

**MATERIAL SAFETY DATA SHEET****SECTION 1 - MATERIAL IDENTIFICATION AND USE**Product : **BROWN DCE 40849**Manufacturer's name : **STARCO CONCENTRATES INC.** Telephone number: **514-645-9559**

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Montreal, Qc, Canada

H1B 5L8

| Chemical name    | Chemical Family                           | Chemical Formula            |
|------------------|---|-----------------------------|
| Dry compound     | Pigment and/or additives                  | Proprietary mixture         |
| Molecular weight | Trade Name and Synonyms                   | Material Use                |
| Not applicable   | Color/additives concentrates, masterbatch | Coloration of PVC compounds |

**SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS**

| % Weight | CAS number | Ingredient                    | Units OSHA             | Vapor pressure |
|----------|------------|-------------------------------|------------------------|----------------|
| 4-10     | 1317-65-3  | Calcium carbonate             | 10 mg/m <sup>3</sup>   |                |
| <0.06    | 14808-60-7 | Crystalline silica            | 0.05 mg/m <sup>3</sup> |                |
| 65-85    | 68186-90-3 | Chrome antimony titanium buff | 0.5 mg/m <sup>3</sup>  |                |
| 5-15     | 1309-37-1  | Iron oxide                    | 5 mg/m <sup>3</sup>    |                |

**SECTION 3 – HAZARDS IDENTIFICATION****Potential Health Effects**

## Acute toxicity

|            |   |
|------------|---|
| Skin       | Non-corrosive and non-sensitizing. Prolonged contact may result in rashes/irritations due to drying of the skin and/or mechanical abrasion related to skin-to-clothing contact or skin-to-skin contact. |
| Inhalation | Inert nuisance dust. Temporary drying effect and/or irritation of mucous membranes may result from excessive exposure. Exposure to dust may aggravate pre-existing respiratory conditions.              |
| Ingestion  | If ingested, do not induce vomiting unless directed to do by medical personnel. Get medical attention.  |

**Chronic Effects** Prolonged dust inhalation may cause silicosis. Prolonged and excessive inhalation of dust may lead to chronic pulmonary disease.

**Eyes** Inert foreign body hazard only.

#### SECTION 4-FIRST AID MEASURES

**Eye contact:** In the case of contact with eyes, rinse immediately with plenty of water. If symptoms persist, call a physician.

**Skin contact:** Wash skin with soap and water. Use of moisturizing may be helpful.

**Ingestion:** No adverse health effects anticipated by this route during proper industrial handling. If accidentally swallowed, rinse mouth thoroughly with water and afterwards, drink plenty of water. In case of discomfort, obtain medical attention.

**Inhalation:** In case product dust is released: Possible discomfort: cough, sneezing. Move victims into fresh air.

#### SECTION 5-FIRE FIGHTING MEASURES

**Flash point:** Not flammable.

**Suitable extinguishing media:** No fire hazard.

**Hazardous combustion products:** No hazardous decomposition products.

##### Explosion data

**Sensitivity to mechanical impact:** Not applicable

**Sensitivity to static discharge** Not applicable

**Protective equipment and precautions for firefighters** As any fire, wear self-contained breathing apparatus and full protective gear.

**NFPA**                      **Health Hazard 1**                      **Flammability 0**                      **Stability 0**

#### SECTION 6-ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Avoid inhalation of dust by arranging adequate ventilation, or use an appropriate dust mask. Avoid excessive contact with the skin.

**Methods for containment:** Prevent further leakage or spillage if safe to do so. Use dyking or absorbent to prevent run-off from entering waterways.

**Methods for cleaning up:** Use any feasible mechanical mean ( e.g. vacuuming, sweeping) but avoid dusting during clean up.

## SECTION 7- HANDLING AND STORAGE

|          |  |
|----------|--|
| Handling | Handle in accordance with good industrial hygiene and safety practice. Avoid dust formation. Avoid contact with skin, eyes and clothing. Wash hands thoroughly before eating, drinking or smoking. |
| Storage  | Keep container tightly closed in a dry and well-ventilated place. Store in original container.   |

## SECTION 8-EXPOSURE CONTROLS/PERSONAL PROTECTION

### Personal protective equipment

|                          |  |
|--------------------------|--|
| Engineering measures     | Good natural ventilation will be sufficient in most circumstances. Local exhaust ventilation may be necessary if airborne dust concentration approaches the exposure limit(s). |
| Eye /face protection     | Safety glasses with side-shields. Goggles.   |
| Skin and body protection | Wear protective gloves/clothing.   |
| Respiratory protection   | Use NIOSH approved dust HEPA-type respirator if limit(s) is or may be exceeded.  |
| Hygiene measures         | Individuals having sensitive skin may find it beneficial to use a barrier cream or moisturizer when excessive or prolonged contact with the skin is likely.                    |

## SECTION 9-PHYSICAL AND CHEMICAL PROPERTIES

|                                    |                             |                                   |                |
|------------------------------------|-----------------------------|-----------------------------------|----------------|
| <b>Appearance</b>                  | Brown                       | <b>Odor</b>                       | None           |
| <b>Physical state</b>              | Solid                       | <b>ph</b>                         | Not applicable |
| <b>Flash point</b>                 | None                        | <b>Auto-ignition temperature</b>  | Not applicable |
| <b>Boiling point/boiling range</b> | Not applicable              | <b>Melting point/range</b>        | ≥ 800 °C       |
| <b>Explosion limits</b>            | Not applicable              | <b>Flammability Limits in air</b> | Not applicable |
| <b>Specific gravity</b>            | 2.6 - 3.4 g/cm <sup>3</sup> | <b>Molecular weight</b>           | Not applicable |
| <b>Water solubility</b>            | < 0.5 mg/100 mg             | <b>Evaporation rate</b>           | Not applicable |

|                       |                |                      |                |
|-----------------------|----------------|----------------------|----------------|
| <b>Vapor pressure</b> | Not applicable | <b>Vapor density</b> | Not applicable |
| <b>VOC content(%)</b> | None           |                      |                |

**SECTION 10-STABILITY AND REACTIVITY**

|                                  |   |
|----------------------------------|---|
| Stability                        | Stable under normal conditions.   |
| Incompatible products            | Aluminum and aluminum salts. Reacts with strong acids to liberate carbon dioxide. |
| Conditions to avoid              | Contact with incompatible substances.   |
| Hazardous decomposition products | Carbon dioxide and calcium oxide.   |
| Hazardous polymerization         | Hazardous polymerization does not occur.  |

**SECTION 11-TOXICOLOGICAL INFORMATION****Acute toxicity**

Product information: These products do not present acute toxicity hazard based on known or supplied information.

| Chemical name     | LD50 Oral                         | LD50 Dermal                    | LC50 Inhalation |
|-------------------|-----------------------------------|--------------------------------|-----------------|
| Calcium carbonate | 2000-6450 mg/kg Oral LD50 ( Rat ) |                                |                 |
| Iron(III) oxide   | >5000 mg/kg Oral LD50 ( Rat )     | 5500 mg/kg Dermal LD50 ( Rat ) |                 |
|                   |                                   |                                |                 |
|                   |                                   |                                |                 |
|                   |                                   |                                |                 |

|                                |  |
|--------------------------------|--|
| <b>Carcinogenicity effects</b> | IARC has concluded that there is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the form of quartz from occupational sources |
| <b>Reproductive effects</b>    | Not available  |
| <b>Teratogenicity</b>          | Not available  |
| <b>Mutagenicity</b>            | Not available  |
| <b>Synergistic Materials</b>   | Not available  |

**Section 12-ECOLOGICAL INFORMATION****Ecotoxicity**

Available evidence indicates that mixture does not cause any significant adverse environmental effects

| Chemical name   | Toxicity to algae | Toxicity to fish                  | Microtox   | Daphnia magna( water flea ) |
|-----------------|-------------------|-----------------------------------|--|-----------------------------|
| Iron(III) oxide |                   | LC50> 1000 mg/L<br>(Golden orfe ) | EC50:>1000 mg/l<br><br>(pseudomonas fluorescens(24h) | EC50>10000 mg/L             |

**Persistence and degradability**

Product is not biodegradable

**Bioaccumulation /accumulation**

Does not bioaccumulate

**Mobility**

There is no evidence of mobility of these products.

**SECTION 13-DISPOSAL CONSIDERATIONS**

**Waste disposal methods** This material, as supplied, is not a hazardous waste according to state and federal regulations ( 40 CFR 261).

**Contaminated packaging** Contaminated packages are not considered hazardous for disposal into sanitary landfill or industrial waste disposal landfill. Please review appropriate national and local waste regulations.

**SECTION 14-TRANSPORT INFORMATION**

**DOT** Not regulated

**TDG** Not regulated

**IMO** Not regulated

**SECTION 15-REGULATORY INFORMATION**

**CEPA status** All components of this product are on the Canadian List

**WHMIS HAZARD CLASS**

D2A Very toxic materials

**NFPA**

|                        |   |
|------------------------|---|
| <b>Health</b>          | 1 |
| <b>Flammability</b>    | 0 |
| <b>Physical Hazard</b> | 0 |

**HMIS**

|                        |   |
|------------------------|---|
| <b>Health</b>          | 1 |
| <b>Flammability</b>    | 0 |
| <b>Physical Hazard</b> | 0 |

|                                     |
|-------------------------------------|
| <b>SECTION 16-OTHER INFORMATION</b> |
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| <b>Prepared by</b> | <b>Phone number</b> | <b>Date (last revision)</b> |
|--------------------|---------------------|-----------------------------|
| Technical Director | 514-645-9559        | September , 2011            |

**Sources used**

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COOHS literature and supplier's MSDS

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To the best of Starco Concentrates' knowledge, the aforementioned information is accurate as of the date of preparation. However, since the conditions of use of this product are not within the control of Starco Concentrates. It is the user's responsibility to determine the suitability of his particular purpose. Starco Concentrates assumes no obligation or liability regarding the accuracy of this data, or the results to be obtained from their use.

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