#### SAFETY DATA SHEET

Safety data sheet according to (EC) No. 1907/2006.

# 1. Identification of the substance/mixture and of the company/undertaking

### Product identifier:

1 M Sulphuric acid

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

Laboratory use.

## Details of the supplier of the safety data sheet:

SSI Diagnostica A/S

Herredsvejen 2 Tlf.: +45 4829 9178 DK-3400 Hillerød, Denmark Fax: +45 4829 9179

Responsible person for the safety data sheet (e-mail): microbiology@ssi.dk

**Emergency telephone:** 

+45 4829 9178 (within office hours)

## 2. Hazards identification

#### Classification of the substance or mixture:

Aqueous solution - causing skin and serious eye irritation. Corrosive to metals.

EC (67/548 or 1999/45): Xi;R36/38

CLP (1272/2008): Met. Corr.1;H290 Skin Irrit. 2;H315 Eye Irrit. 2;H319

Label elements:

CLP:

Content: Sulphuric Acid 9.25%



Warning

H290: May be corrosive to metals.
H315: Causes skin irritation.
H319: Causes serious eye irritation.

P280: Wear protective gloves/eye protection/face protection. P337+P313: If eye irritation persists: Get medical advice/attention.

P390: Absorb spillage to prevent material damage.

Other hazards:

None known. PBT/vPvB: The ingredients are not considered PBT/vPvB according to criteria in Annex XIII.

# 3. Composition/information on ingredients

**Substances: -**

**Mixtures:** 

% w/w Name CAS-no. EC-no. Index-no. REACH-reg.no. Classification Note

9.25 Sulphuric Acid 7664-93-9 231-639-5 016-020-00-8 - EU: C; R35

CLP: Skin Corr. 1A;H314

Ad 100 Water 7732-18-5 231-781-2 - - -

1. Supplementary Classification for Sulphuric Acid listed on the harmonised classification list in Table 3.1 of Annex VI to CLP: Met. Corr.1;H290.

Wording of R-phrases and hazard statements - see section 16.

## 4. First-aid measures

## Description of first aid measures:

Inhalation: Move to fresh air. Keep at rest. If needed: seek medical advice.

Skin contact: Remove contaminated clothing and wash skin with water and mild soap. If irritation persists: Seek medical

advice.

Eye contact: Immediately flush with water or physiological salt water for at least 15 minutes, holding eye lids open, remember

to remove contact lenses, if any. If irritation persists: seek medical advice. Continue to flush on the way.

Ingestion: Rinse mouth and drink plenty of water. Keep at rest. In case of discomfort: Seek medical advice.

## Most important symptoms and effects, both acute and delayed:

Irritation and corrosion.

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

Show this Safety Data Sheet to a physician or emergency ward.

## 5. Fire-fighting measures

#### **Extinguishing media:**

Not combustible; aqueous solution.

Special hazards arising from the substance or mixture:

Not relevant.

Advice for fire-fighters:

Not relevant.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment - see section 8. Avoid further spreading. Ventilate area of leak or spill.

#### **Environmental precautions:**

Do not empty into drains - see section 12. Inform appropriate authorities in accordance with local regulations.

#### Methods and material for containment and cleaning up:

Absorb with paper towels or granulate. Place in suitable container for disposal. Flush with water. Further handling of spillage - see section 13.

#### Reference to other sections:

See above.

# 7. Handling and storage

#### Precautions for safe handling:

Avoid contact with skin, eyes and clothing. Change contaminated clothes. Wash contaminated skin immediately. Required access to water and eye wash fountain.

#### Conditions for safe storage, including any incompatibilities:

In tightly closed container.

### Specific end use(s):

See section 1.

# 8. Exposure controls/Personal protection

Control parameters:

Occupational exposure limits (EH40/2007):

Substance 8-hour TWA 15-min STEL Comments

\_ \_ \_

DNEL/PNEC: No CSR.

**Exposure controls:** 

Appropriate engineering controls: Not relevant.

Personal protective equipment: Respiratory protection: Not relevant.

Skin protection: Wear protective gloves of e.g. nitrile. Breakthrough time: approximately 3 hours.

Eye protection: Use safety goggles when there is a risk of splashes.

Environmental exposure controls: None particular.

# 9. Physical and chemical properties

## Information on basic physical and chemical properties:

Appearance: Colorless liquid
Odour: Odourless

Odour threshold: No information available

pH (20°C):

Melting point/freezing point (°C): Not determined Initial boiling point and boiling range (°C): Not determined Decomposition temperature (°C): Not determined Flash point (°C): Not determined Evaporation rate (water = 1): Not determined Flammability (solid, gas): Not relevant Upper/lower flammability or explosive limits (vol-%): Not determined Vapour pressure (mmHg, 20°C): Not determined

Vapour density (Water =  $1, 20^{\circ}$ C): 1,06

Relative density (Water = 1):

Solubility (water):

Partition coefficient: n-octanol/water:

Not determined

Not determined

Edition No 1 Day of issue: 08.09.2011 Page 2 of 4

# 9. Physical and chemical properties (continued)

Auto-ignition temperature (°C):

Viscosity:

Not determined

Not determined

Not relevant

Oxidising properties:

Oxidising potential

Other information:

Corrosion: May be corrosive to metals

# 10. Stability and reactivity

#### Reactivity:

Has a corrosive effect.

#### Chemical stability:

Stable under normal conditions (room temperature).

### Possibility of hazardous reactions:

Gives off hydrogen by reaction with metals.

#### Conditions to avoid:

None known.

#### **Incompatible materials:**

Metals.

### Hazardous decomposition products:

Thermal decomposition may produce oxides of sulphur oxides.

# 11. Toxicological information

**Information on toxicological effects:** 

Hazard class	Data	Test	Reference
Acute toxicity:			
Inhalation	$LC_{50}$ (rat) = 0.510 mg/l/2h (refers to pure substance)	No info	IUCLID
Dermal	No data (the pure substance is corrosive)	-	-
Oral	$LD_{50}$ (rat) = 2140 mg/kg (refers to pure substance)	No info	IUCLID
Corrosion/irritation:	Mixture causes skin and serious eye irritation. (from human	-	-
	experience)		
Sensitization:	No data	-	IUCLID
CMR:	No relevant data available for the diluted solution.	-	-

Information on likely routes of exposure: May be absorbed through ingestion.

Symptoms:

Inhalation: Inhalation of spray/mists may cause irritation with coughing. Skin: Contact with the skin may cause irritation with redness.

Eyes: Causes serious eye irritation, redness, pain. Eye damage may occur after some time.

Ingestion: May cause irritation of the gastrointestinal tract.

Chronic effects: Prolonged or frequent exposure to diluted solutions may cause dermatitis.

# 12. Ecological information

#### Toxicity:

1 0 m e v y v				
Aquatic	Data	Test (Media)	Reference	
Fish	$LC_{50}$ (Fish, 96 h) = 42 mg/l	No info (FW)	ECOTOX	
Crustacean	$EC_{50}$ (Crustacean, 48h) = 42.5 mg/l	No info	ECOTOX	
Algae	No data	=	-	

### Persistence and degradability:

No information available.

### Bioaccumulative potential:

No information available.

Mobility in soil:

No information available.

### Results of PBT and vPvB assessment:

Ingredients are not considered PBT/vPvB according to criteria in Annex XIII.

### Other adverse effects:

Harmful effect due to pH shift.

## 13. Disposal considerations

#### Waste treatment methods:

Disposal should be according to local, state or national legislation. Dispose of through authority facilities or pass to chemical disposal company. EWC-Code: 16 05 07

## 14. Transport information

UN-no.: UN proper shipping name: Transport hazard class(es): Packing group:

2796 SULPHURIC ACID 8 II (ADR/RID)

**Environmental hazards:** None. **Special precautions for user:** None.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not relevant.

## 15. Regulatory information

## Safety, health and environmental regulations/legislation specific for the substance or mixture:

Must not be used by persons under 18 years of age.

Chemical Safety Assessment: No CSR.

## 16. Other information

### R-phrases and hazard statements mentioned in section 2 and 3:

R 35: Causes severe burns.

R 36/38: Irriterer øjnene og huden.

H290: May be corrosive to metals.

H314: Causes severe skin burns and eye damage.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

#### **Abbreviations:**

DNEL = Derived No-Effect Level  $EC_{50} / LC_{50} / LD_{50} = Effect/Lethal Concentration/Dose 50%$ 

PBT = Persistent, Bioaccumulative, Toxic PNEC = Predicted No-Effect Concentration

vPvB = very Persistent, very Bioaccumulative

### Literature:

ECOTOX = US database.

IUCLID: International Uniform Chemical Database Information. RTECS: Register of Toxic Effects of Chemicals Substances.

### Training advice:

No special training is required. However, the user should be well instructed in the execution of the task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.

#### Changes since the previous edition:

Not relevant.

Prepared by: ALTox a/s - Tonsbakken 16-18 - DK-2740 Skovlunde - Phone +45 - 38 34 77 98 - Fax: +45 - 38 34 77 99 / EL - Quality control: SNS

Edition No 1 Day of issue: 08.09.2011 Page 4 of 4