99.5%



Material Safety Data Sheet acc. to ISO/DIS 11014

Date Prepared: 03/01/2011

Reviewed On: 02/11/2011

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

- · Product Identifier
- · Product Name: Catalyst Charges (GasPak 100)
- · Catalog Number: 260626
- \cdot Details of the supplier of the safety data sheet
- Manufacturer/Supplier: BD Diagnostic Systems 7 Loveton Circle Sparks, MD 21152 Telephone.: (410) 771 - 0100 or (800) 638 – 8663
- Emergency telephone number:
- In case of a chemical emergency, spill, fire, exposure, or accident contact BD Diagnostic Systems (410) 771-0100 or (800)-638-8663, or ChemTrec at (800) 424-9300.

2 Composition/information on ingredients

- · Chemical characterization: Mixture
- · Description: Mixture consisting of the following components.

· Dangerous Components:

alumina

3 Hazards identification

· Classification of the substance or mixture · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Xi; Irritant *R36/37:* Irritating to eyes and respiratory system. Classification system: The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data. · Label elements · Labelling according to EU guidelines: The product has been classified and marked in accordance with regulations on hazardous materials. · Code letter and hazard designation of product: Xi Irritant · Hazard-determining components of labelling: alumina · Risk phrases: 36/37 Irritating to eyes and respiratory system. · Safety phrases: 7 Keep container tightly closed. 22 Do not breathe dust. 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 36 Wear suitable protective clothing. (Contd. on page 2)



Date Prepared: 03/01/2011

Reviewed On: 02/11/2011



(Contd. of page 1)



4 First aid measures

- · General information No special measures required.
- After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Immediately wash with water and soap and rinse thoroughly.
- After eye contact Rinse opened eye for 15 minutes under running water. Then consult a doctor.
- · After swallowing If symptoms persist consult doctor.
- Information for doctor Show this product label or this MSDS.

5 Firefighting measures

· Suitable extinguishing agents

CO2, ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.

- \cdot Special hazards arising from the substance or mixture
- During heating or in case of fire toxic gases may be produced.
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Wipe up with damp sponge or mop.
- Methods and material for containment and cleaning up: No special measures required.
- · 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 Prevent formation of dust.
- Information about protection against explosions and fires: No special measures required.
- · Storage
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Store away from oxidizing agents.

(Contd. on page 3)

USA



Date Prepared: 03/01/2011

Product Name: Catalyst Charges (GasPak 100)

(Contd. of page 2)

• Further information about storage conditions: Store in cool, dry conditions in well sealed containers.

8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see Section 7.

· Components with limit values that require monitoring at the workplace:

alumina

PEL 15*;5** mg/m³ *Total dust **Respirable fraction TLV 10 mg/m³

 $LV = 10 \text{ mg/m}^3$ (e)

· Additional information: The lists that were valid during the creation were used as basis.

· 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. Avoid contact with the eyes and skin.

• Breathing equipment:

In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respirator. • Protection of hands:



Chemical resistant gloves (i.e. nitrile, or equivalent).

· Eye protection: Safety glasses

· Body protection: Protective work clothing (lab coat).

| 9 Physical | and c | hemical | properties |
|-------------|-------|---------------|------------|
| > I hysteat | | <i>convou</i> | properties |

| General Information Appearance: | | |
|------------------------------------|---|--|
| Form: | Solid. | |
| Color: | Grey | |
| | Black | |
| Odor: | Characteristic | |
| Change in condition | | |
| Melting point/Melting range: | 2072°C (3762 °F) | |
| Boiling point/Boiling range: | | |
| Flash point: | Not applicable | |
| Auto igniting: | Product is not self igniting. | |
| Danger of explosion: | Product does not present an explosion hazard. | |
| Density: | 3.97 g/cm ³ (33.13 lbs/gal) | |

USA –



Date Prepared: 03/01/2011

Product Name: Catalyst Charges (GasPak 100)

| | | (Contd. of page 3) |
|---|---------------------------|--------------------|
| · Solubility in / Miscibility w Water: | v ith Insoluble | |
| · Solvent content: Organic solvents: | 0.0 % | |
| Solids content: | 100.0 % | |

10 Stability and reactivity

- *Thermal decomposition / conditions to be avoided:* No decomposition if used according to specifications. • *Incompatible materials:* Incompatible material: strong oxidizers.
- · Hazardous decomposition products: No dangerous decomposition products known.
- · Additional information:

The product will undergo an exothermic hydration reaction with water which may peoduce significant amounts of heat depending on the amount of water and alumina.

11 Toxicological information

- Acute toxicity:
- · Primary irritant effect:
- on the skin: No irritating effect.
- on the eye: Irritating effect.
- Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

12 Ecological information

- · Acquatic toxicity: No further relevant information available.
- · Ecotoxical effects:
- Other information:
- The ecological effects have not been thoroughly investigated, but currently none have been identified.
- · Additional ecological information:
- General notes: Not known to be hazardous to water.

13 Disposal considerations

· Waste treatment methods

· Recommendation

Smaller quantities can be disposed of with solid waste. This product is not considered a RCRA hazardous waste. Dispose of material in accordance with federal (40 CFR 261.3), state and local requirements.

- · Uncleaned packagings:
- Recommendation: Disposal must be made according to state and federal regulations.

(Contd. on page 5)

USA

(Contd. of page 4)



Material Safety Data Sheet acc. to ISO/DIS 11014

Date Prepared: 03/01/2011

Reviewed On: 02/11/2011

Product Name: Catalyst Charges (GasPak 100)

· Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

· DOT regulations:

• Hazard class:

· Land transport ADR/RID (cross-border) · ADR/RID class: -

• Maritime transport IMDG:

· IMDG Class:

• Marine pollutant: No

· Air transport ICAO-TI and IATA-DGR:

· ICAO/IATA Class: -

15 Regulatory information

· SARA Section 355 (extremely hazardous substances)

None of the ingredients is listed.

· SARA Section 313 (specific toxic chemical listings)

alumina

· TSCA (Toxic Substances Control Act)

All ingredients are listed.

· California Proposition 65 - Chemicals known to cause cancer

None of the ingredients is listed.

· California Proposition 65 - Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· California Proposition 65 - Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· California Proposition 65 - Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

alumina

16 Other information

(Contd. on page 6)

A4



Date Prepared: 03/01/2011

Reviewed On: 02/11/2011

Product Name: Catalyst Charges (GasPak 100)

(Contd. of page 5)

To the best of our knowledge, the information contained herein is accurate. However, neither Becton, Dickinson and Company or any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we can not guarantee that these are the only hazards that exist.

 Department issuing MSDS: Environmental, Health & Safety Created by Michael J. Spinazzola
Contact: Technical Service Representative

USA