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

- **1.1 Product identifier**
  - Trade name: Polysulphate
  - Synonyms: \(K_2Ca_2Mg(SO_4)_4 \cdot 2H_2O\), Polyhalite
  - CAS Number: 15278-29-2
  - Registration number: This product is exempted from the obligation to register in accordance to Reg. (EC) 1907/2006 (naturally occuring mineral that is not modified chemically).

- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
  - Relevant identified uses: Fertiliser
  - No uses advised against.

- **1.3 Details of the supplier of the safety data sheet**
  - Manufacturer/Supplier: Cleveland Potash Limited
    Boulby Mine
    Loftus
    Saltburn by the Sea
    Cleveland TS13 4UZ
    Telephone +44 (0) 1287 640 140
    Fax +44(0) 640 934
    Registered in England No GB 915392

- **1.4 Emergency telephone number:** In Europe call: +31-20-5815100 (24 hours a day, 365 days a year)

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
  - Classification according to Regulation (EC) No 1272/2008: The substance is not classified according to the CLP regulation.
  - Information concerning particular hazards for human and environment: Not applicable.

- **2.2 Label elements**
  - Labelling according to Regulation (EC) No 1272/2008: Void
  - Hazard pictograms: Void
  - Signal word: Void
  - Hazard statements: Void
  - 2.3 Other hazards
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.

**SECTION 3: Composition/information on ingredients**

- **3.1 Substances**
  - CAS No. Description
    - 15278-29-2 Polyhalite
    - SVHC None

(Contd. on page 2)
SECTION 4: First aid measures

· 4.1 Description of first aid measures
· General information: No special measures required.
· After inhalation: Supply fresh air; consult doctor in case of complaints.
· After skin contact:
  Rinse with warm water.
  If skin irritation continues, consult a doctor.
· After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· After swallowing:
  Rinse out mouth and then drink plenty of water.
  If symptoms persist consult doctor.
  NOTE: Never give an unconscious person anything to drink.
· 4.2 Most important symptoms and effects, both acute and delayed Gastric or intestinal disorders
· 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media
· Suitable extinguishing agents:
  The product is not flammable.
  Use fire extinguishing methods suitable to surrounding conditions.
· For safety reasons unsuitable extinguishing agents: None
· 5.2 Special hazards arising from the substance or mixture
  In case of fire, the following can be released:
  Sulphur oxides (SOx)
  Oxygen
  MgO
· 5.3 Advice for firefighters
· Protective equipment:
  Wear fully protective suit.
  Mount respiratory protective device.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures
  Avoid formation of dust.
  Use respiratory protective device against the effects of fumes/dust/aerosol.
  Wear protective clothing.
· 6.2 Environmental precautions:
  Dilute with plenty of water.
  Keep contaminated washing water and dispose of appropriately.
· 6.3 Methods and material for containment and cleaning up: Pick up mechanically.
· 6.4 Reference to other sections No dangerous substances are released.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling
  Ensure good ventilation/exhaustion at the workplace.
### Trade name: Polysulphate

- Prevent formation of dust.
- **Information about fire - and explosion protection:**
  - No special measures required.
  - The product is not flammable.

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

- **Requirements to be met by storerooms and receptacles:** Store in dry conditions.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

### 7.3 Specific end use(s)

No further relevant information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:**
  - Ventilation must be sufficient to maintain TLV-TWA below 3 mg/m³, respirable particles, and 10 mg/m³, inhalable particles [ACGIH recommendation for Particles (Insoluble or poorly soluble). Not Otherwise Specified (PNOS)]

### 8.2 Exposure controls

- **General protective and hygienic measures:**
  - The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:**
  - Use suitable respiratory protective device in case of insufficient ventilation.

  - **Filter P2**

- **Protection of hands:**

  - **Protective gloves**
  - **Material of gloves**
    - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
  - **Penetration time of glove material**
    - The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed. (EN 374)
  - **Eye protection:**

  - **Safety glasses**

- **Body protection:** Light weight protective clothing

- **Limitation and supervision of exposure into the environment**
  - Based on all data available this product is not considered to pose a risk to the environment.

- **Risk management measures**
  - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

(Contd. on page 4)
### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
  - **Appearance:**
    - **Form:** Solid
    - **Colour:** Grey
      - Grey-white
  - **Odour:** Odourless
  - **pH-value:** neutral
  - **Change in condition**
    - **Melting point/Melting range:** Undetermined.
    - **Boiling point/Boiling range:** Undetermined.
  - **Flash point:** Not applicable
    - This product is inorganic substance.
  - **Flammability (solid, gaseous):** Product is not flammable.
  - **Self-igniting:** Product is not selfigniting.
  - **Danger of explosion:** Product does not present an explosion hazard.
  - **Explosion limits:** Not applicable
    - This product does not contain any oxidizing agents.
  - **Vapour pressure:** Not determined.
  - **Bulk density at 20 °C:** 1,4-1,8 g/cm³
  - **Evaporation rate:** Not applicable.
  - **Solubility in / Miscibility with water:** Soluble.
  - **Partition coefficient (n-octanol/water):** Not applicable
    - This substance is inorganic chemical.
  - **Viscosity:** This product is solid. Viscosity is only relevant to liquids.
- **9.2 Other information**
  - No further relevant information available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No decomposition if used according to specifications.
- **10.2 Chemical stability** No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid**
  - To avoid thermal decomposition do not overheat.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
  - Formation of toxic gases is possible during heating or in case of fire.
  - Sulphur oxides (SOx)
  - Oxygen
  - MgO
SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:
LD/LC50 values relevant for classification: None
Primary irritant effect:
on the skin: No irritant effect.
on the eye: No irritating effect.
Sensitisation: No sensitising effects known.
Additional toxicological information:
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.
The substance is not subject to classification according to the latest version of the EU lists.
CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
Mutagenicity: None
Carcinogenicity: no data available
(no carcinogenicity study needs to be performed as this substance is not genotoxic)
Toxicity for reproduction: no classification is necessary

SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity: No further relevant information available.
12.2 Persistence and degradability
The substance is inorganic; therefore no biodegradation tests are applicable.
12.3 Bioaccumulative potential
Does not accumulate in organisms
12.4 Mobility in soil
No further relevant information available.
General notes:
According to the criteria of the EU-classification and labelling "dangerous for environment" (93/21/EWG) the substance/ the product has to be classified as non-hazardous for the environment.
12.5 Results of PBT and vPvB assessment
PBT: No assessment is required for inorganic substances.
vPvB: No assessment is required for inorganic substances.
12.6 Other adverse effects
No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation
This product is used as fertiliser. However, large spills can kill vegetation. Prevent large quantities from entering waterways.
If uncontaminated, sweep up or collect, and reuse as product. If contaminated with other materials, collect in suitable containers.
Smaller quantities can be disposed of with household waste.
Disposal must be made according to official regulations.
Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

(Contd. on page 6)
SECTION 14: Transport information

- 14.1 UN-Number
  None
- 14.2 UN proper shipping name
  None
- 14.3 Transport hazard class(es)
  None
- 14.4 Packing group
  Not applicable
- 14.5 Environmental hazards:
  No
- 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 applicable.

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Labelling according to Regulation (EC) No 1272/2008 GHS label elements
  Hazard pictograms
  Void
  Signal word
  Void
  Hazard statements
  Void
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms:
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent

* Data compared to the previous version altered.
  The sections where alterations took place are marked with an asterisk in the left border