1 Identification of the substance/mixture and of the company/undertaking

· Product identifier
· Trade name: DIFFERENTIAL REINFORCED CLOSTRIDIAL MEDIUM
· Article number: CL78
· Relevant identified uses of the substance or mixture and uses advised against
· Application of the substance / the preparation Laboratory chemical

2 Hazards identification

· Classification of the substance or mixture
· Classification according to Regulation (EC) No 1272/2008
  The product is not classified according to the CLP regulation.
· Classification according to Directive 67/548/EEC or Directive 1999/45/EC Void
· Information concerning particular hazards for human and environment:
  This product is not hazardous according to EEC directives 67/548/EEC and 1999/45/EC.

3 Composition/information on ingredients

· Chemical characterization: Mixtures
· Description: Mixture of substances listed below with nonhazardous additions.
· Dangerous components:
  CAS: 7681-57-4 sodium metabisulphite <5%
  EINECS: 231-673-0 Xn R22; Xi R41
  R31
    Eye Dam. 1, H318; Acute Tox. 4, H302
  CAS: 9005-25-8 Starch <5%
  EINECS: 232-679-6
  CAS: 1185-57-5 ammonium iron(III) citrate <5%
  EINECS: 214-686-6
· Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· Description of first aid measures
· General information:
  First Aider: Pay attention to self-protection!
  Immediately remove any clothing soiled by the product.
Trade name: DIFFERENTIAL REINFORCED CLOSTRIDIAL MEDIUM

- **After inhalation:** Supply fresh air and to be sure call for a doctor.
- **After skin contact:**
  - Immediately rinse with water.
  - If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for 10 minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Rinse mouth and drink a glass of water. Do not induce vomiting.
  - If symptoms persist consult doctor.

5 Firefighting measures

- **Extinguishing media**
  - Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
  - **Advice for firefighters**
  - Protective equipment:
  - Wear self-contained respiratory protective device.
  - Wear fully protective suit.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  - Avoid formation of dust.
  - Do not breathe dust.
- **Environmental precautions:** Do not allow to enter sewers/surface or ground water.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **Reference to other sections**
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
  - Precautions for safe handling
  - Keep containers, equipment and working place clean.
  - Handling corresponding to laboratory safety guidelines.
  - Information about fire - and explosion protection: No special measures required.
- **Conditions for safe storage, including any incompatibilities**
  - **Storage:**
  - Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
  - Information about storage in one common storage facility: Store away from foodstuffs.
  - Further information about storage conditions:
  - Keep container tightly sealed.
  - Store in dry conditions.
  - Protect from exposure to the light.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**

  **9005-25-8 Starch**

  WEL (Great Britain) Long-term value: 10* 4** mg/m³
  - *total inhalable
  - **respirable
7681-57-4 sodium metabisulphite
WEL (Great Britain) Long-term value: 5 mg/m³

1185-57-5 ammonium iron(III) citrate
WEL (Great Britain) Short-term value: 2 mg/m³
Long-term value: 1 mg/m³ as Fe

Additional information: The lists valid during the making were used as basis.

Exposure controls
Personal protective equipment:
General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Respiratory protection: Required when dusts are generated.
Protection of hands:
Protective gloves
Due to missing tests no recommendation to the glove material can be given for the product.
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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection:
Tightly sealed goggles
Body protection: Protective work clothing

9 Physical and chemical properties
Information on basic physical and chemical properties
General Information
Appearance:
Form: Solid
Colour: brownish
Odour: Peptone-like
pH-value at 20°C: 7.1
Change in condition
Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.
Flash point: Not applicable.
Ignition temperature: 607°C
Self-igniting: Product is not self-igniting.
Danger of explosion: Product does not present an explosion hazard.
Explosion limits:
Lower: Not determined.
Upper: Not determined.
### Trade name: DIFFERENTIAL REINFORCED CLOSTRIDIAL MEDIUM

- **Density:** Not determined.
- **Solubility in / Miscibility with water at 100°C:** 31 g/l
- **Segregation coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - **Dynamic:** Not applicable.
  - **Kinematic:** Not applicable.

### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** Heating
- **Possibility of hazardous reactions:** No dangerous reaction known.
- **Incompatible materials:** No information available.
- **Hazardous decomposition products:** No information available.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
  - **LD/LC50 values relevant for classification:** Quantitative data on the toxicity of this product are not available.
- **Primary irritant effect:**
  - **on the skin:** No irritating effect.
  - **on the eye:** No irritating effect.
  - **after inhalation:** No information available.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:** After swallowing of great amounts diarrhoea.
- **Further information:** The product should be handled with the care usual when dealing with chemicals.

### 12 Ecological information

- **Toxicity**
  - **Aquatic toxicity:** Quantitative data on the ecological effect of this product are not available.
  - **Persistence and degradability:** No further relevant information available.
  - **Behaviour in environmental systems:**
  - **Bioaccumulative potential:** No further relevant information available.
  - **Mobility in soil:** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
  - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
  - Do not allow product to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
  - The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.
Uncleaned packaging:
Recommendation: Disposal according to official regulations.

14 Transport information

Land transport ADR/RID (cross-border)
ADR/RID class: -
Remarks: Not subject to transport regulations.

Maritime transport IMDG:
IMDG Class: -

Air transport ICAO-TI and IATA-DGR:
ICAO/IATA Class: -
UN "Model Regulation": -
Special precautions for user Not applicable.

15 Regulatory information

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

National regulations:
Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

Relevant phrases
H302 Harmful if swallowed.
H318 Causes serious eye damage.
R22 Harmful if swallowed.
R31 Contact with acids liberates toxic gas.
R41 Risk of serious damage to eyes.

Department issuing MSDS: Department: Health, Safety and Environment
Contact: Herr Dr. Hagel

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals

* Data compared to the previous version altered.