

Issue Date : April 28, 2008

Revision Date : December 16, 2011

Material Safety Data Sheet

1. Identification of the Substance/Mixture and of the Company/Undertaking

Product Name	DESICLAY
Company Name	Tokai Chemical Industry. Co., Ltd.
Address	70 Umemori, Koshido, Toyota city, Aichi 470-0332, Japan
Responsible Department	Sales Division
Telephone Number	+81-565-45-1035
Fax Number	+81-565-45-1691
Use of the Product	Desiccant
Reference Number	DC-GHS-01E

2. Hazards Identification

GHS Classification

Physical Hazards

Explosives	---
Combustible/Flammable gases	---
Combustible/Flammable aerosols	---
Combustion-supporting/Oxidizing gases	---
Gases under pressure	---
Flammable liquids	---
Flammable solids	---
Self-reactive substances and mixtures	---
Pyrophoric liquids	---
Pyrophoric solids	---
Self-heating substances and mixtures	---
Substances and mixtures which, in contact with water, emit flammable gases	---
Oxidizing liquids	---
Oxidizing solids	---
Organic peroxides	---
Corrosive to metals	---

Health Hazards

Acute toxicity (Oral)	---
Acute toxicity (Dermal)	---
Acute toxicity (Inhalation/ Gases)	---
Acute toxicity (Inhalation/ Fumes)	---
Acute toxicity (Inhalation/ Mist)	---
Skin corrosion/ Irritation	---
Serious eye damage/ Eye irritation	---
Respiratory sensitization	---
Skin sensitization	---
Germ cell mutagenicity	---
Carcinogenicity	---
Reproductive toxicity	---
Specific target organ toxicity (Single exposure)	---
Specific target organ toxicity (Repeated exposure)	---

Environmental Hazards

Aspiration hazards	---
Hazards to the aquatic environment (acute)	---
Hazards to the aquatic environment (chronic)	---

“-” are categorized as not classify or classification not possible.

Label Elements

Pictogram	None
Signal Word	None

Others Hazards Information

When dealing with large amount of desiccant, wear appropriate protective equipments because it may produce dust.

Others Physical Information

None

3. Composition/Information on Ingredients

Substance/Mixture	Simple Substance(Natural Clay Bentonite)
Chemical (Common) Name	Bentonite
Chemical Formula	$(\text{Na,Ca}_{1/2})_{0.33}(\text{Al}_{1.67}\text{Mg}_{0.33})\text{Si}_4\text{O}_{10}(\text{OH})_2$
Reference Number in Gazetted List CSCL	Not applicable
ISHL	Silica(No.312) Notifiable Substance
CAS No.	1302-78-9
EINECS No.	215-108-5
Hazardous ingredients	None
Hazardous impurities	None

4. First Aid Measures

Inhalation

If inhaled large amount dust of desiccant, remove the victim into the fresh air and keep at rest.

Skin contact

If contact with large amount of desiccant, rinse with soap and clean water.

Eye contact

Do not rub eyes.
Rinse with clean water.

Ingestion

Immediately gargle with water and drink water.

If feeling unwell, consult with a doctor.

5. Fire Fighting Measures

Extinguishing media

The desiccant is incombustible.
Use extinguishing media for surrounding fire.

Unsuitable extinguishing media	None
Special hazards arising from the substance or mixture	None
Special protective equipments for fire-fighters	Wear appropriate protective equipments.

6. Accidental Release of Measures

Personal precautions, protective equipments and emergency procedures	Wear appropriate protective equipments like goggles, mask and gloves.
Environmental Precautions	Prevent products from running into the river and causing an effect to the environment.
Methods for cleaning up	Sweep spilled product into appropriate containers without creating dust.

7. Handling and Storage

Precautions for safe handling Technical Measures Instructions	<p>When you deal with large amount of desiccant, wear appropriate protective equipments like Section 8. No special precautions when dealing with small amount.</p> <p>After open the package, making the handling quickly, use it up by a packing unit.</p> <p>When you can't use it up, reseal it up and prevent it from absorbing humidity.</p>
Precautions for safe handling	Avoid contact with skin and eyes. Avoid breath in. Wear appropriate protective equipments.
Conditions for safe storage, including any incompatibilities	
Technical Measures	Appropriate exhaust ventilation is required.
Incompatible Products	Not available
Storage Conditions	Avoid direct sunlight, keep it cool and ventilated place.
Packaging Materials	Keep container tightly closed in dry and well.

8. Exposure controls/Personal Protection

Engineering measures	When you deal with large amount of desiccant, in case of insufficient ventilation and closed place, provide appropriate exhaust ventilation.
Control consistency	<p>Mineral Dust $E = 3.0 / (1.19Q + 1)$ mg/m³</p> <p>E : Control consistency(mg/m³)</p> <p>Q : Free silicic acid content of the Mineral dust(%)</p>
Permission Concentration (Japanese society of occupational Health)	<p>Inhalant dust 0.5mg/m³</p> <p>Total dust 2.0mg/m³</p>
Personal Protective Equipments	
Respiratory protection	Respiratory protective equipments
Hand protection	Protective gloves

Eye protection
Skin protection

Safety glasses or goggles
Work uniform and gloves to prevent prolonged contact.

9. Physical and Chemical Properties

Appearance	Gray Granular
Odor	Odorless
pH	7~11 (2%slurry)
Melting Point	Not available
Boiling Point	Not applicable
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Flash Point	Incombustible
Flammable Limits	Incombustible
Density/Specific Gravity	0.95~1.05 (Relative Density=2.6)
Solubility	
Water Solubility	insoluble /不溶
Fat Solubility	Insoluble with most organic solvent
Partition Coefficient (n-Octanol/Water)	Not applicable
Autoignition Temperature	Not applicable
Decomposition Temperature	Not available

10. Stability and Reactivity

Stability	Stable under normal storage conditions and handling.
Reactivity	When desiccant get wet, it will swell, but no chemical reaction.
Conditions to Avoid	High temperature, Sunlight, High humidity.
Incompatible materials	Not available
Hazardous Decomposition Products	Not available

11. Toxicological Information

Acute toxicity	
Ingestion	Not available
Inhalation	Not available
Skin corrosion/Irritation	May cause skin irritation
Serious eye damage/ Irritation	May cause eye irritation
Respiratory or skin sensitization	May cause irritation.
Germ cell mutagenicity	Not available
Carcinogenicity	Not available
Reproductive toxicity	Not available
Stot -single exposure	Not available
Stot -repeated exposure	Not available
Aspiration hazards	Not available

12. Ecological Information

Ecotoxicity	Not available
Persistence/Degradability	Not available
Bioaccumulation	Not available
Mobility	Not available

13. Disposal Considerations

Waste treatment measures	<p>Dispose of contents/container to waste in accordance with local/regional/national regulations (to be specified).</p> <p>After danger and the hazardous properties are noticed thoroughly to waste treatment company, processing is consigned.</p>
Contaminated vessel	Dispose in accordance with all applicable regulations without contents.

14. Transport information

International Regulations	
(b)Marine Regulations	Not applicable
(c)Aviation regulation	Not applicable
Regulations in Japan	
(a)Land Regulations	Not applicable
(b)Marine Regulations	Not applicable
(c)Aviation regulations	Not applicable
Special Precautions	Check the damage of the container and a leak, then make prevention of collapse of cargo. Avoid sunlight and rainwater during

15. Regulatory Information

Industrial and Safety and health Law	Article 57 The notifiable substance No.312 Silica
Pneumoconiosis Law	
Law Concerning Waste Disposal and Scavenging	

16. Other Information

Reference book	NITE-Chemical Risk Information Platform
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The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the products.