

**SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006  
(amended by Regulation (EU) 2015/830)

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**Acetic acid anhydride-d6**

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***SECTION 1: Identification of the substance/mixture and of the company/undertaking*****1.1. Product identifier**

<b>Product name</b>	Acetic acid anhydride-d6
<b>CAS-No.</b>	16649-49-3
<b>EC-No.</b>	240-697-0
<b>Product code</b>	None.

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

<b>Use of the Substance/Mixture</b>	Solvent for NMR spectroscopy
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**1.3. Details of the supplier of the safety data sheet**

<b>Company/Undertaking Identification</b>	Zeochem AG, <a href="http://www.zeochem.ch">www.zeochem.ch</a> Joweid 5, 8630 Rüti, Schweiz Tel.: +41 44 922 93 93 E-Mail: <a href="mailto:info@zeochem.ch">info@zeochem.ch</a>
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<b>1.4. Emergency telephone number</b>	Tox-Zentrum Zürich : 145 / +41 44 251 51 51 [24h/7d]
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<b>Issuing date</b>	05.10.2018
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<b>Version</b>	GHS 4 (Previous versions: GHS 3)
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## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Acute toxicity, inhal., Vapours, Cat. 4, H332  
Acute toxicity, oral, Cat. 4, H302  
Skin corrosion/irritation, Cat. 1B, H314  
Flammable liquids, Cat. 3, H226

**Additional information**

For the full text of the phrases mentioned in this Section, see Section 16.

### 2.2. Label elements



**Signal Word**

Danger

**Hazard Statements**

H226: Flammable liquid and vapour.  
H302+H332: Harmful if swallowed or if inhaled.  
H314: Causes severe skin burns and eye damage.

**Precautionary statements**

P210b: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233: Keep container tightly closed.  
P243: Take precautionary measures against static discharge.  
P260: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P264a: Wash skin thoroughly after handling.  
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310: Immediately call a POISON CENTER or doctor/physician.  
P403+P235: Store in a well-ventilated place. Keep cool.  
P501: Dispose of contents/ container to an approved waste disposal plant.

**Supplemental information**

None.

**Product identifier**

Acetic acid anhydride-d6, CAS-No. 16649-49-3, EC-No. 240-697-0

### 2.3. Other hazards

None known.

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## SECTION 3: Composition/information on ingredients

### 3.1. Substances

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Components		Product identifier
Acetic acid anhydride-d6	> 90%	CAS-No.: 16649-49-3 EC-No.: 240-697-0

For the full text of the phrases mentioned in this Section, see Section 16.

**Hazardous impurities** None known.

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## **SECTION 4: First aid measures**

### **4.1. Description of first aid measures**

<b>Inhalation</b>	Move to fresh air. Consult a physician after significant exposure.
<b>Skin contact</b>	Wash off immediately with plenty of water. Consult a physician for severe cases.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Protect unharmed eye.
<b>Ingestion</b>	If conscious, drink plenty of water. Do not induce vomiting. Consult a physician for severe cases.

**4.2. Most important symptoms and effects, both acute and delayed** None known.

**4.3. Indication of any immediate medical attention and special treatment needed** None known.

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## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

**Suitable extinguishing media** Use dry chemical, CO<sub>2</sub>, water spray or alcohol foam.

**Extinguishing media which must not be used for safety reasons** High volume water jet. Water spray.

**5.2. Special hazards arising from the substance or mixture** Solvents may produce excessive pressure under fire-conditions. Sealed containers may rupture and ignite. Cool containers / tanks with water spray. Burning produces irritant fumes.

### **5.3. Advice for firefighters**

**Special protective equipment for firefighters** Standard procedure for chemical fires.

**Specific methods** Do not use a solid water stream as it may scatter and spread fire. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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## **SECTION 6: Accidental release measures**

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

<b>Advice for non-emergency personnel</b>	No special measures required.
<b>Advice for emergency responders</b>	Handle in accordance with good industrial hygiene and safety practice.

**6.2. Environmental precautions** No special environmental precautions required.

**6.3. Methods and material for containment and cleaning up** Clean up promptly by sweeping or vacuum. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). After cleaning, flush away traces with water.

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## **SECTION 7: Handling and storage**

<b>7.1. Precautions for safe handling</b>	Plan first aid action before beginning work with this product. Wear personal protective equipment.
<b>7.2. Conditions for safe storage, including any incompatibilities</b>	Store at room temperature in the original container.
<b>7.3. Specific end use(s)</b>	No information available.

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## **SECTION 8: Exposure controls/personal protection**

### **8.1. Control parameters**

**Exposure limit(s)** MAK (Maximale Arbeitsplatzkonzentration): 5 ppm.

### **8.2. Exposure controls**

**Appropriate engineering controls** Avoid contact with skin, eyes and clothing.

#### **Personal protection equipment**

*Respiratory protection* In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

*Hand protection* Gloves made of latex.

*Eye protection* Safety glasses with side-shields conforming to EN166.

*Skin and body protection* Wear as appropriate: Solvent-resistant apron and boots. Impervious clothing.

*Thermal hazards* No special measures required.

**Environmental exposure controls** No special measures required.

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## ***SECTION 9: Physical and chemical properties***

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

<b>Appearance</b>	Liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Stinging.
<b>Odour Threshold</b>	Not determined.
<b>pH:</b>	Not determined.
<b>Melting point/range:</b>	-73°C
<b>Boiling point/range:</b>	140°C
<b>Flash point:</b>	49°C
<b>Evaporation Rate:</b>	Not determined.
<b>Flammability:</b>	Not determined.
<b>Explosion limits:</b>	10.3% / 2.0%
<b>Vapour pressure:</b>	5.06 mbar (20°C)
<b>Vapor density:</b>	3.52
<b>Relative density:</b>	1.15 g/ml
<b>Water solubility:</b>	hydrolyses
<b>Partition coefficient (n-octanol/water):</b>	Not determined.
<b>Autoignition temperature:</b>	330°C
<b>Decomposition temperature:</b>	Not determined.
<b>Viscosity:</b>	Not determined.
<b>Explosive properties:</b>	liquid, flammable
<b>Oxidising properties:</b>	None

### **9.2. Other information**

**General Product Characteristics** No information available.

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## ***SECTION 10: Stability and reactivity***

<b>10.1. Reactivity</b>	No information available.
<b>10.2. Chemical stability</b>	No decomposition if used as directed.
<b>10.3. Possibility of hazardous reactions</b>	No information available.
<b>10.4. Conditions to avoid</b>	Heating in air. Burning produces obnoxious and toxic fumes. Exposure to moisture.
<b>10.5. Incompatible materials</b>	Incompatible with strong bases and oxidizing agents. Corrodes base metals.
<b>10.6. Hazardous decomposition products</b>	None under normal use.

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## **SECTION 11: Toxicological information**

### **11.1. Information on toxicological effects**

<b>Acute toxicity</b>	LD50/oral/rat = 1780 mg/kg. LD50/dermal/rabbit = 4290 mg/kg. LC50/inhalation/4h/rat = 4.18 mg/kg.
<b>Skin corrosion/irritation</b>	No data available.
<b>Serious eye damage/eye irritation</b>	No data available.
<b>Respiratory / Skin Sensitisation</b>	None.
<b>Carcinogenicity</b>	No data available.
<b>Germ cell mutagenicity</b>	Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
<b>Reproductive toxicity</b>	No data available.
<b>Specific target organ toxicity (single exposure)</b>	No data available.
<b>Specific target organ toxicity (repeated exposure)</b>	No data available.
<b>Aspiration hazard</b>	No data available.
<b>Human experience</b>	No data available.

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## **SECTION 12: Ecological information**

<b>12.1. Toxicity</b>	EC50/24h/daphnia = 55 mg/l. LC50/48h/golden orfe = 265 mg/l. May change pH of waters.
<b>12.2. Persistence and degradability</b>	Readily biodegradable. Neutralization is normally necessary before waste water is discharged into water treatment plants.
<b>12.3. Bioaccumulative potential</b>	Does not bioaccumulate.
<b>12.4. Mobility in soil</b>	No data available.
<b>12.5. Results of PBT and vPvB assessment</b>	No information available.
<b>12.6. Other adverse effects</b>	No information available.

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## **SECTION 13: Disposal considerations**

### **13.1. Waste treatment methods**

<b>Waste from residues / unused products</b>	Can be used without re-conditioning. Taking into account local regulations the product may be disposed of as waste water after neutralisation.
<b>Contaminated packaging</b>	Offer rinsed packaging material to local recycling facilities.

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## **SECTION 14: Transport information**

<b>ADR/RID</b>	UN 1715. Proper shipping name: ACETIC ANHYDRIDE. Class 8. Packing group II. ADR/RID-Labels 8+3. Classification code CF1. Hazard identification no. 83. Limited quantity 1 L. Excepted quantity E2. Tunnel restriction code D/E
<b>IMDG</b>	UN 1715. Proper shipping name: ACETIC ANHYDRIDE. Class 8. Packing group II. IMDG-Labels 8+3. Limited quantity 1 L. Excepted quantity E2. EmS F-E, S-C. Marine pollutant: No.
<b>IATA</b>	UN 1715. Proper shipping name: Acetic anhydride. Class 8. Packing group II. IATA label 8+3. Packing instruction (passenger aircraft): 851 (1 L). Packing instruction (LQ): Y840 (0.5 L). Packing instruction (cargo aircraft): 855 (30 L).
<b>Inland navigation ADN</b>	UN 1715. Proper shipping name: ACETIC ANHYDRIDE. Class 8. Packing group II. ADN labels 8+3. Classification code CF1. Limited quantity 1 L. Excepted quantity E2.
<b>Further Information</b>	None.

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## **SECTION 15: Regulatory information**

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

**Regulatory Information**                      The product is classified and labelled according to Regulation (EC) No. 1272/2008.

**15.2. Chemical safety assessment**                      Not required.

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## **SECTION 16: Other information**

**Key or legend to abbreviations and acronyms**                      CLP: Classification according to Regulation (EC) No. 1272/2008 (GHS)  
MAK: Occupational exposure limit.

**Full text of phrases referred to under sections 2 and 3**                      H226: Flammable liquid and vapour.  
H302: Harmful if swallowed.  
H314: Causes severe skin burns and eye damage.  
H332: Harmful if inhaled.

**Further information**                      Take notice of the directions of use on the label.

**Disclaimer**                      The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered a warranty or quality specification.