Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 26.10.2012 Version number 38 Revision: 26.10.2012

* 1 Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· **Product name: Silica No.1**

· **Catalog number:** 00513139, (4)513130, (4)513131, 513133(0)

· **Application of the substance / the preparation:** Reagent for water analysis

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

· **Supplier:**
Tintometer GmbH
Schleefstr. 8-12
DE-44287 Dortmund
Made in Germany
www.lovibond.com
phone: +49 (0) 231 945100
E-Mail: sales@tintometer.de

· **Informing department:**
e-mail: produktsicherheit@tintometer.de
Product Safety Department
· **Contact for technical details:**
Technical Department
e-mail: technik@tintometer.de

· **1.4 Emergency telephone number:**
Poison Center Berlin, Germany
phone: 0049-30 30686 790

* 2 Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**


GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**


Xi; Irritant

R36/38: Irritating to eyes and skin.
R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
· **Hazard pictograms** GHS07
· **Signal word** Warning
· **Hazard statements**
H315 Causes skin irritation.
H319 Causes serious eye irritation.

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H412 Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P273	Avoid release to the environment.
P264	Wash thoroughly after handling.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P313	Get medical advice/attention.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

* 3 Composition/information on ingredients

· **3.2 Mixtures**

· **Description:** Mixture of organic and inorganic compounds

· **Dangerous components:**

CAS: 5329-14-6 EINECS: 226-218-8 Index number: 016-026-00-0	sulphamidic acid Xi R36/38 R52/53 Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412	25-35%

· **REACH - Pre-registered substances** All components are REACH pre-registered.

· **Additional information** For the wording of the listed risk phrases refer to section 16.

* 4 First aid measures

· **4.1 Description of first aid measures**

· **General information** Instantly remove any clothing soiled by the product.

· **After inhalation** Supply fresh air; consult doctor in case of symptoms.

· **After skin contact** Instantly wash with water and soap and rinse thoroughly.

· **After eye contact**

Rinse opened eye for several minutes (at least 10 min) under running water.

Call a doctor immediately.

· **After swallowing**

Rinse out mouth and then drink 1-2 glasses of water.

Seek medical treatment.

· **4.2 Most important symptoms and effects, both acute and delayed**

irritations

coughing

breathing difficulty

pain

· **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

* 5 Firefighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents** Use fire fighting measures that suit the environment.

· **5.2 Special hazards arising from the substance or mixture**

Can be released in case of fire:

Nitrogen oxides (NOx)

Carbon monoxide (CO)

Sulphur dioxide (SO2)

nitrous gases

Sulphur oxides (SOx)

nitrogen oxides

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ammonia (NH3)
· **5.3 Advice for firefighters**
· **Protective equipment:**
Wear self-contained breathing apparatus.
Wear full protective suit.
· **Additional information**
Collect contaminated fire fighting water separately. It must not enter drains.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Ambient fire may liberate hazardous vapours.

* 6 Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
· **6.2 Environmental precautions:** Do not allow product to reach sewage system or water bodies.
· **6.3 Methods and material for containment and cleaning up:**
Dispose of contaminated material as waste according to item 13.
Collect mechanically.
Ensure adequate ventilation.
· **6.4 Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

* 7 Handling and storage

· **7.1 Precautions for safe handling** No special precautions necessary if used correctly.
· **Information about protection against explosions and fires:** The product is not flammable

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage**
· **Requirements to be met by storerooms and containers:** Store in cool location.
· **Information about storage in one common storage facility:**
Store away from water.
Store away from metals.
· **Further information about storage conditions:**
Keep container tightly sealed.
Protect from heat and direct sunlight.
Store under dry conditions.
Protect from humidity and keep away from water.
Protect from the effects of light.
· **Recommended storage temperature:** 20°C +/- 5°C
· **Storage class** 8 B
· **7.3 Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **8.1 Control parameters**
· **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
· **Additional information:** The lists that were valid during the compilation were used as basis.

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· **8.2 Exposure controls**
· **Personal protective equipment**
· **General protective and hygienic measures**
Take off immediately all contaminated clothing
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes.
Do not eat, drink or smoke while working.

· **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.
· **Recommended filter device for short term use:** Filter P2
· **Protection of hands:**
Preventive skin protection by use of skin-protecting agents is recommended.
After use of gloves apply skin-cleaning agents and skin cosmetics.
· **Material of gloves**
nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.11 mm
· **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
Value for the permeation: Level ≥ 1 (>10 min)
· **Eye protection:**
Tightly sealed safety glasses.
use against the effects of fumes / dust
· **Body protection:** Protective work clothing.

* 9 Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **Appearance:**	
Form:	Tablets
Colour:	White
· **Odour:**	Odourless
· **pH-value (10.5 g/l) at 20°C:**	1.6
· **Melting point/Melting range:**	Not determined
· **Boiling point/Boiling range:**	Not determined
· **Flash point:**	Not applicable
· **Danger of explosion:**	Product is not explosive.
· **Density at 20°C**	2 g/cm³
· **Solubility in / Miscibility with**	
Water:	Soluble
· **Solvent content:**	
Organic solvents:	0.0 %
Solids content:	100.0 %
· **9.2 Other information**	No further relevant information available.

* 10 Stability and reactivity

· **Reactivity**
· **Thermal decomposition / conditions to be avoided:** To avoid thermal decomposition do not overheat.
· **Possibility of hazardous reactions**
Reacts with water

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Corrosive action on metals
Forms hydrogen in aqueous solution with metals
Aqueous solution reacts acidic.

· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:**
alkalis
acids
metals
halogen compounds
nitrates
chlorine
oxidizing agents
· **Hazardous decomposition products:** see chapter 5

* 11 Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity:**
Quantitative data on the toxicity of the preparation are not available.
The following statements refer to the individual components.

· **LD/LC50 values that are relevant for classification:**		
5329-14-6 sulphamidic acid		
Oral	LD50	1600 mg/kg (rat) (IUCLID)

· **Primary irritant effect:**
· **on the skin:** slight irritations possible
· **on the eye:** Strong irritant with the danger of severe eye injury.
· **Sensitization:** No sensitizing effect known.
· **Experience with humans:**
molybdenum(VI):
Can cause liver damages.
Can cause kidney damages.

· **Additional toxicological information:**
in case of an acute molybdenum(VI) intoxication: diarrhoea, anaemia, fatigue, loss of appetite

12 Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**	
5329-14-6 sulphamidic acid	
LC50	14.2 mg/l/96h (fish) (GESTIS) 70.3 mg/l/96h (Pimephales promelas) (MERCK / OECD 203)

· **12.2 Persistence and degradability** No further relevant information available.

· **Other information:**
Quantitative data on the ecological effect of this product are not available.
The following statements refer to the individual components.
· **12.3 Bioaccumulative potential**
Depending on the concentration, nitrogen compounds may contribute to the eutrophication of water supplies.

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· **Behaviour in environmental systems:**	
5329-14-6 sulphamidic acid	
log P(o/w)	0.10 (.)

· **12.4 Mobility in soil** No further relevant information available.

· **Ecotoxical effects:**
· **Remark:**
Toxic for fish:
NH_4^+ > 0.3 mg/l
sulphates > 7 g/l
molybdenum compounds in general: > 25 mg/l
Forms corrosive mixtures with water even if diluted.
· **Algea toxicity:** molybdenum compounds: Sc. quadricauda toxic from 54 mg/l
· **Bacterial toxicity:** sulphates toxic > 2.5 g/l
· **Protozoa:** molybdenum compounds: Microregma toxic from 27 mg/l
· **Additional ecological information:**

· **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment acc. VwVwS Annex 4): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms.
· **12.5 Results of PBT and vPvB assessment** no data available
· **vPvB assessments:** no data available
· **12.6 Other adverse effects** No further relevant information available.

* 13 Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**	
16 05 06*	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.
· **Recommended cleaning agent:** Water, if necessary with cleaning agent.

* 14 Transport information

· **14.1 UN-Number**	
· **ADR, IMDG, IATA**	UN2967
· **14.2 UN proper shipping name**	
· **ADR**	2967 SULPHAMIC ACID, mixture
· **IMDG**	SULPHAMIC ACID, mixture
· **IATA**	SULPHAMIC ACID

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· **14.3 Transport hazard class(es)**

· **ADR**

· **Class**	8 (C2) Corrosive substances.
· **Label**	8

· **IMDG, IATA**

· **Class**	8 Corrosive substances.
· **Label**	8
· **14.4 Packing group**	
· **ADR, IMDG, IATA**	III
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	No
· **14.6 Special precautions for user**	Warning: Corrosive substances.
· **Kemler Number:**	80
· **EMS Number:**	F-A,S-B
· **Segregation groups**	Acids
· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	Not dangerous according to the above specifications.
· **ADR**	
· **Limited quantities (LQ)**	5 kg
· **Tunnel restriction code**	E

* 15 Regulatory information

· **15.4 Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **National regulations**

· **Information about limitation of use:** Employment restrictions concerning young persons must be observed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

* 16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.
R36/38 Irritating to eyes and skin.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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· **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organization
EC50: effective concentration, 50 percent (in vivo)
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

· **Sources**
GESTIS-Stoffdatenbank
IUCLID (International Uniform Chemical Information Database)
Data arise from reference works and literature.

· *** Data compared to the previous version altered.**