# SAFETY DATA SHEET
# BELZONA® 1131 (BEARING METAL) BASE

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® 1131 (BEARING METAL) BASE

**Internal Id** SN2484

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

**Identified uses** A metal repair compound with self lubricating properties for use on low friction surfaces subject to intermittent contact where specific loads are low. 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
☏ +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)** Xi;R36/38. R43. N;R51/53.

**Reference**

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

### 2.2. Label elements

**Contains** EPOXY RESIN (Number average MW <= 700 )

**Labelling**

Irritant

Dangerous for the environment

**Risk Phrases**

| | |
|---|---|
| R36/38 | Irritating to eyes and skin. |
| R43 | May cause sensitisation by skin contact. |
| R51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

**Safety Phrases**

| | |
|---|---|
| P5 | Contains epoxy constituents. See information supplied by the manufacturer. |
| S36/37 | Wear suitable protective clothing and gloves. |
| 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

Not applicable

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

## 3.2. Mixtures

**EPOXY RESIN (Number average MW <= 700 )** **30-60%**

**CAS-No.: 25068-38-6** **EC No.: 500-033-5** **Registration Number: 01-2119456619-26-xxxx**

| Classification (EC 1272/2008) | Classification (67/548/EEC) |
|---|---|
| Skin Irrit. 2 - H315 | R43 |
| Eye Irrit. 2 - H319 | Xi;R36/38 |
| Skin Sens. 1 - H317 | N;R51/53 |
| Aquatic Chronic 2 - H411 | |

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

**Skin contact**

Prolonged or repeated contact with the skin or mucous membrane may result in irritant symptoms such as redness, blistering or dermatitis. Onset of symptoms may be delayed. May cause allergic skin reaction.

**Eye contact**

Irritating to eyes.

## 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, foam, carbon dioxide, chemical powder or 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 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

Avoid contact with skin and 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. 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

Keep the container tightly closed when not in use. Vapours may collect in the container headspace during transit or prolonged storage. Avoid the inhalation of vapour when opening the container. 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). Avoid skin and eye contact. 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.

FIRE/EXPLOSION

This product is combustible. Exclude sources of heat, sparks and open flame. Ensure emergency equipment (for fires, spills, leaks, etc.) is readily available. Good housekeeping standards and regular safe removal of waste materials will minimise the risks of spontaneous combustion and other fire hazards.

### 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 alkaline 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

**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.

## 8.2. Exposure controls

**Engineering measures**

Open containers in a well ventilated area.

**Respiratory equipment**

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** | Black. |
| **Odour** | Epoxy. |
| **Solubility** | Immiscible with water |
| **Initial boiling point and boiling range (°C)** | D |
| **Relative density** | 1.84 - 1.94 @ 20 °C |
| **Vapour pressure** | L |
| **pH-Value, Conc. Solution** | NIA |
| **Flash point (°C)** | > 239 CC (Closed cup). |
| **Auto Ignition Temperature (°C)** | > 300 |
| **Partition Coefficient (N-Octanol/Water)** | > 3 |
| **Comments** | NIA = No Information available. D = Decomposes. L = Low. |

## 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 alkaline 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. Based on the properties of the epoxy constituent(s) and considering toxicological data on similar preparations, this preparation may be a skin sensitiser and an irritant. It contains low molecular weight epoxy constituents which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitisation with possibly cross-sensitisation to other epoxies.

**Inhalation**

Vapours that may collect in the container headspace during transit or prolonged storage may be harmful by inhalation. Exposure to vapours may result in irritation of the mucous membrane and the respiratory system.

**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 of mucous membranes.

**Skin contact**

Prolonged or repeated contact with the skin may cause irritation, blistering or dermatitis. Causes of allergic skin reaction have been observed. May cause sensitisation by skin contact.

**Eye contact**

Splashes in the eyes may cause irritation and reversible local damage.

**Route of entry**

Skin and/or eye contact. Ingestion. Inhalation.

**Medical Considerations**

Skin contact constitutes a pronounced hazard. 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 epoxy resin (number average MW <=700) content, this product 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 epoxy resin (number average MW<=700) content, this 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 epoxy resin (number average MW<=700) content, this product is expected to bioaccumulate. May cause long-term adverse effects in the aquatic environment.

**Partition coefficient** > 3

## 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 01 11*.

*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 (2000/532/EC Comission Decision), 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.<br>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)** | 3077 |
| **UN No. (IMDG)** | 3077 |
| **UN No. (ICAO)** | 3077 |

## 14.2. UN proper shipping name

| | |
|---|---|
| **Proper Shipping Name** | Environmentally hazardous substance, solid, n.o.s. (containing Epoxy resin mixture) |

## 14.3. Transport hazard class(es)

| | |
|---|---|
| **ADR/RID/ADN Class** | 9 |
| **IMDG Class** | 9 |
| **ICAO Class/Division** | 9 |

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

**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 (EEC) 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** 02-04-2013

**Safety Data Sheet Status** English. Approved.

**Risk Phrases In Full**

R36/38 Irritating to eyes and skin. , R43 May cause sensitisation by skin contact. , R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Hazard Statements In Full**

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.

**Classification procedure**

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

**Revision No.** 2.1