

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifiers

Product Name : A25 Inert Bed Support
Product Family : Al₂O₃-SiO₂ (Aluminum Silicate)
 : Al₂O₃ (Aluminum Oxide)
Preparation Date : August 31, 2015

Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Inert catalyst support media

Details of the supplier of the safety data sheet

Producer :Interra Global
805 W Touhy Ave
Park Ridge, IL 60068
Telephone : +1(847)292-8600
Emergency telephone number
Emergency : +1(847)292-8600

2. HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture

GHS classification in accordance with 29 CFR 1910 (OSHA HCS)

This product is not classified as hazardous according to 29 CFR 1910.1200 (2012)

Inert catalyst support media is not a hazardous material under the definitions of the OSHA Hazard Communication Standard (29 CFR 1910.1200). However, when used the product is partly consumed and its physical state and chemistry are altered. Some hazardous elements contained in the product can be released. This Safety Data Sheet provides information for dealing with those hazards.

Hazards not otherwise classified (HNOC) or not covered by GHS

None

3. COMPOSITION/INFORMATION ON INGREDIENTS Chemical identity:

Component	CAS	Wt %
Quartz	14808-60-7	0-15
Cristobalite	14464-46-1	0-10
Aluminum Oxide	1344-28-1	0-99
Titanium Dioxide	13463-67-7	0-2
Calcium oxide	1305-78-8	0-8

This composition lists materials with the hazard potential described in Section 2. In other sections Quartz and Cristobalite are included in the chemical name Silicon Dioxide.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a qualified medical professional. Show this data sheet to the doctor in attendance. Move out of the dangerous area.

If ingested

Not a usual hazard for this material. No known effect but not recommended.

Skin contact

Wash off skin with soap and running water avoiding excessively hard rubbing. If irritation occurs and persists or develops seek medical attention.

Eye contact

Flush with a large amount of water for at least 15 minutes. If irritation occurs and persists, seek medical help.

Inhalation

Remove to fresh air. Perform artificial respiration if not breathing.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

This product is non-combustible. Use extinguishing media appropriate for surrounding area.

5.2 Special hazards arising from the substance or mixture

None

5.3 Advice for firefighters

None

5.4 Further information

None

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Not normally required. Product does not lend itself to spills. If material released or spilled: Pick up and remove. Avoid the generation of dust.

6.2 Environmental precautions

Not normally required.

6.3 Methods and materials for containment and cleaning up

Unused material - solid waste landfill.

Used material - test to determine hazard status and dispose of in accordance to applicable local, provincial or federal rules and regulations.

Packaging materials - incinerate or dispose of in a solid waste landfill.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Wear a dust respirator and safety glasses as appropriate.

7.2 Conditions for safe storage, including any incompatibilities

No unusual procedures required. Keep dry for best results. Avoid the creation of dust.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters/exposure limits

Exposure limits are provided in the event product handling results in dust. Limits are for air levels only. Skin contact can cause over exposure even with the following limits being met. For all components, metal fumes can cause metal fume fever and inhaling the powder can harm eyes, skin and throat. Long term exposure can cause scarring of the lungs. And metals in powdered form are explosive. The limits for each component are:

Quartz: OSHA: The legal airborne permissible exposure limit (PEL) is: 10 mg/m³ % Silicon Dioxide +2 (as respirable dust) averaged over an 8-hour work shift, and 30 mg/m³ % Silicon Dioxide +2 (as total dust) averaged over an 8-hour work shift. NIOSH: The recommended airborne exposure limit is 0.1 mg/m³ (as respirable dust) averaged over a 10-hour work shift. ACGIH: The recommended airborne exposure limit is 0.025 mg/m³ (as the respirable fraction) averaged over an 8- hour work shift.

Cristobalite: OSHA: The legal airborne permissible exposure limit (PEL) is one half of the value from the formulas:10 mg/m³ % Silicon Dioxide +2 (as respirable dust) averaged over an 8-hour work shift, and 30 mg/m³ % Silicon Dioxide +2 (as total dust) averaged over an 8-hour work shift. NIOSH: The recommended airborne exposure limit is 0.05 mg/m³ (as respirable dust) averaged over a 10-hour work shift. ACGIH: The recommended airborne exposure limit is 0.025 mg/m³ (as the respirable fraction) averaged over an 8-hour work shift.

Aluminum Oxide: OSHA: The legal airborne permissible exposure limit (PEL) is 5 mg/m³ (as respirable dust) and 15 mg/m³ (as total dust) averaged over an 8-hour work shift. ACGIH: The threshold limit value (TLV) is 1 mg/m³ (as the respirable fraction) averaged over an 8-hour work shift.

Titanium Oxide: OSHA: The legal airborne permissible exposure limit (PEL) is 15 mg/m³ averaged over an 8-hour work shift. NIOSH: The recommended airborne exposure limit (REL) is 2.4 mg/m³ for fine Titanium Dioxide, and 0.3 mg/m³ for ultrafine Titanium Dioxide, averaged over a 10-hour work shift. ACGIH: The threshold limit value (TLV) is 10 mg/m³ averaged over an 8-hour work shift.

Calcium Oxide: OSHA: PEL 5 mg/m³ averaged over an 8-hr work shift. NIOSH: 2 mg/m³ averaged over a 10-hr work shift. ACGIH: 2 mg/m³ averaged over an 8-hr work shift.

Nuisance Dust: OSHA: PEL 15 mg/m³ avg. 8-hr shift. ACGIH 0.015 mg/m³ (as respirable fraction) avg. 8-Hr shift.

8.2 Appropriate engineering controls

Not normally required. If product processing results in dust, keep below exposure limit by making local exhaust ventilation if necessary.

8.3 Personal protective equipment

Respiratory protection: When above exposure limit, use a dust respirator, if ventilation is judged to be insufficient. If dust created in amounts in excess of occupational exposure limits wear a NIOSH or MSHA approved respirator for particulates. In the unlikely event that fumes are emitted in concentrations in excess of a TWA of 5 ppm or a STEL of 10 ppm wear a chemical cartridge regulator with the appropriate gas cartridge and a dust and mist pre-filter.

Hand protection: Wear protective gloves.

Eye protection: Wear Safety glasses with side shields. Wear dust goggles, when dust is present.

Skin and body protection: Long sleeved shirt and long pants. Normal work clothing. Wear gloves when handling. Safety shoes with metatarsal protection recommended. Hygiene measures: Wash hands after handling.

Summary of Risks: Warning: Material contains trace amounts of crystalline silica. Fumes produced during initial heating are irritating to eyes and pulmonary system and if inhaled over a long period of time may cause liver and/or kidney damage. Medical conditions that may be aggravated by contact. Any dust or fumes produced may aggravate such preexisting lung diseases as, but not limited to, asthma, emphysema, bronchitis, and those lung disorders associated with the smoking of tobacco.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Solid
Physical appearance	Solid spheres
Color	Buff, tan, or white
Odor	Odorless
Odor threshold	Not applicable
PH	Not applicable
Specific gravity	Not applicable
Melting point/freezing point	Not applicable
Initial boiling point and boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability	Non-combustible
Upper/lower flammability/explosive limits	Not applicable
Vapor pressure	Not applicable
Vapor density	Not applicable
Relative density	Not applicable
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water)	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable
Viscosity	Not applicable
Density (loose fill)	76-120 lb. cu/ft.

10. STABILITY AND REACTIVITY

10.1 Chemical stability

The product is Stable under normal conditions.

10.2 Possibility of hazardous reactions

Used product may react with strong acids and hydrogen fluoride.

10.3 Conditions to avoid

None known.

10.4 Incompatible materials

None known.

10.5 Hazardous decomposition products

During the initial heating trace amounts of the decomposition products may be emitted. In an oxidizing atmosphere these chemicals readily oxidize to carbon dioxide and water.

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effect

No adverse health effects expected if the product is handled in accordance with product label. If overexposure, the primary entry route is inhalation.

11.2 Acute and Chronic Toxicity

Acute effects: Temporary upper respiratory irritation. Chronic effects: Inhalation of dust produced from the used or unused product in amounts in excess of occupational exposure limits may, if continued over a long period of time, cause a serious lung disease (silicosis). Repeated or prolonged inhalation of fumes may cause liver and/or kidney damage.

11.3 Skin corrosion/irritation

No data available.

11.4 Serious eye damage/eye irritation

Any dust created is abrasive and may irritate eye by abrasive action. Any fumes emitted are extremely irritating to the eyes.

11.5 Respiratory or skin sensitization

Dust is abrasive and may irritate by mechanical abrasive action.

11.6 Carcinogenicity

The IARC Monograph volume 68, 1997 concludes that there is sufficient evidence that inhaled crystalline silica causes cancer in humans. IARC classification: Group 1. The NTP in its Ninth Annual Report of Carcinogens has classified "silica, crystalline (respirable)" as a known human carcinogen.

11.7 Reproductive toxicity

No data available.

11.8 Specific target organ toxicity following single exposure

Inhalation - Breathing difficulties and irritation of the upper respiratory tract.

11.9 Specific target organ toxicity following repeated exposure

No data available.

11.8 Aspiration hazard

Breathing difficulties and irritation of the upper respiratory tract.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

This product is not characterized as a hazard to the environment.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

This product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous. Avoid repacking wet material in sealed containers. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

14. TRANSPORT INFORMATION**DOT (U.S.A.)**

Not regulated.

IMDG

Not regulated.

Transport hazard classes

Not applicable.

Packing group

Not applicable.

Environmental hazards

See section 12.

Transport in bulk

Not applicable.

Special precautions for users

Not applicable.

15. REGULATORY INFORMATION**15.1 Federal and state regulations:****SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313

Aluminum Oxide

SARA 311/312 Hazards

Acute health hazard

Massachusetts Right to Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know Components

No components are subject to the Pennsylvania Right to Know Act.

New Jersey Right to Know Components

No components are subject to the New Jersey Right to Know Act.

California Proposition 65 Components

Silicon Dioxide.

DOT Classification

Not a DOT controlled material (United States)

15.2 Other classifications**WHMIS (Canada)**

Not controlled.

DSCL (EEC)

This product, or its components, are listed on or are exempt from the Canadian Domestic Substances List (DSL).

HMIS (U.S.A.)

None

National Fire Protection Association (U.S.A.)

None

Toxic Control Substances Act (TSCA)

This product complies with all applicable rules or orders under the Toxic Control Substances Act (TSCA).

16. OTHER INFORMATION**16.1**

Preparation Date	: August 31, 2015
Revision Dumber	: 1
Revision Date	: May 21, 2021
Revised By	: AH
Approved By	: CB

16.2 Warranty

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