

**ActiSorb® S 2: Extr 4.5 SCQ 200M: G-72D**Update  
10.02.2010Print Date  
10.01.2011Version  
2**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****Product information**

Commercial Product Name : ActiSorb® S 2: Extr 4.5 SCQ 200M: G-72D

Company : Süd-Chemie AG  
Business Unit Catalytic Technologies  
Lenbachplatz 6  
80333 München

Telephone : +498951100  
Telefax : +49895110480

Contact Point : BCT-1 +49 89 5110 - 322 or email to catalysts@sud-chemie.com

Emergency telephone : +49 (0)613284463 only for workplace emergency  
(only German or English)

**2. HAZARDS IDENTIFICATION**

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Chemical nature** : Mixture of zinc oxide and aluminium oxide

**Usage** : Catalyst for chemical reactions

| Components      | EINECS / ELINCS | Symbol(s) | R-phrase(s) | Concentration |
|-----------------|-----------------|-----------|-------------|---------------|
| ZINC OXIDE      | 215-222-5       | N         | R50/53      | > 25,00 %     |
| ALUMINIUM OXIDE | 215-691-6       |           |             | < 10,00 %     |
| SODIUM OXIDE    | 215-208-9       | C         | R14, R34    | < 1,00 %      |

**4. FIRST AID MEASURES**

General advice : none

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin contact : Wash off with soap and plenty of water.

Inhalation : If large amounts have been inhaled, seek medical advice.

Ingestion : Drink plenty of water. Let person, if fully conscious, vomit but do not induce vomiting. Rinse mouth. Call a physician immediately.

**Notes to physician**

Treatment : none

**SAFETY DATA SHEET** according to EC Directive 1907/2006/EC  
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### 5. FIRE-FIGHTING MEASURES

- Specific hazards during fire fighting : none
- Special protective equipment for fire-fighters : none
- Suitable extinguishing media : The product itself does not burn.  
Use extinguishing measures appropriate to the environment.
- Extinguishing media which shall not be used for safety reasons : Do not use a solid water stream as it may scatter and spread fire.

### 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : none
- Environmental precautions : Do not flush into surface water or sanitary sewer system.
- Methods for cleaning up : Take up uncontaminated material and pass on for further processing.  
Take up contaminated material by mechanical means, load into clean containers, and dispose of in accordance with legal regulations.
- Additional advice : Avoid dust formation.

### 7. HANDLING AND STORAGE

#### Handling

- Safe handling advice : Avoid formation of dust and aerosols. Handle with care to avoid abrasion or breakage.
- Advice on protection against fire and explosion : No special precautions required.

#### Storage

- Requirements for storage areas and containers : Keep container tightly closed and dry.
- Advice on common storage : no restrictions

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Additional technical information on the plant : none

#### Components with workplace control parameters

| Components  | CAS-No. | Value                      | Basis / Remarks |
|---|---------|----------------------------|-----------------|
| limiting value of inert dust (breathable content) |         | <b>10 mg/m<sup>3</sup></b> | TRGS900 01 2006 |
| limiting value of inert dust (alveolar content)   |         | <b>3 mg/m<sup>3</sup></b>  | TRGS900 01 2006 |

#### Personal protective equipment

- Respiratory protection : respirator with P2 filter
- Hand protection : Chemical-resistant protective gloves according to EN 374, EN 388, EN 420 With full contact/spraying contact: nitrile rubber, layer thickness 0.4mm, break through time > 480min
- Eye protection : Safety glasses

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Skin and body protection : none  
Hygiene measures : Wash off with warm water and soap.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form : extrusions  
Colour : grey  
Odour : none

### Other data

Melting point : > 1.000 °C  
Boiling point : n.a.  
Flash point : n.a.  
Ignition temperature : n.a.  
Autoignition temperature : none  
Upper explosion limit : n.a.  
Lower explosion limit : n.a.  
Vapour pressure : n.a.  
Bulk density : 1.090 Kg/m<sup>3</sup> +- 80  
Water solubility : insoluble  
pH : n.av.  
Oxidizing properties : none  
Explosive properties : Remarks: none

## 10. STABILITY AND REACTIVITY

Conditions to avoid (Hazardous reactions) : None known.  
Materials to avoid (Hazardous reactions) : None known.  
Information about decomposition : No decomposition if stored and applied as directed.

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2**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

Acute oral toxicity : LD50 rat  
Dose: 10.000 mg/kg  
( ALUMINIUM OXIDE )

**irritation, Sensitisation, Other data Toxicology**

Eye irritation : no data available

Sensitisation : no data available

Repeated dose toxicity : no data available

Human experience : Under normal conditions of industrial hygiene no negative effects are known so far. Due to dust raising, light irritation of eyes and/or mucous membranes is possible.

**12. ECOLOGICAL INFORMATION**

Degradation : The solid matter content can be separated mechanically in a sewage plant. Catalyst is a nearly insoluble, inorganic product.

Distribution to environmental compartments : no data available

**Ecotoxicity effects**

Other data Ecotoxicity : no data available

Water contaminating class (Germany) : (Self classification acc. to German "VwVwS-concept")  
WGK 2 water endangering

**13. DISPOSAL CONSIDERATIONS**

Product : Used catalysts may have different hazards or properties than the original product. This SDS does not apply to used catalysts. Refer to manufacturer/supplier for information on recovery/recycling. Can be disposed of as a solid waste or burned in a suitable installation subject to local regulations.

disposal key number (EAK) : 16 08 - Spent catalysts

Contaminated packaging : Dispose of as unused product.

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#### 14. TRANSPORT INFORMATION

**Land transport** : ADR: UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)  
Regulation : ADR  
Class : 9  
Classification Code: M7  
Packaging group : III  
Warning sign : 90

RID: UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)  
Regulation : RID  
Class : 9  
Classification Code: M7  
Packaging group : III  
Warning sign : 90

**Sea transport** : IMDG-CODE: UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)  
Regulation : IMDG-CODE  
Class : 9  
PG : III  
EmS number : F-A, S-F  
Marine pollutant : P  
IMDG Page : 548 (34-8)  
MFAG number (first) : NONE

**Air transport** : IATA\_C: UN 3077 Environmentally hazardous substance, solid, n.o.s. (zinc oxide)  
Regulation : IATA\_C  
Class : 9  
PG : III  
CAC : 911  
transport without restriction : Yes

IATA\_P: UN 3077 Environmentally hazardous substance, solid, n.o.s. (zinc oxide)  
Regulation : IATA\_P  
Class : 9  
PG : III  
PAC : 911  
transport without restriction : Yes

#### 15. REGULATORY INFORMATION

General advice : The product is classified and labelled in accordance with EC directives or respective national laws.

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Hazardous components which must be listed on the label:

- ZINC OXIDE

Symbol(s) : N Dangerous for the environment

R-phrase(s) : R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s) : S60 This material and its container must be disposed of as hazardous waste.  
S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

Other information : Handle in accordance with good industrial hygiene and safety practice.

**Notification status:** Mixture

| Components / CAS-No. | Registered in / No. | Status |
|----------------------|---------------------|--------|
| all components       | AICS                | listed |
|                      | DSL                 | listed |
|                      | INV (CN)            | listed |
|                      | ENCS (JP)           | listed |
|                      | TSCA                | listed |
|                      | EINECS              | listed |
|                      | KECI (KR)           | listed |
|                      | PICCS (PH)          | listed |

**16. OTHER INFORMATION**

**Relevant R-Phrases acc. Chapter 2 and 3** : R14 - Reacts violently with water.  
R34 - Causes burns.  
R50/53 - Very toxic to aquatic organisms, may cause long-term effects in the aquatic environment.

Responsible for SDS: Environmental Protection Contact person: Dep. CEQ Tel.: +49 8761/82-654

The information presented herein is believed to be accurate, but is not warranted.

It does not represent any assurance of properties of the product.

The specifications are to be drawn from the corresponding leaflet.

A vertical bar (|) in the left margin indicates an amendment from the previous version.

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**Legend**

n.a.: not applicable

n.av.: not available

n.r.: not relevant