Blend-i-Pack Ltd

Version 1.1
Date: April 2015
Supersedes: January 2010

# Safety Data Sheet

LIMPAC

This Safety Data Sheet contains information concerning the potential risks to those involved in handling, transporting and working with the material as well as describing potential risks to the consumer and the environment. This information must be made available to those who may come into contact with the material or are responsible for the use of the material. This Safety Data Sheet is prepared in accordance with formatting described in REACH regulation (EC) No 1907/2006, and described in CLP Regulation (EC) No 1272/2008.

## 1. Identification of the Substance/Mixture and of the Company/Undertaking

### 1.1 Product Identifier

| | |
|---|---|
| Product Name | LIMPAC |
| | A full list of product codes that this SDS applies to is given in Section16 |

### 1.2 Relevant identified uses of the substance

Agent for absorbing gases or liquids

### 1.3 Company Details

| | |
|---|---|
| Company Name | Blend-i-Pack Ltd |
| Address | Rannoch,<br>Eccles Road,<br>Chapel-en-le-Frith.<br>SK23 9RR |
| Telephone | +44 (0)844 800 4665 |
| Web | www.blend-i-pack.co.uk |
| Telephone number of competent person | +44 (0)844 800 4665 |

### 1.4 Emergency Telephone

| | |
|---|---|
| Emergency telephone number (24 hours) | +44 (0)844 800 4665 |

## 2. Hazards Identification

### 2.1 Classification of the substance or mixture

#### 2.1.1 Classification according to Regulation (EC) 1272/2008

Skin irritation (Category 2), H315
Serious eye damage (Category 1), H318
Specific target organ toxicity – single exposure (Category 3), respiratory system, H335

#### 2.1.2 Classification according to Dangerous Substances Directive 67/548/EEC

Xi Irritant R37/38, R41

### 2.2 Labelling elements

#### 2.2.1 Labelling according to Regulation (EC) 1272/2008

Pictogram

| | |
|---|---|
| Signal word | Danger |
| Hazard statement(s) | |
| H315 | Causes skin irritation |
| H318 | May cause serious eye damage |
| H335 | May cause respiratory irritation |
| Precautionary statement(s) | |
| P261 | Avoid breathing dust |
| P280 | Wear protective gloves/eye protection/face protection |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |

### 2.3 Other hazards

- The substance does not meet the criteria for a PBT or vPvB substance
- No other hazards identified

## 3. Composition/Information on Ingredients

### 3.1 Substance

| Main constituent | Formula | CAS Number | EC Number | Classification | Concentration |
|---|---|---|---|---|---|
| Calcium hydroxide | $Ca(OH)_2$ | 1305-62-0 | 215-137-3 | Skin irrit. 2, Eye dam. 1; STOT SE 3; H315, H318, H335 | 70-95% w/w |
| Activated carbon | C | 7440-44-0 | 231-153-3 | No classification listed | 5-30%w/w |

**Impurities**
No impurities relevant for classification and labelling

## 4. First Aid Measures

### 4.1 Description of first aid measures

General advice
- Consult a physician. Show this safety data sheet to the doctor in attendance.

Following inhalation
- If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician

Following skin contact
- Wash skin with soap and water
- If irritation occurs and persists seek medical advice

Following eye contact
- Rinse eye thoroughly with eye wash solution or clean water for at least 10 minutes
- Eyelids should be held away from the eyeball to ensure thorough rinsing
- Obtain medical attention if necessary

After ingestion
- Wash out mouth with water and obtain medical advice if necessary

## 5. Fire Fighting Measures

### 5.1 Extinguishing Media

#### 5.1.1 Suitable extinguishing media

- The product is not combustible, all extinguisher products can be used
- Use extinguishing measures that are appropriate to local circumstances and the surroundings

### 5.1.2 Unsuitable extinguishing media

- None

### 5.2 Special hazards arising from the substance or mixture

- None

### 5.3 Advice for firefighters

- Wear self-contained breathing apparatus as necessary

## 6. Accidental Release Measures

### 6.1 Personal Precautions

### 6.1.1 For non-emergency personnel

- Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
- For suitable protective equipment (see Section 8)

### 6.2 Environmental Precautions

- Avoid discharges into the environment (rivers, water courses, sewers etc.)

### 6.3 Methods for containment and clean up

- In all cases avoid dust formation
- Use vacuum suction, or shovel into bags
- Store material in a suitable, correctly labelled closed container

### 6.4 Reference to other sections

- For more information on exposure controls/personal protection or disposal considerations, see section 8 and 13

## 7. Handling and Storage

### 7.1 Precautions for Safe Handling

### 7.1.1 Protective measures

- Keep dust levels to a minimum
- Minimize dust generation
- Atmospheric levels should be controlled in compliance with the workplace exposure limit (see Section 8.1)
- Wear protective equipment (see Section 8.2)

### 7.1.2 Advice on general occupational hygiene

- Good personal and housekeeping practices
- No drinking, eating and smoking at the workplace

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

- Store in a cool dry place, (preferably at a temperature below 25 °C and humidity less than 65%)
- Store in original, closed and correctly labelled container
- Keep away from acids

## 8. Exposure Controls/Personal Protection

### 8.1 Control parameters

#### 8.1.1 Occupational Exposure Limits

| Component | CAS Number | Value | Control parameters | Basis |
|---|---|---|---|---|
| Calcium hydroxide | 1305-62-0 | TWA | 5 mg/m3 | UK EH40 WEL – workplace exposure limits |
| | | TWA | 5 mg/m3 | Europe. Commission Directive 91/322/EEC on establishing indicative limit values |

### 8.2 Exposure Controls

#### 8.2.1 Appropriate engineering controls

- if user operations generate dust, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne dust levels below recommended exposure limits

#### 8.2.2 Personal protection

##### 8.2.2.1 Eye/face protection

- face shield and safety glasses required. Use equipment approved under appropriate government standards. Such as EN 166(EU)

##### 8.2.2.2 Hand protection

- handle with gloves

Suggested type:
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Example product: Dermatril (KCL 740)

##### 8.2.2.3 Skin/body protection

- complete body suit protecting against chemicals.

##### 8.2.2.4 Respiratory protection

- in the case of high dust levels wear suitable respiratory protective equipment eg. dust mask or respirator, that conform to national/international standard, EN143. Recommended filter tpe P2

#### 8.2.3 Environmental exposure controls

- contain any spillage
- avoid discharges to the environment
- dispose of any rinse water in accordance with local and national regulations

## 9. Physical and Chemical Properties

### 9.1 Information basic physical and chemical properties

| | |
|---|---|
| Appearance | Grey/black powder |
| Odour | odourless |
| Odour threshold | not applicable |
| pH | 12.4-12.6 (saturated solution) |
| Melting point | >450 °C |

| | |
|---|---|
| Boiling point | no data available |
| Flash point | no data available |
| Evaporation rate | not applicable |
| Flammability | no data available |
| Upper flammability limit | no data available |
| Lower flammability limit | no data available |
| Relative density | no data available |
| Water solubility | partially soluble |
| Partition coefficient | not applicable (inorganic substance) |
| Vapour pressure | not applicable (inorganic substance) |
| Vapour density | not applicable |
| Decomposition temperature | starts to decompose above 580 °C to liberate calcium oxide and water |
| Viscosity | not applicable (solid) |
| Explosive properties | non-explosive (no chemical groups associated with explosive properties) |
| Oxidising properties | non-oxidising (based on the chemical structure of the substance and the oxidation states of the constituent elements) |

## 10 Stability and Reactivity

### 10.1 Reactivity

- calcium hydroxide is basic and therefore reacts with acid

### 10.2 Chemical Stability

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

### 10.3 Possibility of hazardous reactions

- an exothermic reaction results on contact with acid

### 10.4 Conditions to Avoid

- Contact with acids unless under controlled conditions
- Heating above 580 °C – thermal decomposition commences
- Exposure to moisture

### 10.5 Incompatible materials

- calcium hydroxide reacts with acid liberating heat
- calcium hydroxide reacts with brass and aluminium in the presence of moisture. Storage in contact with these materials should be avoided.

### 10.6 Hazardous decomposition products

- calcium hydroxide reacts with carbon dioxide when in solution forming calcium carbonate. Calcium carbonate is non-hazardous.

## 11. Toxicological Information

### (a) Acute Toxicity

- Oral $LD_{50}$, rat : 7340 mg/kg (for calcium hydroxide)

### (b) Skin Corrosion/Irritation

- Eyes, severe skin irritation (OECD test guideline 404)

### (c)Serious eye damage/irritation

- Eyes, severe eye irritation (OECD test guideline 405)

### (d) Respiratory or skin sensitisation

- no data available

### (e) Germ cell mutagenicity

- no data available

### (f) Carcinogenicity

- No evidence of calcium hydroxide/carbon having carcinogenic effects

Not classified according to EU Directive 67/548/EEC and CLP Regulation (EC) No. 1272/2008

### (g) Reproductive toxicity

- No data on reproduction toxicity available. However, based on the normal physiological role of calcium ions, no toxicity on mammalian or human reproduction is expected

### 12.1 Toxicity

- Fish, Clarias gariepinus: 96hr-$LC_{50}$, 33 mg/l (for Calcium hydroxide)
- Invertebrates, Daphnia magna : 48hr-$LC_{50}$, 49 mg/l (for Calcium hydroxide)

### 12.2 Persistence and degradeability

- In water: Not applicable ($Ca(OH)_2$ quickly dissociates), carbon will sediment out

- In soil: Not applicable (inorganic substance)
- In sediment : Not applicable (inorganic substance)

### 12.3 Biocummulative potential

Not applicable (inorganic substance)

### 12.4 Mobility in soil

Not applicable (partition coefficient measurement not required, inorganic substance)

### 12.5 PBT and vPvB assessment

According to Annex XIII of REACH Regulation, inorganic substances do not require assessment

### 12.6 Other adverse effects

No other adverse effects are identified

## 13. Disposal considerations

### 13.1 Waste treatment methods

- If recycling spilled product is not practicable, dispose of in compliance with local or national regulations
- Dissolve in water and neutralise with an acid, under controlled conditions
- Do not dispose of directly with acids

Packaging:

- Where possible, recycling is preferred to disposal or incineration
- Clean container with water, dispose of rinse water in accordance with local or national regulations
- Must be incinerated in a registered incineration plant with permit from the local authorities

## 14. Transport Classification

**Limpac is not classified as hazardous for transport**

### 14.1 UN Number

- Not regulated

### 14.2 UN proper shipping name

- Not regulated

### 1 4 . 3 Transport hazard class

| | |
|---|---|
| - Land Transport : | ADR/RID Not restricted |
| - Inland Waterway Transport : | ADN Not regulated |
| - Sea Transport : | IMO/IMDG Not regulated |
| - Air Transport : | ICAO-TI/IATA-DGR Not regulated |

## 15. Regulatory information

### 15.1 Safety, health and environmental regulations

- Water Hazard Class : WGK 1, VwVwS (Germany)
- TSCA Inventory : Listed

### 15.2 Chemical safety assessment

- A Chemical Safety Assessment/Report has not been carried out

## 16. Other information

### 16.1 Indication of changes

Section 1 – change of company name, logo and contact details
Issue No. : 1.1 Date of Issue : April 2015 - supercedes issue No. : 1.0, Date of Issue: January 2010

### 16.2 Abbreviations and acronyms

WEL : Workplace exposure limit
ACGIH : American Conference of Industrial Hygiene
TWA : Time Weighted Average
DNEL : Derived no effect level
NOEC : No Observed Effect Concentration
PBT : Persistent, Bioaccumulative, Toxic
vPvB : vert Persistent, very Bioaccumulative
PNEC : Predicted No Effect Concentration
ADR : European Agreement Concerning the International Carriage of Dangerous Goods by Road
RID : International Rule for Transport of Dangerous Substances by Rail
ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterway
IMO/
IMDG : International Maritime Organization/International Maritime Dangerous Goods Code
ICAO/
IATA : International Civil Aviation Organization/International Air Transport Association
OECD : Organisation for Economic Co-operation and Development
SIDS : Screening Information Data Set

### 16.3 Key literature references and sources of data

Data is taken from the Chemical Safety Report (CSR) and/or OECD SIDS report for calcium hydroxide

### 16.4 Further information

**16.4.1** The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid.

To our best present knowledge the information given is correct and complete as of the date of this document and is given in good faith but without warranty, either expressed or implied, nor do we accept any liability in relation to this information or its use. This version of the SDS supercedes all previous versions.