Revision Date 10-12-2013 SDS No. 11300



# SAFETY DATA SHEET BELZONA® 1311 (CERAMIC R-METAL) SOLIDIFIER

According to Regulation (EU) No 453/2010

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

# 1.1. Product identifier

Product name BELZONA® 1311 (CERAMIC R-METAL) SOLIDIFIER

Internal Id SN2618

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

Identified uses Repair system designed for rebuilding metals damaged by erosion-corrosion. For industrial use only. Uses advised against

The product should not be used for purposes other than those recommended in the appropriate

Instructions For Use (IFU) leaflet.

# 1.3. Details of the supplier of the safety data sheet

Supplier Belzona Polymerics Limited

> Claro Road, Harrogate North Yorkshire HG1 4DS, England **28** +44 (0) 1423 567641 +44 (0) 1423 505967 sds@belzona.com

# 1.4. Emergency telephone number

+44 (0) 1423 567641 (office hours: 0845-1715 GMT)

## **SECTION 2: HAZARDS IDENTIFICATION**

# 2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xn;R22. C;R34. R43. N;R51/53.

Reference

The full text for all R-Phrases is displayed in Section 16.

# 2.2. Label elements

Contains DIETHYLENETRIAMINE

> 1,3-BENZENEDIMETHANAMINE TRIMETHYLHEXANE-1.6-DIAMINE

Labelling



Corrosive Dangerous for the environment

Risk Phrases

R22 Harmful if swallowed. R34 Causes burns.

May cause sensitisation by skin contact. R43

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

Safety Phrases

S23C Do not breathe fumes/vapour.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S45 In case of accident or if you feel unwell, seek medical advice immediately

(show label where possible).

S60 This material and its container must be disposed of as hazardous waste.
S61 Avoid release to the environment. Refer to special instructions/safety data

sheets.

# 2.3. Other hazards

May be harmful in contact with skin.

# **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

# 3.2. Mixtures

BENZYL ALCOHOL		5-10%			
CAS-No.: 100-51-6	EC No.: 202-859-9	Registration Number: 01-2119492630-38-xxxx			
Classification (EC 1272/2008) Acute Tox. 4 - H302 Acute Tox. 4 - H332		Classification (67/548/EEC) Xn;R20/22			

DIETHYLENETRIAMINE 5-10%

CAS-No.: 111-40-0 EC No.: 203-865-4

 Classification (EC 1272/2008)
 Classification (67/548/EEC)

 Acute Tox. 4 - H302
 C;R34

 Acute Tox. 4 - H312
 Xn;R21/22

Skin Corr. 1B - H314 R43 Skin Sens. 1 - H317

FORMALDEHYDE POLYMER WITH 1,3-BENZENEDIMETHANAMINE AND PHENOL 5-10%

CAS-No.: 57214-10-5 EC No.: 500-137-0

Classification (EC 1272/2008) Classification (67/548/EEC)

Aquatic Acute 1 - H400 N;R50/53.

Aquatic Chronic 1 - H410

1,3-BENZENEDIMETHANAMINE 1-5%

CAS-No.: 1477-55-0 EC No.: 216-032-5

Classification (EC 1272/2008) Classification (67/548/EEC)

 Acute Tox. 4 - H302
 Xn;R20/22.

 Acute Tox. 3 - H331
 C;R34.

 Skin Corr. 1B - H314
 R43,R52/53.

Skin Sens. 1 - H317 Aquatic Chronic 3 - H412

TOLUENESULPHONIC ACID -para <= 5% H2SO4 1-5%

CAS-No.: 104-15-4 EC No.: 203-180-0

Classification (EC 1272/2008) Classification (67/548/EEC)

Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 Xi;R36/37/38

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

1-5%

CAS-No.: 90-72-2 EC No.: 202-013-9 Registration Number: 01-2119560597-27-xxxx

Classification (EC 1272/2008) Classification (67/548/EEC)

Acute Tox. 4 - H302 Xn;R22 Skin Irrit. 2 - H315 Xi;R36/38 Eye Irrit. 2 - H319

TRIMETHYLHEXANE-1,6-DIAMINE 1-5%

CAS-No.: 25620-58-0 EC No.: 247-134-8

Classification (EC 1272/2008) Classification (67/548/EEC)

Acute Tox. 4 - H302 Xn;R22.
Skin Corr. 1B - H314 C;R34.
Skin Sens. 1 - H317 R43,R52/53.
Aquatic Chronic 3 - H412

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

#### **SECTION 4: FIRST AID MEASURES**

# 4.1. Description of first aid measures

#### **General information**

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

## Inhalation

Remove to fresh air. Keep the patient warm and at rest. If breathing has stopped, administer artificial respiration. Give nothing by mouth. If unconscious, place in the recovery position and seek medical advice.

#### Ingestion

If accidentally swallowed obtain immediate medical attention. Keep at rest. Rinse mouth with plenty of water. Do NOT induce vomiting.

#### Skin contact

Remove contaminated clothing. Wash skin thoroughly with soap and water or use a proprietary skin cleaner. Do NOT use solvents or thinners. If irritation or inflammation persists, seek medical attention.

## Eye contact

Contact lenses should be removed. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart, and seek medical advice.

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

#### Inhalation

Exposure to vapours may result in irritation of the mucous membrane and the respiratory system; in severe cases burns may occur.

# Ingestion

Ingestion is not normally an exposure risk arising from professional applications. May cause chemical burns in mouth, oesophagus and stomach.

#### Skin contact

Contact with skin or any living tissue may cause burns, in severe cases complete tissue destruction may occur. May cause allergic skin reaction

#### Eye contact

Contact with eyes may cause severe irritation with corneal injury, which may result in permanent impairment of vision.

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

None.

#### **SECTION 5: FIREFIGHTING MEASURES**

# 5.1. Extinguishing media

#### Extinguishing media

Use: sand, alcohol resistant foam, carbon dioxide, chemical powder, water fog for larger fires. Do NOT use water jet.

# 5.2. Special hazards arising from the substance or mixture

#### Hazardous combustion products

In a fire, hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide, oxides of nitrogen and ammonia may be produced.

# 5.3. Advice for firefighters

## Special Fire Fighting Procedures

Fire will produce dense black smoke containing hazardous products of combustion. Exposure to decomposition products may be a hazard to health. Appropriate self-contained breathing apparatus may be required. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or watercourses.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

# 6.1. Personal precautions, protective equipment and emergency procedures

Exclude sources of ignition and ventilate the area. Exclude non-essential personnel. Keep up-wind of spill to avoid breathing vapours. Do not get on skin or in eyes.

# 6.2. Environmental precautions

Prevent product entering drains or sewers. If the product enters drains or sewers in large quantities, the local Water Company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the appropriate National regulating agency.

# 6.3. Methods and material for containment and cleaning up

Scrape the majority of the product into a suitable labelled container. Cover the spill area with sand or other suitable inert material and sweep up into the container. Clean surfaces down with a water and detergent mixture. Do not allow spilled product or the associated washings to enter surface water drains or watercourses.

# 6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13. For information on National regulating agencies refer to Section 16.

## **SECTION 7: HANDLING AND STORAGE**

# 7.1. Precautions for safe handling

#### **GENERAL**

Vapours may collect in the container headspace during transit or prolonged storage. Avoid the inhalation of vapour when opening the container. Keep the container tightly closed when not in use. Where possible open containers and mix components in a well ventilated place away from the application area. Prevent air-borne concentrations higher than the occupational exposure limits (see Section 8). Exclude non-essential personnel. Minimise the number of employees exposed and the duration of their exposure. Do not get on skin or in eyes. Smoking, eating and drinking should be prohibited in areas of storage and use. For personal protection see Section 8. Always keep in containers made of the same material as the supply container. Good housekeeping methods and regular safe removal of waste materials should be observed. The Manual Handling Operations Regulations may apply to the handling of containers/packages of this product. Refer to the guide weight on the container/package when carrying out assessments.

This product is combustible. Exclude sources of heat, sparks and open flame.

## 7.2. Conditions for safe storage, including any incompatibilities

Observe the label precautions. Store between 5 °C and 30 °C unless otherwise stated in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorised access. Store separately from oxidising agents and strongly acidic materials

#### **ENVIRONMENTAL STORAGE PRECAUTIONS**

Spillage, incorrect storage of chemicals or waste materials or unsuitable disposal activities can result in pollutants seeping through the soil, causing serious harm to groundwater- which is a vital source of drinking water. All wastes especially liquid wastes, must be securely stored on site in designated areas that are isolated from surface drains and bunded to contain any spillages.

#### Storage Class

The principals contained in the HSE guidance note Chemical Warehousing: storage of packaged dangerous substances (HSG71) should be observed when storing this product.

# 7.3. Specific end use(s)

Application by plastic applicator or spatula provided. Mix with Solidifier component before use. Please refer to the relevant Belzona® Instructions For Use for further information.

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

# 8.1. Control parameters

Name		STD	TWA	- 8 Hrs	STEL	- 15 Min	Notes
DIETHYLENETR	IAMINE	WEL	1 ppm	4,3 mg/m3			Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

#### **Ingredient Comments**

When personal protective equipment, including respiratory protective equipment, is used to control exposure to hazardous substances it must be selected to meet the requirements of the COSHH Regulations.

OEL's are taken from the current version of EH40 except those that are marked 'SUP' which are assigned by the supplier of the substance. 'Sk' indicates a risk of exposure through skin absorption. 'C' = Ceiling Limit.

The risk of exposure by inhalation to hazardous concentrations of diethylenetriamine under normal working conditions in a well ventilated area is minimal. Exposure to chemicals assigned occupational exposure limits (OELs) should be controlled using the most effective and reliable measures, proportional to the health risk, which minimise their escape and spread. All relevant exposure routes should be taken into account.

# 8.2. Exposure controls

# **Engineering measures**

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of vapours below the relevant occupational exposure limits, suitable respiratory protective equipment should be worn (see 'Respirators' below).

## Respiratory equipment

#### GENERAL GUIDANCE ON RESPIRATORY PROTECTION

It is essential that the concentration of the contaminant(s) in the application environment does not exceed the applicable Occupational Exposure Limit(s) (OELs) multiplied by the Assigned Protection Factor (APF) quoted for the respiratory protective equipment selected. STANDARD APPLICATIONS

Where necessary, it is recommended that respiratory protective equipment that complies with EN 136 (full face mask) or EN 140 (half face mask) should be worn in combination with an organic/inorganic vapours, acid gases and ammonia cartridge (ABEK1). Where the application environment is likely to be contaminated by significant concentrations of dust then the appropriate particulate prefilter (N-, R- or, P-series) should be worn in combination with the above. It is essential that the facepiece is correctly fitted and the filter is changed in accordance with the manufacturer's instructions. Respiratory protection is not normally required but it may be required when this product is used in confined spaces or where adequate ventilation cannot be achieved.

#### Hand protection

## GENERAL GUIDANCE ON HAND PROTECTION

Hand protection should be selected in accordance with EN 374 Protective gloves against chemicals. The breakthrough time of the gloves selected should exceed the expected use period. Where this is not possible gloves should be changed in good time, and in any case before the breakthrough time is exceeded. If any doubt exists, advice should be sought from glove suppliers on appropriate types. Barrier creams may help to protect exposed areas of skin but are not substitutes for full physical protection. They should not be applied once exposure has occurred.

SPECIFIC RECOMMENDATIONS

Use protective gloves made of: Neoprene. Nitrile.

STANDARD APPLICATIONS

Medium-heavy weight gauntlet type gloves that provide wrist protection are suitable.

EMERGENCY REPAIRS OR APPLICATION OF SINGLE UNITS

Light weight disposable gloves are normally suitable.

#### Eye protection

It is recommended that eye protection, for example safety spectacles or goggles are worn at all times during the handling and use of this material. Eye protection should be selected in accordance with EN 166 Personal eye protection. During subsequent machining, grinding, abrasion or removal of this product appropriate eye protection should be selected according to the type of tools or equipment used.

#### Other Protection

#### STANDARD APPLICATIONS

Synthetic polyethylene coveralls such as the Tyvek PRO-TECH® or equivalent coveralls manufactured to EN 13034 Type 6, Protective clothing against liquid chemicals. Grossly contaminated clothing should be removed and the skin washed with soap and water or a proprietary skin cleaner.

**EMERGENCY REPAIRS OR APPLICATION OF SINGLE UNITS** 

Cotton overalls are normally suitable.

#### Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Ensure eye wash facilities (fountain, bottle, vials, etc.) are readily available. Do not put contaminated articles or equipment e.g. spatulas, applicators, brushes, cloths etc., into pockets. Where necessary, contaminated work clothing and shoes should be removed to prevent cross contamination of surfaces and the risk of inadvertent skin contact and ingestion.

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

# 9.1. Information on basic physical and chemical properties

Appearance Paste.

Colour Light grey.

Odour Amine.

Initial boiling point and boiling range (°C) 760 mm Hg > 100 @

**Relative density** 1.62 - 1.72 @ 20 °C

Vapour density (air=1) > 1
Vapour pressure L
pH-Value, Conc. Solution A
Viscosity NIA
Decomposition temperature (°C) NIA

Flash point (°C) > 100 CC (Closed cup).

Auto Ignition Temperature (°C) NIA
Flammability Limit - Lower(%) NIA
Flammability Limit - Upper(%) NIA
Partition Coefficient NIA

(N-Octanol/Water)

**Comments** NIA = No Information available. A = Alkaline. L = Low. N.ap

# 9.2. Other information

This section contains typical values for Health, Safety and Environmental guidance only and is not intended to represent a technical specification for the product.

## **SECTION 10: STABILITY AND REACTIVITY**

# 10.1. Reactivity

No specific reactivity hazards associated with this product.

# 10.2. Chemical stability

Stable under recommended storage and handling conditions (see Section 7).

## 10.3. Possibility of hazardous reactions

No hazardous reactions expected when stored and handled as recommended.

#### 10.4. Conditions to avoid

No specific conditions are likely to result in a hazardous situation.

# 10.5. Incompatible materials

#### Materials To Avoid

Keep away from oxidising agents and strongly acidic materials to prevent the possibility of exothermic reaction.

# 10.6. Hazardous decomposition products

None under normal conditions.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

# 11.1. Information on toxicological effects

#### **Toxicological information**

There is no data on the product itself. Diethylenetriamine, a component of this product, may cause respiratory sensitisation in susceptible individuals.

#### Inhalation

Exposure to vapours may result in irritation of the mucous membrane and the respiratory system; in severe cases burns may occur.

#### Ingestion

Ingestion is not normally an exposure risk arising from professional applications. Inadvertent ingestion of small amounts of this product through poor hygiene or cross contamination may cause irritation or burns of the mouth, throat and stomach. Harmful if swallowed.

#### Skin contact

Contact with skin or any living tissue may cause burns, in severe cases complete tissue destruction may occur. This product contains one or more components that have caused skin sensitization in humans. This product contains components that may be absorbed through the skin (see Section 8). May be harmful in contact with skin.

#### Eye contact

Contact with eyes may cause severe irritation with corneal injury, which may result in permanent impairment of vision. Low vapour concentrations of many amines can cause a visual disturbance known as 'blue haze' or 'halo vision'. Vision becomes foggy or blurred, objects may appear bluish, and halos may be seen around lights. Symptoms may be delayed. Eye discomfort or pain may not be experienced by affected persons. The effect normally clears up within a day and causes no permanent injury. The visual disturbance could contribute to accidents.

#### Route of entry

Inhalation. Skin absorption. Ingestion. Skin and/or eye contact.

## **Medical Considerations**

Skin contact constitutes a pronounced hazard. Contact with skin or any living tissue may cause burns, in severe cases complete tissue destruction may occur. Persons with a history of skin sensitisation problems should only be employed in processes in which this product is used under appropriate medical supervision.

# **SECTION 12: ECOLOGICAL INFORMATION**

#### **Ecotoxicity**

There is no data on the product itself. The following information is provided on the basis of the individual component data available.

# 12.1. Toxicity

#### **Acute Fish Toxicity**

Based on the individual component data, is expected to have experimental LC50/EC50/IC50 values between 1 and 10 mg/l in most sensitive species. Toxic to aquatic organisms.

#### 12.2. Persistence and degradability

#### Degradability

Based on the individual component data, the product is not expected to be readily biodegradable according to OECD/EC guidelines. May cause long-term adverse effects in the aquatic environment.

# 12.3. Bioaccumulative potential

# Bioaccumulative potential

Based on the individual component data, the product is expected to bioaccumulate. May cause long-term adverse effects in the aquatic environment.

Partition coefficient

NIA

# 12.4. Mobility in soil

#### Mobility:

There is no data available on the product itself.

# 12.5. Results of PBT and vPvB assessment

Based on information received from our suppliers no PBT or vPvB substances are intentionally added to this product.

#### 12.6. Other adverse effects

None known.

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

#### General information

All cleaning activities including cleaning of equipment, floors and containers, can produce large volumes of contaminated waste. All cleaning agents used are potentially polluting. Water containing detergents, degreasers or any other cleaning agents must not be allowed to enter the surface water drains or soakaways. All water based cleaning/degreasing operations should be carried out in designated areas away from the surface water system and drained to the foul water system. Where this is not possible the surface water system should be isolated by suitable damming techniques and the contaminated water collected and removed for controlled safe disposal. Where water immiscible cleaners/degreasers are used for example solvents, the relevant product safety data sheet should be referred to for information on safe disposal.

# 13.1. Waste treatment methods

#### GENERAL

Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Controlled wastes include non-hazardous industrial and hazardous chemical wastes. All controlled wastes should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act. In addition, hazardous chemical wastes should be disposed of in accordance with the Hazardous Waste Regulations. When in doubt, using information provided in this safety data sheet, advice should be obtained from the National regulating agency whether the Hazardous Waste Regulations apply. Refer to information sources listed in Section 16.

#### COMPONENT DISPOSAL

TRANSIT PACKAGING: shrink or stretch wrap, boxes and fittings that have not been contaminated with product should be re-used or recycled. UNREACTED PRODUCT and empty uncleaned containers should be disposed of as controlled wastes. REACTED PRODUCT, contaminated mixing boards, spatulas, applicators, brushes, nominally empty containers and mixing bowls- once fully cured- should be disposed of as non-hazardous chemical waste.

#### **Waste Class**

List of Waste (LoW) code: 08 04 09\*

\*Hazardous waste pursuant to Directive 91/689/EEC

The LoW code quoted in this section is a general entry. LoW codes should be assigned based on the end use of the product. Where a more specific code is available it should be used in preference to the code given above. Where in doubt refer to the List of Wastes, your local licensed waste contractor or the National regulating agency. Refer to information sources listed in Section 16.

# **SECTION 14: TRANSPORT INFORMATION**

General Labelling and packaging requirements may vary with pack and load size. Please refer to the current

transport regulations.

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of accident or spillage.

Road Transport Notes Transport category 3

# 14.1. UN number

 UN No. (ADR/RID/ADN)
 3259

 UN No. (IMDG)
 3259

 UN No. (ICAO)
 3259

# 14.2. UN proper shipping name

Proper Shipping Name Amines, solid, corrosive, n.o.s. (containing Diethylenetriamine and Formaldehyde oligomeric copolymer

mixture)

8

# 14.3. Transport hazard class(es)

ADR/RID/ADN Class

IMDG Class

ICAO Class/Division

8

# 14.4. Packing group

ADR/RID/ADN Packing group III
IMDG Packing group III
ICAO Packing group III

# 14.5. Environmental hazards

**Environmentally Hazardous Substance/Marine Pollutant** 



# 14.6. Special precautions for user

Not applicable.

# 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not carried in bulk.

#### **SECTION 15: REGULATORY INFORMATION**

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

#### **Uk Regulatory References**

This product is classified and labelled for supply in accordance with the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002, as amended.

The provisions of the Health and Safety at Work Act and the Control of Substances Hazardous to Health Regulations with amendments apply to the use of this product at work.

The information contained within this safety data sheet is provided in accordance with Regulation (EC) No. 1907/2006 as amended concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

This product may add to the calculation for determining whether a site is within scope of the Control of Major Accident Hazards Regulations.

## **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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

# 15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

# **SECTION 16: OTHER INFORMATION**

#### General information

The information contained within this safety data sheet does not constitute the users own assessment of workplace risks as required by other health and safety legislation. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant National legislation are complied with. The information contained within this safety data sheet is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.

#### Information Sources

Provision and Use of Personal Protective Equipment Regulations 1992 (SI 1992: 2932).

PPG18: Control of Spillages and fire fighting run-off.

HSG53 The selection, use and maintenance of respiratory protective equipment, as amended.

HSG97 A step by step guide to COSHH assessment.

Working with ADR: An introduction to the carriage of dangerous goods by road.

#### UK ENVIRONMENTAL REGULATING AGENCIES:

England and Wales- Environment Agency; Scotland- Scottish Environment Protection Agency (SEPA); Northern Ireland- Environment and Heritage Service.

#### **Training Advice**

For further information please contact your supplier, Belzona consultant or Belzona direct.

#### **Revision Comments**

REVISION. This safety data sheet has been revised in the following Section(s): 1, 16, Please observe the REVISION DATE. Should you be reading a safety data sheet that is more than 24 months old or have concerns over its validity, please contact your local Belzona consultant or Belzona direct (sds@belzona.com) and the most current information will be sent to you.

Revision Date 10-12-2013

Safety Data Sheet Status English. Approved.

#### Risk Phrases In Full

R20/22 Harmful by inhalation and if swallowed. , R21/22 Harmful in contact with skin and if swallowed. , R22 Harmful if swallowed. , R34 Causes burns. , R36/37/38 Irritating to eyes, respiratory system and skin. , R36/38 Irritating to eyes and skin. , R43 May cause sensitisation by skin contact. , R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. , R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. , R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Hazard Statements In Full

H302 Harmful if swallowed., H312 Harmful in contact with skin., H314 Causes severe skin burns and eye damage., H315 Causes skin irritation., H317 May cause an allergic skin reaction., H319 Causes serious eye irritation., H331 Toxic if inhaled., H332 Harmful if inhaled., H335 May cause respiratory irritation., H400 Very toxic to aquatic life., H410 Very toxic to aquatic life with long lasting effects., H411 Toxic to aquatic life with long lasting effects.

#### Classification procedure

The hazard classes for the classification of the mixture have been determined by the calculation method.

Revision No. 2.2