

# SAFETY DATA SHEET

## Section 1 - Identification

**Manufacturer's Name & Address**

Ebco  
15 Rose lane  
Wallkill, NY 12589 USA

**Telephone Number**

845.747.0014

**GHS Product Identifier**

**Atmosphere Generator**

**Catalyst**

**Trade Names and Synonyms Product Numbers**

Nickel (NiO) Impregnated Fire Brick NCC01 thru NCC11 Nickel Catalyst  
Cubes

**Recommended Use Recommended Restrictions**

Catalyst None known

## Section 2 – Hazard(s) identification

**OSHA/HCS Status:** This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Health Hazards:** SPECIFIC TARGET ORGAN TOXICITY – Category 1  
(Repeated Exposure) CARCINOGEN – Category 1A SENSITIZATION,  
SKIN / RESPIRATORY – Category 1

**GHS Label Elements:**

**Signal Word: DANGER**

**Hazard Statement:** Health hazards, including cancer, may arise from inhalation of dust generated from handling, ingestion and/or contact with skin and/or eyes

**Prevention:** Do not breathe dust wash thoroughly after handling Do not handle until all safety precautions have been read Wear respiratory protection

**Response:** If exposed or concerned, get medical advice or attention

**Storage:** No precautions needed

**Disposal:** Dispose of contents in accordance with all local, regional, national, and international regulations

**Hazards not otherwise Classified:**  
None known

### Section 3 – Composition / Information on Ingredients

<i>Mixture Ingredient Name</i>	<i>CAS Number</i>	
% Aluminum Oxide, $Al_2O_3$	1344-28-1	40-50% 40-50%
Silica, $SiO_2$	7631-86-9	40-50% 40-50%
as Crystalline Quartz	14808-60-7	as
Crystalline Cristobalite	14464-46-1	
Nickel Oxide	1313-99-1	9-12% 9-12%

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

## Section 4 – First Aid Measures

**Inhalation:** Remove to fresh air. May give oxygen. Consult physician.

**Eye Contact:** Flush eyes with copious amounts of water, at least 15 minutes.

**Skin Contact:** Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation or inflammation persists.

**Ingestion:** Induce vomiting if conscious. Consult physician.

***Most important symptoms/effects, acute and delayed Over-exposure signs/symptoms:***

***Inhalation:*** Inhalation of concentrations above the Occupational Exposure Limits may cause congestion and irritation of the throat, nasal passages and upper respiratory system.

***Eye Contact:*** Temporary irritation and inflammation Check for and remove any contact lenses If irritation persists, seek medical attention

***Skin Contact:*** May cause allergic dermatitis (Nickel itch or rash)

***Ingestion:*** May cause stomach and intestinal distress

***Indication of immediate medical attention and special treatment needed:*** Medical conditions which may be aggravated by exposure include upper respiratory and lung disease such as, but not limited to, bronchitis, emphysema, and asthma.

## Section 5 – Fire-fighting Measures

**Specific hazards arising from the chemical:** None known

**Hazardous Decomposition:** Decomposition products may include Crystalline Silica. During initial exposure to service temperatures, smoke may be emitted which can cause transitory irritation to the lungs and upper respiratory system. Toxic fumes of nitrogen oxides and metal oxides may be present during decomposition.

**Special protective actions for firefighters:** Material will not burn  
No special firefighting equipment is necessary

## Section 6 – Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** No action shall be taken involving any personal risk or without suitable training Provide adequate ventilation Wear appropriate respirator when ventilation is inadequate Put on appropriate personal protective equipment (see section 8)

**Methods and materials for containment and cleaning up:** Contain spill. Pick up and place in container for disposal in accordance with Federal, State and Local laws.

## Section 7 – Handling and Storage

**Precautions for safe handling:** Minimize dust generation. Use appropriate respiratory

protection if dust is present above exposure limits.  
Avoid contact with eyes and skin.

**Conditions for safe storage:** Store in accordance with local regulations. Store in a dry, cool and well ventilated area, away from incompatible materials (see section 10).

## Section 8 – Exposure Controls/Personal Protection

### *Occupational Exposure Limits:*

#### **US OSHA Permissible Exposure Limit:**

Irritant (Nuisance) Dust: 5.0 mg/m<sup>3</sup>

Crystalline Silica (Respirable): 10 mg/m<sup>3</sup>

%SiO<sub>2</sub> + 2

Crystalline Silica (Total Dust): 30 mg/m<sup>3</sup>

%SiO<sub>2</sub> + 2

Nickel Oxide: 1.0 mg/m<sup>3</sup>

#### **US ACGIH Threshold Limit**

##### **Values:**

Irritant (Nuisance) Dust: 3.0 mg/m<sup>3</sup>

Crystalline Silica: 0.025 mg/m<sup>3</sup>

Nickel Oxide: 0.2 mg/m<sup>3</sup>

***Appropriate Engineering Controls:*** If user operations generate dust, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

##### ***Individual Protection Measures:***

***Respiratory:*** Wear a NIOSH-approved dust mask to limit exposure

Higher dust levels may require use of a half or full mask respirator with dust filters

**Eye/Face:** Wear safety glasses with side shields or goggles complying with an approved standard to avoid exposure to dust

**Skin:** Protective gloves complying with an approved standard should be worn when handling chemical products

## Section 9 – Physical and Chemical Properties

**Appearance** Gray Solid Cubes **Physical State** Solid  
**Color** Gray **Odor** None **Odor Threshold** Not Applicable  
**pH** Not Applicable **Melting Point** 2900-3400 Deg. F  
**Boiling Point** N/A **Flash Point** None **Burning Time** Not Applicable  
**Specific Gravity** 0.9 **Burning Rate** Not Applicable  
**Evaporation Rate** 0 (butyl acetate = 1)  
**Flammability (solid, gas)** Not Applicable **Lower Explosive (flammable) Limit** Not Available  
**Upper Explosive (flammable) Limit** Not Available **Vapor Pressure** Not Applicable  
**Vapor Density** Not Applicable  
**Relative Density** Not Available

**Solubility** Insoluble **Solubility in Water** Insoluble  
**Partition Coefficient: n-octanol/water** Not Available  
**Auto-ignition Temperature** Not Available  
**Decomposition Temperature** Not Available **SADT** Not Available  
**Viscosity** Not Available

## Section 10 – Stability and Reactivity

**Reactivity:** The product is stable and non-reactive under normal conditions

**Chemical Stability:** Stable under normal temperature conditions

**Possibility of Hazardous** Under normal conditions of storage and use, hazardous reactions **Reactions:** or polymerization will not occur

**Conditions to Avoid:** Avoid strong acids and ammonium salts. Contact with strong oxidizing agents (such as fluorine, chlorine trifluoride) may present a

fire hazard.

***Incompatible Materials:*** Hydrofluoric acid, fluorine, chlorine trifluoride, oxygen difluoride

***Hazardous Decomposition Materials:*** Nitrogen oxides and metal oxides may be present during decomposition

## Section 11 – Toxicological Information

### ***Information on likely routes of exposure***

***Ingestion:*** May irritate and cause stomach pain, vomiting and diarrhea

***Inhalation:*** May cause allergic respiratory reaction

***Skin contact:*** May cause an allergic skin reaction

***Eye contact:*** May irritate eyes

### ***Information on toxicological effects***

#### ***Acute toxicity (list all possible routes of exposure)***

***Oral Product:*** No data available

***Dermal Product:*** No data available

***Inhalation Product:*** No data available

***Repeated dose toxicity product:*** No data available

***Skin corrosion/ irritation product:*** May cause skin irritation

***Eye damage/ irritation product:*** May cause temporary eye irritation

***Respiratory or skin sensitization product:*** May cause allergic skin reaction

***Carcinogenicity product:*** NTP- In its twelfth annual report on Carcinogens,

respirable crystalline silica and nickel oxide were classified as known human carcinogens. IARC (Volume 68) – There is sufficient evidence in humans for the carcinogenicity of nickel oxide and inhaled crystalline silica in the form of quartz or cristobalite from occupational sources. OSHA – Crystalline silica and nickel oxide are not regulated as a carcinogens.

***Germ cell mutagenicity In vitro product:*** No mutagenic components identified

***In vivo product:*** No mutagenic components identified

***Reproductive toxicity product:*** No components toxic to reproduction

***Specific target organ toxicity- single exposure product:*** None known

***Specific target organ toxicity- repeated exposure product:***  
None known

***Aspiration hazard product:*** Not Classified

***Other effects:*** Not known

## Section 12 – Ecological Information

### ***Toxicity***

***Persistence and Degradability:*** Not available

***Bioaccumulative Potential:*** Not available

### ***Mobility in Soil***

***Soil/water partition coefficient:*** Not available

***Other adverse effects:*** Most of the ingredients in this product are naturally occurring minerals, and unless contaminated in service, are not hazardous to the environment



## Section 13 – Disposal Considerations

**Disposal Methods:** The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14 – Transport Information

**US DOT Shipping Name:** Not regulated

**DOT Label:** None

**UN/NA Number:** None

**Canadian TGD Shipping Description:** Not regulated as dangerous goods according to Canadian TDGA

**International Dangerous Goods Information:**

**IMO:** Not regulated as dangerous goods according to the IMDG Code

**ICAO:** Not regulated as dangerous goods according to the IACO

## Technical Instructions

**IATA:** Not regulated as dangerous goods according to the IATA  
Dangerous Goods Regs

### Section 15 – Regulatory Information

#### **US Federal Regulations**

**TSCA 8(a) CDR Exempt/Partial exemption:** Not applicable

**United States Inventory (TSCA 8b):** This material is listed

**CERLA Hazardous Substance List (40 CFR 302.4):** None present in regulated quantities

**SARA 302 Extremely Hazardous Substance:** None present in regulated quantities

**SARA 304 Emergency Release Notification:** Nickel Oxide

**SARA 311/312 Hazardous Chemical:** Nickel Oxide, 500 lbs. TPQ

**SARA 313 (TRI Reporting):** Nickel Oxide

**Reporting threshold for other users:** 10000 lbs.

**Reporting threshold for manufacturing and processing:** 25000 lbs.

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs):** Not listed

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3):** None present in regulated quantities

**Clean Air Act Section 602 Class I Substances:** Not listed

**Clean Air Act Section 602 Class II Substances:** Not listed

**DEA List I Chemicals (Precursor Chemicals):** Not listed

**DEA List II Chemicals (Essential Chemicals):** Not listed

## Section 16 – Other Information

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