Tabular bed support

Ivys PART #M001-010-0/1/2/3

1. IDENTIFICATION OF SUBSTANCE/MIXTURE FROM MANUFACTURER

1.1. Product identifier

Product Name	Tabular bed support
Molecular Formula	Not Available
Molecular Weight	
CAS # / EC #	

1.2. Relevant identified uses of the substance or mixture and uses advised against:

Relevant Identified Uses	Heat sink media. Catalyst support
Uses Advised Against	

1.3. Details of the supplier of the substance or mixture:

Supplier	**Manufacturer**
Ivys Adsorption Inc	
730, Boulevard Industriel	
Blainville, Québec	
Canada J7C 3V4	
Tel +1 450 979 8700	
Email : sales@ivysads.com www.ivysads.com	

1.4. Emergency phone number

(800) 255-3924 // 1 (813) 248-0585

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008
The product is not classified as hazardous according to the Globally Harmonized System (GHS). The product is not classified as hazardous according to OSHA GHS regulations within the United States.
The product is not classified as hazardous according to the CLP regulation.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 None
· Hazard pictograms Not Regulated
· Signal word Not Regulated
· Hazard statements None
· Precautionary statements Not Regulated
- Additional information: Safety data sheet available on request.

2.3. Other hazards

There are no other hazards not otherwise classified that have been identified.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Mixture

Components

CAS: 7631-86-9
EINECS: 231-545-4
Reg.nr.: 01-2119379499-16-XXXX
silicon dioxide
substance with a Community workplace exposure limit
45-65%
CAS: 1344-28-1
EINECS: 215-691-6
Reg.nr.: 01-2119529248-35-XXXX
aluminium oxide
substance with a Community workplace exposure limit
15-35%
CAS: 14808-60-7
EINECS: 238-878-4
quartz
substance with a Community workplace exposure limit

0-10%

4. FIRST AID MEASURES

4.1. Description of first aid

Skin contact	Brush off loose particles from skin. Wash with soap and water. If skin irritation is experienced, consult a doctor.
Eye Contact	Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
Ingestion	Do not induce vomiting; call for medical help immediately.
Inhalation	Respiration of particulates is unlikely during normal usage. Supply fresh air; consult doctor in case of complaints.
Most important symptoms and effects, both acute and delayed	**Note to Physicians: Treat symptomatically.**
Indication of the immediate medical attention and special treatment needed	

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media	**Use media appropriate for surrounding fire and/or materials**.

5.2. Special hazards arising from the substance or mixture

Unusual Fire or Explosion Hazards	**Minimize air borne spreading of dust. Spilled material may cause floors and contact surfaces to become slippery.**

5.3. Advice for fire-fighters

Special measures for the protection of fire-fighters	**Isolate materials that are not involved in the fire and protect personnel. Use self-contained breathing apparatus and protective clothing.**

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid formation of dust. For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

6.2. Environmental precautions

No special measures required.

6.3. Methods and material for containment and clean up

Pick up mechanically.

Dispose of the material collected according to regulations.

6.4. Reference to other sections

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Prevent formation of dust.
Avoid breathing dust.

Information about fire - and explosion protection: No special measures required.

7.2. Conditions for safe storage, including any incompatibilities

Storage:
· Requirements to be met by storerooms and receptacles: No special requirements.
· Information about storage in one common storage facility: No further relevant informationavailable.

7.3. Specific end use(s)

Exposure	
Other information	**Use only with adequate ventilation and avoid breathing dusts. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Wash contaminated clothing thoroughly before reuse.**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Ingredients with limit values that require monitoring at the workplace:
7631-86-9 silicon dioxide
NIOSH REL (USA) Long-term value: 6 mg/m³ NIOSH REL (USA) Long-term value: 6 mg/m³
OSHA PEL (USA) Long-term value: 80 mg/m³ OSHA PEL (USA) Long-term value: 80 mg/m³
1344-28-1 aluminium oxide
PEL (USA)
Long-term value: 15*; 5** mg/m³
*Total dust; ** Respirable fraction
REL (USA)
Long-term value: 10* 5** mg/m³
as Al*Total dust**Respirable/pyro powd./welding f.
TLV (USA)

Long-term value: 1* mg/m³ as Al; *as respirable fraction 14808-60-7 quartz PEL (USA) see Quartz listing REL (USA) Long-term value: 0,05* mg/m³ *respirable dust; See Pocket Guide App. A TLV (USA)Long-term value: 0,025* mg/m³ *as respirable fraction

* mppcf = million particles per cubic foot

8.2. Exposure controls

Appropriate engineering controls	**Local exhaust ventilation preferred. Make up air should be supplied to balance air that is removed by local or general exhaust ventilation. Ventilate low lying areas such as sumps or pits where dense dust may collect.**
Individual protection measures – personal protective equipment	
Eye / Face Protection	**Safety glasses with side shields are recommended to prevent eye contact. Use chemical safety goggles when there is potential for eye contact. Contact lenses should not be worn when working with this material.**
Skin Protection	**Gloves and protective clothing made from cotton, canvas, rubber or plastic should be impervious under conditions of use. Prior to use, user should confirm impermeability. Discard contaminated gloves.**
Respiratory Protection	**No specific guidelines available. Respiratory protection should not be necessary unless dust is created. A NIOSH/MSHA approved dust mask for concentrations of nuisance dust up to 100 mg/m³ particulate. An air-supplied respirator if concentrations are higher or unknown.**
Other PPE	**Wear regular work clothing. The use of coveralls is recommended. Locate safety shower and eyewash station close to chemical handling area. Take all precautions to avoid personal contact.**

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	**Solid. Buff pellets or balls available in a variety of uniform sizes**
Colour	**Buff / beige**
Odour	**Odourless**
Flammability Class (WHMIS)	**Not regulated**
Hazardous Combustion Products	**Absorbed material may decompose (3)**
Flammability Limits in Air (%)	**LEL & UEL: not applicable**
Flash Point °C	**Non-combustible. (does not burn)**
Melting Point/freezing point:	**1200 °C (2192 °F)**
Sensitivity to Mechanical Impact	**Not expected to be sensitive to impact**
Burn Rate	**Not Available**
Explosive Power	**Not Available**
Sensitivity to Static Discharge	**Not expected to be sensitive to discharge**
Solubility	**Not soluble in water.**
Auto-ignition Temperature (^{0}C)	**Not applicable**

10. STABILITY AND REACTIVITY

Reactivity	
Chemical Stability	**Stable under normal conditions. Not Flammable under fire conditions**
Possibility of hazardous reaction (polymerization)	**Will not occur**
Conditions to avoid	**High temperatures, sparks, open flames and all other sources of ignition. Avoid creating dusts. Minimize air borne spreading of dust. Avoid high temperatures (above 800 °C) and treatment (calcining) (3). Calcining is the heating of the product to below its melting point to cause thermal decomposition or phase transition.**

Materials To Avoid	**Reducing agents. Acids. Fluorides. Hydrofluoric Acid. Hydrofluoric Acid: Glass, concrete and other silicone-bearing materials yield silicone tetrafluoride gas when in contact with Hydrofluoric Acid. Pressure build up from this process has been known to blow up glass containers. (3)**
Hazardous decomposition products	**Metallic oxides. Adsorbed material may decompose. (3)**

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	Based on available data, the classification criteria are not met.
LD/LC50 values relevant for classification:	None.
Primary irritant effect	
Skin corrosion/irritation:	Based on available data, the classification criteria are not met.
Serious eye damage/irritation:	Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation:	Based on available data, the classification criteria are not met.
Carcinogenic categories	
IARC (International Agency for Research on Cancer):	
14808-60-7	quartz
NTP (National Toxicology Program):	
14808-60-7	quartz
OSHA-Ca (Occupational Safety & Health Administration):	
None of the ingredients are listed.	
Probable routes of exposure:	Ingestion. Eye contact. Skin contact.
Repeated dose toxicity:	Long-term inhalation of silica dusts may cause obstructive pulmonary disease including silicosis.
Germ cell mutagenicity:	Based on available data, the classification criteria are not met.
Carcinogenicity:	Contains known or suspect carcinogens when inhaled. Product is in non-inhalable form and is nonclassifiable as a carcinogen.
Reproductive toxicity:	Based on available data, the classification criteria are not met.
STOT-single exposure:	Based on available data, the classification criteria are not met.
STOT-repeated exposure:	Based on available data, the classification criteria are not met.
Aspiration hazard:	Based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

12.1. Eco-Toxicity

No further relevant information available.

12.2. Persistence and degradability. Environmental Fate:

No further relevant information available.

12.3. Bio accumulative potential

No further relevant information available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Methods:	**This information applies to the material as manufactured. Dispose of waste material at an approved (hazardous) waste treatment/disposal facility in accordance with applicable local, provincial and federal regulations. Do not dispose of waste with normal garbage, or to sewer systems. Re-evaluation of the product may be required by the user at the time of disposal since the product uses, transformations, mixtures and processes may influence waste classification.**
Packaging Disposal :	**Empty containers retain product residue and can be hazardous. Treat package in the same manner as the product.**

14. TRANSPORT INFORMATION

CANADIAN TDG ACT SHIPPING DESCRIPTION:	This product is not regulated by TDG. Label(s): Not applicable. Placard: Not applicable.
US DOT CLASSIFICATION (49CFR 172.101, 172.102):	This product is not regulated by DOT. Label(s): Not applicable. Placard: Not applicable. CERCLA-RQ: Not available. Exemptions: None known.

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific to the substance or mixture:

United States (USA)
· SARA
· Section 355 (extremely hazardous substances):
None of the ingredients are listed.
· Section 313 (Specific toxic chemical listings):
1344-28-1 aluminium oxide
· TSCA (Toxic Substances Control Act):
All ingredients are listed.
· Proposition 65 (California):
· Chemicals known to cause cancer:
Reference to Crystalline Silica and/or Quartz is based on unbound respirable particles and is not generally applicable to product as supplied.
14808-60-7 quartz
· Chemicals known to cause reproductive toxicity for females:
None of the ingredients are listed.
· Chemicals known to cause reproductive toxicity for males:
None of the ingredients are listed.
· Chemicals known to cause developmental toxicity:
None of the ingredients are listed.
· Carcinogenic Categories
· EPA (Environmental Protection Agency)
None of the ingredients are listed.
· IARC (International Agency for Research on Cancer)
Reference to chemical component(s) listed below are based on unbound respirable particles and are not generally applicable to product as supplied.
14808-60-7 quartz 1
· NIOSH-Ca (National Institute for Occupational Safety and Health)

14808-60-7 quartz
Canadian Domestic Substances List (DSL)
Directive 2012/18/EU
· Named dangerous substances - ANNEX I None of the ingredients are listed.
· Other regulations, limitations and prohibitive regulations
· Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients are listed.

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
· Abbreviations and acronyms:
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
LDLo: Lowest Lethal Dose Observed
· Sources
Website, European Chemicals Agency (echa.europa.eu)
Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)
Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6
Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN:

978-0-07-176923-5 // Safety Data Sheets, Individual Manufacturers

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