

## Material Safety Data Sheet

### **1. Product Identification:**

Chemical name : 2-Chloro-1,3-Butadiene homopolymer  
Designation or trade name : DCR-213

#### **1.2 Use of the preparation**

Production of rubber finished articles, alone or in compound with other components.

#### **1.3 Identification of the company / undertaking**

Responsible for placing on the North American market:

**HB Chemical Corp., 140 E. Ascot Ln., Cuyahoga Falls, Ohio 44223**

Telephone N°: 330-920-8023 Fax: 330-920-0971

#### **Emergency Numbers:**

*CHEMTREC 800-424-9300*

*CANUTECH(Canada) 613-996-6666*

### **2 . COMPOSITION / INFORMATION ON INGREDIENTS**

The preparation is essentially made of: 2-Chloro-1,3 Butadiene homopolymer (CR).  
CAS number: 9010-98-4 (referred to the polymer).

### **3 . HAZARDS IDENTIFICATION**

#### **- Classification**

This product is not classified as dangerous according to Directive 1999/45/EC and following amendments.

#### **- Critical hazards to man:**

The preparation is not hazardous in the form in which it is placed on the market and under the normal and recommended conditions of storage and use. The preparation is not dangerous for the health according to the criteria set by the European Union. See also sections 4 and 11.

#### **- Critical hazards to the environment**

The preparation is not dangerous for the environment according to the criteria set by the European Union.

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## 4 . FIRST-AID MEASURES

### - Symptoms, effects, indication for immediate action

#### • Inhalation

Symptoms : (dust or gas/vapours released by heath) irritation of the respiratory organs.

Expected delayed effects : N.Ap.

First aid actions : move the affected person away from the contaminated area into fresh air; seek medical assistance.

#### • Contact with skin

Symptoms : dust can irritate skin. No effect expected by contact with the elastomer at room temperature. Melted product cause burns.

Expected delayed effects : N.Ap.

First aid actions

: wash with plenty of water. In case of contact with melted material, cool down with cold water and seek medical assistance. Do not remove the product that solidified on skin.

Treat as a burn.

#### • Contact with eyes

Symptoms : (dust or gas/vapours released by heath) dust can redden eyes.

Expected delayed effects : N.Ap.

First aid actions

: wash with plenty of water. If irritation persists, seek medical assistance.

#### • Ingestion

Symptoms : abdominal pain.

Expected delayed effects : N.Ap.

First aid actions: no specific measure requested in case of ingestion. If needed seek medical assistance.

- **Specific and immediate treatment means to be available at the workplace:** eye wash fountain.

## 5 . FIRE-FIGHTING MEASURES

### - Suitable extinguishing media:

Water, water spray, foam, dry chemicals, carbon dioxide.

Cool down the containers using water spray.

- **Extinguishing media which must not be used for safety reasons:** N.Ap.

- **Special exposure hazards arising from preparation itself, combustion products, resulting**

### **gases:**

The preparation, when involved in a fire, burns with a sooty flame and release fumes made up of

water, carbon dioxide, carbon monoxide (when starved of oxygen), chlorinated derivatives (HCl).

Overheating/pyrolysis evolves vapours made up of monomers, low molecular weight polymers and

their oxidation products.

### - **Special protective equipment for fire-fighters:**

Use suitable personal protective equipment (self contained breathing apparatus, helmet, goggles, fire resistant gloves, boots).

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## 6 . ACCIDENTAL RELEASE MEASURES

### - Personal precautions:

See section 8.

### - Environmental precautions:

Keep away from drains. Do not release into the environment.

### - Methods for cleaning:

Collect mechanically. Reuse if possible or dispose of as required by national and local regulations (see section 13).

## 7 . HANDLING AND STORAGE

### 7.1 Handling

#### - Safety precautions

During processing, ventilation should be ensured and suitable exhaust systems should be in place.

Use gloves and safety glasses. Avoid contact with sources of ignition. Elevated processing temperatures may result in some degree of thermal degradation: as a guideline 250 °C is the maximum allowed temperature for very short time.

The preparation is a poor conductor and it is likely to accumulate electrostatic charges. Precautions normally used for materials not conductive and against the accumulation of electrostatic charges should be used during processes which employ powdered materials or produce dust (e.g.: reduce speed to the minimum, install earthing systems, the absolute prohibition to smoke and use free flames, use inert gases in mills and in the closed systems).

Comply with personal hygiene measures and use the personal protective equipment (see chapter

8). Do not smoke, eat or drink in the workplace. Re-seal opened containers.

### 7.2 Storage

#### - Safety conditions

Store the preparation in a covered place in sealed packaging, away from sunlight and heat sources.

Ensure the proper ventilation in all storage areas.

### 7.3 – Specific uses

Recommendations: N.Ap.

## 8 . EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Exposure limit values

A) Occupational:

**Threshold limit values ACGIH (Tab. 2002)\***

**TWA STEL / C**

(ppm; mg/m<sup>3</sup>) (ppm; mg/m<sup>3</sup>)

residual monomer:

β Chloroprene 10 ppm ---

other substances:

Particulate not otherwise  
classified (inhalable)

10 mg/m<sup>3</sup>--

\*Or statutory limit values in the country concerned.

B) Medical:

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- **Recommended monitoring procedures:** As required by the rules and regulations of each country.

## 8.2 Exposure control

### - Occupational exposure control:

Traces of monomers and others volatile substances may be given off during processing, particularly at unusually high processing temperatures.

Work rooms must be provided with adequate ventilation and exhaust equipment to collect dusts and gas/vapours that may be emitted during the conversion.

### - Equipment to provide adequate and personal protection:

**Respiratory protection:** In normal conditions masks with antidust filters should be available to be used when requested.

**Hand protection:** chemical substances resistant gloves. Breakthrough time of the glove material: see producer's data.

**Eye protection:** not necessary when no powders or vapours are present. Where present, use safety goggles.

**Skin protection:** standard work clothes.

- **Specific hygiene measures:** No smoking, eating or drinking in the workplace. Wash hands thoroughly before eating, drinking or smoking.

## 9 . PHYSICAL AND CHEMICAL PROPERTIES

- Appearance

Physical state at 23°C : solid

**Form :** chips

**Density :** 1.23 ca.

**Softening temperature :** N.Ap.

**Decomposition temperature :** >250°C ca.

- Solubility with other solvents : soluble in tetrahydrofurane, aromatic hydrocarbons and chlorinated solvents.

- Lower calorific value : N.Av.

**Color :** ivory

**Odor :** light characteristic

**Bulk density :** N.Av.

**Ignition :** 400 °C

**Solubility in water :** insoluble

## 10. STABILITY AND REACTIVITY

The preparation is stable and inert in the recommended storage and handling conditions (see sect. 7).

### - Conditions/Materials to avoid:

Exposure to sunlight and/or heat. Accumulation of electrostatic charges. Oxidising substances.

- **Hazardous decomposition products:** (see sect. 5).

Comply with the advised processing temperatures to avoid the formation of noxious gas and vapours.

## 11 . TOXICOLOGICAL INFORMATION

Specific information on the preparation is not available in the literature. Residual monomers are present in the product at trace level, hindered in the elastomer matrix and therefore not available in normal conditions.

- **Dangerous effects from exposure to the preparation:**

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The possible dusts may cause irritation to the eyes and/or respiratory organs.  
The elastomer does not present any intrinsic health hazard when processed according to correct working procedures.

**- Delayed and immediate effects from short and long term exposure:**

Carcinogenicity, mutagenicity, reproductive toxicity: no evidence of these effects has been reported for the preparation.

## 12 . ECOLOGICAL INFORMATION

**- Ecotoxicity**

The preparation is essentially an high molecular weight polymer, not regarded as ecotoxic.

**- Mobility**

Use according to good working practice, and avoid releasing the product into the environment.

**- Persistence and degradability**

The preparation is not a biodegradable polymer.

## 13 . DISPOSAL CONSIDERATIONS

**- Description and handling of residues:** For the handling of the residues the same safety

advices given for the preparation are to be applied.

**- Appropriate methods of disposal of preparation:**

Residues should be disposed of as required by national and local regulations.

**• Incineration**

Must be done under approved conditions, possibly with energy recovery and only at suitable

facilities equipped with a scrubber for the treatment of fumes before their release into the atmosphere.

**• Recycling**

After suitable treatment (cleaning, grinding, etc.), the preparation can be safely re-used, as is

or mixed with fresh material, when this is compatible with the intended final application.

**• Landfilling**

Should be avoided as far as possible. If unavoidable, use approved landfill sites.

**- National and Community provisions relating to waste:**

Directive 91/156/EEC of 18 March 1991; Directive 91/689/EEC of 12 December 1991;

Directive

94/62/EEC of 20 December 1994.

## 14 . TRANSPORT INFORMATION

The preparation is not classified as dangerous for the transport according to the following

regulations: ADR/RID, IMO, IATA.

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## **15 . REGULATORY INFORMATION**

### **- Information on classification and labelling:**

The preparation is not dangerous according to the Directive 1999/45/EC.  
Label not required.

## **16 . OTHER INFORMATION**

This safety data sheet has been taken from the MSDS of Polieri Europa who once made Butaclor material. They gathered their information according to the requirements of Directive 2001/58/EC.

Data and information contained in this Safety Data Sheet are based on our available knowledge at the last revision date.

No guarantee can be given as to the sufficiency of any safety measures contained in this Safety Data Sheet, nor can it

be assumed that other or additional measures may not be required under particular or exceptional circumstances. The

user must make sure of the fitness and completeness of the information, according to the specific use he wants to do.