-38-XXXX

Classification

Acute Tox. 4 - H302 Acute Tox. 4 - H332 Eye Irrit. 2 - H319

Ethyl 4-[[(methylphenylamino)methylene]amino]benzoate

1-5%

CAS number: 57834-33-0 EC number: 260-976-0

Classification

STOT RE 2 - H373 Aquatic Chronic 2 - H411

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.

Inhalation

Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.

Ingestion

Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.

ER-BRT RESIN

Skin contact It is important to remove the substance from the skin immediately. In the event of any

sensitisation symptoms developing, ensure further exposure is avoided. Remove

contamination with soap and water or recognised skin cleansing agent. Get medical attention

if symptoms are severe or persist after washing.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide

apart. Continue to rinse for at least 10 minutes.

Protection of first aiders First aid personnel should wear appropriate protective equipment during any rescue. If it is

suspected that volatile contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth

resuscitation.

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

General information See Section 11 for additional information on health hazards. The severity of the symptoms

described will vary dependent on the concentration and the length of exposure.

Inhalation Prolonged inhalation of high concentrations may damage respiratory system.

Ingestion May cause discomfort if swallowed.

Skin contact May cause skin sensitisation or allergic reactions in sensitive individuals. Redness. Irritating to

skin.

Eye contact Irritating to eyes.

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

Notes for the doctor

Treat symptomatically. May cause sensitisation or allergic reactions in sensitive individuals.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry

powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up.

Hazardous combustion

products

Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

5.3. Advice for firefighters

Protective actions during

firefighting

Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment

for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

ER-BRT RESIN

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material. Avoid contact with skin and eyes.

6.2. Environmental precautions

Environmental precautions

Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Small Spillages: Collect spillage. Large Spillages: Absorb spillage with non-combustible, absorbent material. The contaminated absorbent may pose the same hazard as the spilled material. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on general occupational hygiene

Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store away from incompatible materials (see Section 10). Store in accordance with local regulations. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Bund storage facilities to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent.

Storage class

Miscellaneous hazardous material storage.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Propane-1,2-diol

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ particulate

Long-term exposure limit (8-hour TWA): WEL 150 ppm 474 mg/m³ total vapour and particulates

WEL = Workplace Exposure Limit

8.2. Exposure controls

Protective equipment







Appropriate engineering controls

Provide adequate ventilation. Good general ventilation should be adequate to control worker exposure to airborne contaminants.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended. Wear protective gloves made of the following material: Nitrile rubber. Thickness: ≥ 0.13 mm The selected gloves should have a breakthrough time of at least 0.5 hours.

Other skin and body protection

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

Hygiene measures

Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet. Warn cleaning personnel of any hazardous properties of the product.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Check that the respirator fits tightly and the filter is changed regularly. Combination filter, type A2/P2.

Environmental exposure controls

Avoid discharge to the aquatic environment. Keep container tightly sealed when not in use.

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SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Coloured liquid.

Colour Colourless to pale yellow.

Odour Slight.

Odour thresholdNot determined.pHNot determined.Melting pointNot determined.

Initial boiling point and range

Not determined.

ER-BRT RESIN

Flash point > 200°C Closed cup.

Not determined. **Evaporation rate** Not determined. **Evaporation factor**

Upper/lower flammability or

explosive limits

Bulk density

Not determined.

Not determined.

Vapour pressure Not determined. Vapour density Not determined. Relative density 1.14 @ 22°C

Solubility(ies) Not determined.

Partition coefficient Not determined.

Auto-ignition temperature Not determined.

Not determined. **Decomposition Temperature**

Viscosity Not determined. **Explosive properties** Not determined.

Oxidising properties Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information Not known.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous

None known.

reactions

10.4. Conditions to avoid

Conditions to avoid There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid Strong acids. Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition Does not decompose when used and stored as recommended. Thermal decomposition or products combustion products may include the following substances: Harmful gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD50) Based on available data the classification criteria are not met.

ER-BRT RESIN

ATE oral (mg/kg) 108,000.0

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

ATE inhalation (dusts/mists

mg/l)

219.8

Skin corrosion/irritation

Animal data Irritating.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation May cause skin sensitisation or allergic reactions in sensitive individuals.

Germ cell mutagenicity

Genotoxicity - in vitroBased on available data the classification criteria are not met.

Genotoxicity - in vivoBased on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

IARC carcinogenicity

None of the ingredients are listed or exempt.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity -

development

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazardBased on available data the classification criteria are not met.

General information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure.

Inhalation Prolonged inhalation of high concentrations may damage respiratory system.

Ingestion May cause sensitisation or allergic reactions in sensitive individuals. May cause irritation.

Skin contact May cause skin sensitisation or allergic reactions in sensitive individuals. Redness. Irritating to

skin.

Eye contact Irritating to eyes.

Route of exposure Ingestion Inhalation Skin and/or eye contact

Target organs No specific target organs known.

Medical considerations Skin disorders and allergies.

Toxicological information on ingredients.

bis-[4-(2,3-epoxipropoxi)phenyl]propane

Acute toxicity - oral

Notes (oral LD₅₀) > 2000 mg/kg Rat REACH dossier information. Based on available data the

classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LDso) > 2000 mg/kg Rat REACH dossier information. Based on available data the

classification criteria are not met.

Skin corrosion/irritation

Animal data Dose: 0.5ml, 4 hr, Rabbit Erythema/eschar score: Very slight erythema - barely

perceptible (1). Oedema score: Very slight oedema - barely perceptible (1). REACH

dossier information. Irritating to skin.

Skin sensitisation

Skin sensitisation Local Lymph Node Assay (LLNA) - Mouse: Sensitising. REACH dossier

information. May cause sensitisation by skin contact.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative. REACH dossier information. Based on available data the

classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information. This substance

has no evidence of mutagenic properties.

Carcinogenicity

Carcinogenicity NOAEL 100 mg/kg, Oral, Rat REACH dossier information. There is no evidence

that the product can cause cancer.

Reproductive toxicity

Reproductive toxicity -

fertility

Two-generation study - NOAEL 20 mg/kg/day, Oral, Rat P REACH dossier

information. Based on available data the classification criteria are not met.

Reproductive toxicity - development

Maternal toxicity: - NOAEL: 180 mg/kg/day, Oral, Rat REACH dossier information.

Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 50 mg/kg, Oral, Rat REACH dossier information. Not classified as a specific

target organ toxicant after repeated exposure.

SECTION 12: Ecological Information

Ecotoxicity Dangerous for the environment if discharged into watercourses.

12.1. Toxicity

Toxicity Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.

Ecological information on ingredients.

bis-[4-(2,3-epoxipropoxi)phenyl]propane

Acute aquatic toxicity

ER-BRT RESIN

Acute toxicity - fish LC₅₀, 96 hours: 1.2 mg/l, Oncorhynchus mykiss (Rainbow trout)

REACH dossier information.

Acute toxicity - aquatic

EC₅₀, 48 hours: 2.8 mg/l, Daphnia magna

invertebrates

REACH dossier information.

Acute toxicity - aquatic

EC₅₀, 72 hours: 9.4 mg/l, Selenastrum capricornutum

plants

REACH dossier information.

Acute toxicity - IC50, 3

IC50, 3 hours >: 100 mg/l, Activated sludge

microorganisms REACH dossier information.

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

Ecological information on ingredients.

bis-[4-(2,3-epoxipropoxi)phenyl]propane

Phototransformation Water - DT₅₀ : 6.44 hours

Estimated value.

REACH dossier information.

Biodegradation Water - Degradation (%) 5: 28 days

REACH dossier information.

No biodegradation observed under test conditions.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

Ecological information on ingredients.

bis-[4-(2,3-epoxipropoxi)phenyl]propane

Bioaccumulative potential The product is not bioaccumulating. BCF: ~ 31, Estimated value. REACH dossier

information.

Partition coefficient log Pow: ≥ 2.918 REACH dossier information.

12.4. Mobility in soil

Mobility No information available.

Ecological information on ingredients.

bis-[4-(2,3-epoxipropoxi)phenyl]propane

Mobility Slightly soluble in water.

Adsorption/desorption

coefficient

Water - log Koc: ~ 2.65 @ 20°C Estimated value. REACH dossier information.

Surface tension 58.7 mN/m @ 20°C REACH dossier information.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

This product does not contain any substances classified as PBT or vPvB.

assessment

Ecological information on ingredients.

bis-[4-(2,3-epoxipropoxi)phenyl]propane

Results of PBT and vPvB This substance is not classified as PBT or vPvB according to current EU criteria. assessment

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information The generation of waste should be minimised or avoided wherever possible. This material and

its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially

hazardous.

Disposal methods Waste, residues, empty containers, discarded work clothes and contaminated cleaning

materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible. Do not

discharge into drains or watercourses or onto the ground.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082

UN No. (ADN) 3082

14.2. UN proper shipping name

Proper shipping name

(ADR/RID)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS bis-[4-(2,3-

epoxipropoxi)phenyl]propane, BISPHENOL F EPOXY RESIN)

Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS bis-[4-(2,3-

epoxipropoxi)phenyl]propane, BISPHENOL F EPOXY RESIN)

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS bis-[4-(2,3-

epoxipropoxi)phenyl]propane, BISPHENOL F EPOXY RESIN)

Proper shipping name (ADN) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS bis-[4-(2,3-

epoxipropoxi)phenyl]propane, BISPHENOL F EPOXY RESIN)

14.3. Transport hazard class(es)

ADR/RID class 9

ADR/RID classification code M6

ADR/RID label 9

IMDG class 9

ICAO class/division 9

ADN class 9

Transport labels



14.4. Packing group

ADR/RID packing group III

IMDG packing group III

ADN packing group III

ICAO packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS F-A, S-F

ADR transport category 3

Emergency Action Code •3Z

Hazard Identification Number 90

(ADR/RID)

Tunnel restriction code (-)

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

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

SECTION 15: Regulatory information

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

National regulations Health and Safety at Work etc. Act 1974 (as amended).

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment

Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].

EH40/2005 Workplace exposure limits.

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18

December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of

Chemicals (REACH) (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as

amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

ER-BRT RESIN

Abbreviations and acronyms used in the safety data sheet

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

Road.

ADN: European Agreement concerning the International Carriage of Dangerous Goods by

Inland Waterways.

RID: European Agreement concerning the International Carriage of Dangerous Goods by

Rail.

IATA: International Air Transport Association.

ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.

IMDG: International Maritime Dangerous Goods.

CAS: Chemical Abstracts Service. ATE: Acute Toxicity Estimate.

LC₅o: Lethal Concentration to 50 % of a test population.

LD₅o: Lethal Dose to 50% of a test population (Median Lethal Dose).

EC₅: 50% of maximal Effective Concentration.

PBT: Persistent, Bioaccumulative and Toxic substance.

vPvB: Very Persistent and Very Bioaccumulative.

Classification abbreviations

and acronyms

Eye Irrit. = Eye irritation Skin Irrit. = Skin irritation

Skin Sens. = Skin sensitisation

Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and

sources for data

Source: European Chemicals Agency, http://echa.europa.eu/

Classification procedures according to Regulation (EC)

1272/2008

Skin Irrit. 2 - H315: Eye Irrit. 2 - H319: Skin Sens. 1 - H317: : Expert judgement. Aquatic

Chronic 2 - H411: : Expert judgement.

Training advice Read and follow manufacturer's recommendations. Only trained personnel should use this

material.

Revision date 05/11/2018

Revision 3

Supersedes date 08/10/2018

SDS number 20569

Hazard statements in full H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

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

H411 Toxic to aquatic life with long lasting effects.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.