



LimeX45 and LimeX70 Material Safety Data Sheet

1.0 TYPICAL PRODUCT ANALYSIS

Parameter	LimeX45	LimeX70
Neutralising Value (NV)	22%	25%
Sieve testing: % passing 5.00mm	99%	99%
Sieve testing: % passing 3.35mm	97%	97%
Sieve testing: % passing 150 um (c. 600m ² /kg)	85%	85%
P ₂ O ₅ : kg/tonne	7	10
MgO: kg/tonne	5	7
SO ₃ : kg/tonne	6	9

2.0 MATERIAL SAFETY DATA SHEET (MSDS)

2.1 Product Identification

LimeX45 and LimeX70 are precipitated calcium carbonate products, from the British Sugar beet process.

2.2 Composition

The four main components are Calcium base (essentially acid soluble ash in the carbonate form, but may contain up to 6% oxide and 10% hydroxide forms). Organic material, containing plant nutrients (essentially volatile matter at 450°C, inert silicates (essentially acid insoluble ash) and water. Typical contents are shown in table 1.

Table 1 - Composition*¹.

Product	CaCO ₃ %	Organic %	Silicates %	Water %
LimeX45	40	13	4	45
LimeX70	52	15	5	30

*1 These values are not absolute. There will be a range for each constituent. LimeX products are sold subject to mandatory statutory statement for NV and sieve testing analysis in accordance with The Fertiliser Regulations 1991, as amended.

The major plant nutrients are shown in table 2.

Table 2. LimeX Nutrient Content *2

Product	Total P₂O₅ kg/tonne	Total MgO kg/tonne	Total SO₃ kg/tonne
LimeX45	7	5	6
LimeX70	10	7	9

2.3 Hazards Identification

- Inhalation: Excessive concentrations of a nuisance dust may cause nuisance condition such as coughing, sneezing and nasal irritation
- Ingestion: May be harmful if ingested in quantity
- Skin contact: May cause irritation.
- Eye contact: May cause chemical and mechanical irritation or more serious damage to eyes.

2.4 First Aid Measures

- Inhalation: Remove to fresh air and rest. Get medical attention for any breathing difficulty, or after significant exposure.
- Ingestion: If large amounts are swallowed get medical advice. Do not induce vomiting. Give plenty of water in sips.
- Skin contact: Wash exposed area with soap/cleanser and rinse with water. Seek medical advice if irritation develops.
- Eye contact: Irrigate thoroughly for at least 15 minutes and seek medical advice.

2.5 Fire Fighting Measures

- Fire: Not considered to be a fire hazard under normal conditions.
- Explosion: Not considered to be an explosion hazard under normal conditions.
- Small scale fire: Do not use water jets, use other options.
- Large scale fire: Evacuate area and call fire brigade. Wear self-contained BA & PPE.

2.6 Accidental Release Measures / Ecological Information

If significant quantities enter controlled waters, drains or sewers, contact the Environment Agency Hotline without delay on 0800 807060, and British Sugar Co-Products on 0870 240 2314.

2.7 Handling and Storage

- When mechanically handling or spreading products care must be taken to avoid inhaling dust and minimise contact with the skin and eyes.
 - Wear eye protection, gloves and protective clothing when working in proximity with the product.
- Store in a well ventilated area.
- When using, do not eat, drink or smoke.

2.8 Exposure Controls / Personal Protection

- Exposure limits from EH40: CaCO₃ total inhalable dust at 10mg/m³, respirable dust 4mg/m³, Ca(OH)² 5 mg/m³ and CaO 2mg/m³.
- PPE: If the exposure limit is exceeded, wear a half-face dust mask. When handling nuisance dust, wear protective overalls and gloves. Avoid contact with skin and eyes, and if necessary wear eye protection.

2.9 Physical and Chemical Properties

- LimeX45 is an off-white to dark grey cake.
- LimeX70 is an off-white to dark grey friable material.
- Appearance: Can vary depending on moisture content and storage period.
- Odour: Varies with storage method and storage period.

2.10 Stability and Reactivity

- Stability: stable under normal conditions of use and storage.
- Hazardous decomposition products: if decomposition of the organic matter occurs under anaerobic conditions, small quantities of CO₂, ammonia and methane can be liberated. Always store in a well ventilated area.

2.11 Toxicological Information

No LD50/LC50 information found relating to normal routes of occupational exposure.

2.12 Disposal Considerations

If sending to landfill, treat as 'active' material under Landfill Tax regime, with appropriate documentation as required under waste management legislation.

2.13 Transport Information

LimeX is normally transported in bulk tipping vehicles.

2.14 Regulatory Information

This MSDS has been prepared according to the hazard criteria of the Chemicals [Hazard Information and Packaging] Regulations 1994, as amended.

2.15 Other Information

For further information contact British Sugar Co-Products on 0870 240 2314, or fax on 0870 240 2729. Alternatively contact the Agricultural Department at the factory from which the product was dispatched:

Factory	Telephone Number
Bury St Edmunds	01284 763291
Cantley	01493 700351
Newark	01636 640000
Wissington	01366 377364