

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 and 453/2010 (REACH), however, this product is not classified as dangerous, therefore neither the transfer of safety data sheet nor its update are not a requirement.

**Trade name:** AD-1<sup>®</sup> Molecular Sieve Adsorbent

	Date of print: 2013.07.09 Revision date: 2013.06.20 Version: 1.0 / EN
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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

**1.1 Product identifier:** AD-1<sup>®</sup> Molecular Sieve Adsorbent

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

The product is water absorbent.

**1.3 Details of the supplier of the safety data sheet**

Supplier: Flow Dry Kft.  
Street/POB: Lovarda tér 4.  
Postcode/City/Country: H-2900 Komárom, Hungary  
E-mail: iizsaki@flowdry.hu  
Phone: +36-34-543-957 (8:00-16:00)

**1.4 Emergency telephone number**

Emergency telephone number: +43 1 406 43 43 Austria

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## SECTION 2: Hazards identification

**2.1 Classification of the substance or mixture**

*2.1.1. Classification according to Regulation (EC) No. 1272/2008 (CLP):*

Classification of mixtures is not yet a directive.

*2.1.2. Classification according to Directive 1999/45/EC:*

The product is not classified as dangerous.

**2.2 Label elements**

**2.2.1. Labeling according to Regulation (EC) No 1272/2008 [CLP]**

Labeling of mixtures according to CLP is not yet a directive.

**2.2.2 Labeling according to directive 1999/45/EC**

Safety data sheet is available for professional users on request

**2.3 Other hazards**

The product is not classified as PBT or vPvB.

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### SECTION 3: Composition/information on ingredients

Name	EC-Nr.	CAS-Nr.	REACH Nr.	Content (%)	Classification according to 1999/45/EC		Classification according to 1272/2008 (CLP)	
					Hazard symbol(s)	R-phrase(s)	Hazard categories	H-phrase(s)
Zeolites	215-283-8	1318-02-1	<sup>1</sup>	>95	None	None	None	None
Silicon dioxide	231-545-4	7631-86-9	<sup>1</sup>	<5	None	None	None	None

<sup>1</sup>- Pertinent information has not yet been obtained from the supplier.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is
- On ingestion: If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Get medical attention.
- On skin contact: Wash contaminated skin with plenty of water and soap and flush with water.
- On contact with eyes: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes.

#### 4.2. Most important symptoms and effects, both acute and delayed

##### Potential acute health effects

- Eye contact: No further information is available.
- Inhalation: No further information is available.
- Skin contact: No further information is available.
- Ingestion: No further information is available.

##### Over-exposure signs/symptoms

- Eye contact: No further information is available.
- Inhalation: No specific data
- Skin contact: No further information is available.
- Ingestion: No further information is available.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: Symptomatic treatment and supportive therapy as indicated.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Not flammable. Use an extinguishing agent suitable for the surrounding fire.

#### 5.2. Special hazards arising from the substance or mixture

Not known

#### 5.3. Advice for firefighter

Fire-fighters should wear mask against dust

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## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Wear mask against dust.

### 6.2. Environmental precautions

No specific measures are needed.

### 6.3. Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4. Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid contact on skin and eyes. Avoid formation of dust and aerosols.

### 7.2. Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in dry and well-ventilated place.

### 7.3. Specific end use(s)

Not available.

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## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Silicon oxid: OEL: 0,15 mg/m<sup>3</sup> (respirable dust)

Krisztobalit OEL: 0,15 mg/m<sup>3</sup> (respirable dust)

### 8.2. Exposure controls

Appropriate engineering controls: Handle in accordance with good industrial practice. Wash hands before meals and at the end of workday.

Eye/face protection: Safety eyewear

Skin protection: No specific requirement

Hand protection: Safety gloves

Body protection: Impervious clothing.

Respiratory protection: In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls: No special requirement.

DNEL and PNEC values are not available.

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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

- |   |  |
|---|--|
| a) Appearance:                            | granules                                     |
| b) Odour:                                 | not specific                                 |
| c) Odour threshold:                       | no data                                      |
| d) pH-value:                              | not applicable                               |
| e) Melting point/freezing point:          | > 400°C                                      |
| f) Boiling range:                         | no data                                      |
| g) Flash point:                           | not applicable, the product is not flammable |
| h) Evaporation rate:                      | not applicable                               |
| i) Flammability (solid, gaseous):         | not flammable                                |
| j) Ignitable, explosive range:            | not flammable                                |
| k) Vapour pressure:                       | not applicable                               |
| l) Vapour density:                        | not applicable                               |
| m) Density:                               | >2 g/cm <sup>3</sup>                         |
| n) Solubility:                            | not applicable                               |
| o) Partition coefficient n-octanol/water: | not applicable                               |
| p) Self-ignition temperature:             | not applicable                               |
| q) Decomposition temperature:             | no data                                      |
| r) Viscosity:                             | not applicable                               |
| s) Explosive properties:                  | not flammable                                |
| t) Oxidising properties:                  | not oxidising                                |

### 9.2. Other data

Not available

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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

When contacted with water at the first time the product may reach the boiling point of water. Flush with water to cool the product.

### 10.2. Chemical stability

Stable under normal storage conditions.

### 10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

### 10.4. Conditions to avoid

To avoid exothermic reactions, keep away from oxidizing reagents, highly acidic materials.

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### 10.5. Incompatible materials

Acids.

### 10.6. Hazardous decomposition products

No hazardous decomposition products if stored and handled as prescribed/indicated.

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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity:

LD50 oral, rat: > 32 000 mg/kg

LD50 skin, rabbit :2 000 mg/kg

LC50 inhalation: no data

Irritation: no data

Sensitization: no data

Mutagenicity: no data

Carcinogenicity: no data

Reproductive toxicity: no data

Specific target organ toxicity – single exposure (STOT): no data

Specific target organ toxicity – repeated exposure (STOT): no data

Aspiration hazard: no data

Potential health effects

Inhalation	May be harmful if inhale. Causes respiratory tract irritation
Ingestion	May be harmful if swallowed
Skin	May be harmful if absorbed through skin. May cause skin irritation
Eyes	May cause eye irritation.

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## SECTION 12: Ecological information

### 12.1. Toxicity

No data available

### 12.2. Persistence and degradability

No data available

**12.3. Bioaccumulative potential:** no data available

**12.4. Mobility in soil:** no data available

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**12.5. Results of PBT and vPvB assessment:** no data available

Substances do not meet the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII.

Substances do not meet the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII.

**12.6. Other adverse effects:** No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods:

**Hazardous waste:** According to available information and Directive 91/689/EC material matches with criteria of hazardous wastes.

**Waste code:** 06 08 99 not specified wastes

## SECTION 14: Transport information

**14.1. UN number (ADR/RID, ADN/ADNR, IMDG, IATA):** Not applicable

**14.2. UN proper shipping name(ADR/RID, ADN/ADNR, IMDG, IATA):** Amines, liquid, corrosive, n.o.s.

	ADR/RID	ADN/ADNR	IMDG	IATA
<b>14.3. Transport hazard class(es)</b>	Not available	Not available	Not available	Not available
<b>14.4. Packaging group</b>	Not available	Not available	Not available	Not available
<b>14.5. Environmental hazards</b>	No	No	No	No
<b>14.6. Special precautions for user</b>	Not available	Not available	Not available	Not available

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislations specific for the substance or mixture

No specific information available.

**15.2. Chemical Safety Assessment:** Chemical Safety Assessment has not been carried out for the product.

## SECTION 16: Other information

The information given corresponds with our actual knowledge and experience. This information is meant to describe our product in view of possible safety requirements.

**16.1. Indication of changes:** This version replaces all previous versions.

### 16.2. Abbreviations and acronyms:

CAS number: Chemical Abstracts Service number

CLP: Classification Labeling Packaging Regulation

EC: European Commission

EC number: EINECS and ELINCS number

EC50: Half maximal effective concentration

EINECS: European Inventory of Existing Commercial Chemical Substances

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 The logo for Flow Dry Technology features a stylized blue and yellow graphic on the left, followed by the text "Flow Dry" in a large, bold, italicized font, and "Technology" in a smaller, bold, italicized font below it. A registered trademark symbol (®) is located to the right of "Flow Dry".	Date of print: 2013.07.09 Revision date: 2013.06.20 Version: 1.0 / EN
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GHS: Globally Harmonized System

LC50: Lethal concentration, 50 %

LD50: Median Lethal dose

PBT: Persistent, Bioaccumulative and Toxic

REACH: The Registration, Evaluation, Authorisation and Restriction of Chemicals

STOT: Specific Target Organ Toxicity

STOT SE: Specific target organ toxicity — single exposure

STOT RE: Specific target organ toxicity — repeated exposure

Tox.: Toxicity

vPvB: Very Persistent and Very Bioaccumulative

**16.3. Key literature references and sources for data:** safety data sheets, received from suppliers.