

# SAFETY DATA SHEET

## According to Regulation (EU) No. 1907/2006

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### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product Name:** Acid Reagent Powder Pillows for High Range Silica  
**Catalog Number:** 2541549

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**SDS Number:** M00025  
**Index Number per (EC) No 1272/2008:** Not applicable  
**CAS No.:** Not applicable  
**Additional CAS No. (for hydrated forms):** Not applicable  
**EEC Number:** Not applicable  
**REACH Registration Number:** Not applicable  
**Use of the substance/preparation:** Silica determination  
**Date of MSDS Preparation:**  
**Day:** 05  
**Month:** November  
**Year:** 2010

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### 2. HAZARDS IDENTIFICATION

**CLASSIFICATION:**

**Classification:** DPD(1999/45/EEC) or DSD (67/548/EEC):

**Indication of Danger:** Irritant Dangerous to the Environment

**R-phrases:** R 36/38: Irritating to eyes and skin. R 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**GHS Classification: Reg (EC) 1272/2008:**

**Hazard categories:** Serious Eye Damage/Eye Irritation: Eye Irrit. 2 Skin Corrosion/Irritation: Skin Irrit. 2 Hazardous to the Aquatic Environment: Aquatic Chronic 3

**Hazard statements:** Causes serious eye irritation. Causes skin irritation. Harmful to aquatic life with long lasting effects.

**LABEL ELEMENTS:**

**Hazardous Components Indicated on Label as Listed in Section 3:**



**Signal Word:** WARNING

**Hazard Statements:** H319 Causes serious eye irritation. H315 Causes skin irritation. H412 Harmful to aquatic life with long lasting effects.

**Precautionary Statements:** P280 Wear protective gloves / protective clothing / eye protection / face protection. 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. P337+P313 If eye irritation persists: Get medical advice/attention. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P362 Take off contaminated clothing and wash before reuse.

**For package sizes of < 125 ml, only the following H and P codes appear on the product label.:**

**H Phrases:** H319, H315, H412

**P Phrases:** P280, P264, 305+P351+P338, P337+P313, P302+P352, P362

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Hazardous Components per Regulation (EU) No. 1272/2008:**

**Sulfamic Acid**

**Index Number per (EC) No 1272/2008:** 016-026-00-0

**CAS No.:** 5329-14-6

**EEC Number:** 226-218-8

**Classification:** Xi, R36/38; R 52/53

**GHS Classification:** Eye Irrit. 2, H319; Skin Irrit. 2 H315; Aquatic Chronic 3 H412; Acute Tox 5 - Orl H303

**EU Occupational Exposure Limits:** 3 mg/m<sup>3</sup> inhalable dust

**Percent Range:** 80,0 - 90,0

**Percent Range Units:** weight / weight

**Sodium Chloride**

**Index Number per (EC) No 1272/2008:** Not applicable

**CAS No.:** 7647-14-5

**EEC Number:** 2315983

**Classification:**

**GHS Classification:**

**EU Occupational Exposure Limits:** 3 mg/m<sup>3</sup>, Inhalable dust

**Percent Range:** 10,0 - 20,0

**Percent Range Units:** weight / weight

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### 4. FIRST AID MEASURES

**General Information:** In the event of exposure, show this Material Safety Data Sheet and label (where possible) to a doctor.

**Inhalation:** Give artificial respiration if necessary. Call physician. Remove to fresh air.

**Skin Contact (First Aid):** Wash skin with plenty of water. Call physician if irritation develops.

**Eye Contact:** Immediately flush eyes with water for 15 minutes. Call physician.

**Ingestion (First Aid):** Do not induce vomiting. Give 1-2 glasses of water. Never give anything by mouth to an unconscious person. Call physician immediately.

**Advice to doctor:** Treat symptomatically.

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### 5. FIRE FIGHTING MEASURES

**Extinguishing Media:** Water. Dry chemical.

**Extinguishing Media NOT To Be Used:** Not applicable

**Hazardous Combustion Products:** Toxic fumes of: ammonia nitrogen oxides. sulfur oxides. sodium monoxide  
**Fire / Explosion Hazards:** May react violently with: chlorine / chlorine compounds metal nitrates metal nitrites nitric acid  
**Fire Fighting Instruction:** As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

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## 6. ACCIDENTAL RELEASE MEASURES

**Evacuation Procedure:** Evacuate local area (15 foot radius or as directed by your facility's emergency response plan) when: a pound or more of loose powder is spilled. If conditions warrant, increase the size of the evacuation.

Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. See Section 13, Special Instructions for disposal assistance.

**Containment Technique:** Stop spilled material from being released to the environment. Cover spilled solid material with sand or other inert material.

**Clean-up Technique:** Scoop up spilled material into a large beaker and dissolve with water. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Flush reacted material to the drain with a large excess of water. Decontaminate the area of the spill with a soap solution.

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## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes skin Do not breathe dust. Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.

**Storage:** Store away from: acids Protect from: heat moisture

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**EU Occupational Exposure Limits:** 3 mg/m<sup>3</sup>, Inhalable dust

**For Occupational Exposure Limits (OEL) for ingredients, see section 3 - Composition/Information on Ingredients.:**

**Engineering Controls:** Use general ventilation to minimize exposure to mist, vapor or dust. Maintain general industrial hygiene practices when using this product.

**Personal Protective Equipment:**

**Eye Protection:** safety glasses with top and side shields

**Skin / Hand Protection:** disposable latex gloves In the EU, the selected gloves must satisfy the specifications of EU Directive 89/686/EEC and standard EN 374 derived from it. lab coat

**Inhalation Protection:** adequate ventilation

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## 9. PHYSICAL / CHEMICAL PROPERTIES

**Appearance:** White crystals

**Physical State:** Solid

**Odor:** None

**Odor Threshold:** Odorless

**pH:** of a 5% solution = 0,8

**Boiling Point:** Not applicable

**Melting Point:** ~205 °C ~401 °F

**Decomposition Temperature:** Not determined

**Evaporation Rate (water = 1):** Not applicable

**Flammable Properties:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition.

**Flash Point:** Not applicable

**Method:** Not applicable

**Flammability Limits:**

**Lower Explosion Limits:** Not applicable

**Upper Explosion Limits:** Not applicable

**Vapor Pressure:** Not applicable

**Vapor Density (air = 1):** Not applicable

**Specific Gravity/ Relative Density (water = 1; air =1):** 2,00

**Viscosity:** Not applicable

**Solubility:**

**Water:** Soluble

**Partition Coefficient (n-octanol / water):** Not applicable

**Autoignition Temperature:** Not applicable

**Metal Corrosivity:**

**Corrosivity Classification:** Not classified as corrosive to metals according to GHS criteria.

**Aluminum:** Not determined

**Steel:** Not determined

**Explosive Properties:**

Not applicable Not classified according to GHS criteria.

**Oxidizing Properties:**

Not applicable Not classified according to GHS criteria.

**Reactivity Properties:**

Not applicable Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.

**Gas under Pressure:**

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## 10. STABILITY / REACTIVITY

**Chemical Stability:** Stable when stored under proper conditions.

**Mechanical Impact:** None reported

**Static Discharge:** None reported.

**Reactivity / Incompatibility:** Incompatible with: bromine trifluoride chlorine fuming nitric acid lithium trifluoride

**Hazardous Decomposition:** Heating to decomposition releases toxic and/or corrosive fumes of: nitrogen oxides sulfur oxides

**Conditions to Avoid:** Heating to decomposition. Excess moisture

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## 11. TOXICOLOGICAL INFORMATION

**Toxicokinetics, Metabolism and Distribution:** No information available for mixture.

**Acute Toxicity:** Acute Toxicity Estimate (ATE) - Calculated from Ingredient Toxicity Data

Oral rat LD50 = 6702 mg/kg.

**Specific Target Organ Toxicity - Single Exposure (STOT-SE):** Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity - Repeat Exposure (STOT-RE):** Based on classification principles, the classification criteria are not met.

**Skin Corrosion/Irritation:** Irritating to skin.

**Eye Damage:** Irritating to eyes.

**Sensitization:** Based on classification principles, the classification criteria are not met.

**CMR Effects/Properties (carcinogenic, mutagenic or toxic to reproduction):** No germ cell mutagenicity, carcinogenicity or reproductive toxicity data found.

This product does NOT contain any IARC listed chemicals.

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## 12. ECOLOGICAL INFORMATION

**Product Ecological Information: --**

No ecological data available for this product. Mobility in soil: No data available

**Ingredient Ecological Information: --**

CEPA screening assessment conclusion for each and every ingredient: Unlikely to cause ecological harm

Sulfamic acid: Pimephales promelas 96 hr LC50 14,2 - 70.3 mg/L

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## 13. DISPOSAL CONSIDERATIONS

**Disposal number: Waste from residues or unused products:** 160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST: gases in pressure containers and discarded chemicals; Classified as hazardous waste. laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals.

**Disposal number: Used product:** 160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST: gases in pressure containers and discarded chemicals; Classified as hazardous waste. laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals.

**Disposal number: Contaminated packaging:** 160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST: gases in pressure containers and discarded chemicals; Classified as hazardous waste. laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals.

**Uncontaminated packaging:** In accordance with local and national regulations.

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## 14. TRANSPORT INFORMATION

### **I.M.O.:**

**I.M.O. Proper Shipping Name:** Sulphamic Acid Mixture

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**I.M.O. Hazard Class:** 8

**I.M.O. Subsidiary Risk:** NA

**I.M.O. UN Number:** UN2967

**I.M.O. Packing Group:** III

### **I.C.A.O.:**

**I.C.A.O. Proper Shipping Name:** Sulphamic Acid Mixture

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**ICAO Hazard Class:** 8

**ICAO Subsidiary Risk:** NA

**ICAO UN/ID Number:** UN2967

**ICAO Packing Group:** III

### **A.D.R.:**

**A.D.R. Proper Shipping Name:** Sulphamic Acid Mixture

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**A.D.R Hazard Class:** 8

**A.D.R. Subsidiary Risk:** NA

**A.D.R. UN-Number::** UN2967

**A.D.R. Packing Group:** III

**Additional Information:** There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

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## 15. REGULATORY INFORMATION

### **NATIONAL REGULATORY INFORMATION:**

**Employment restrictions (EU):** Observe employment restrictions for young people.

**Water contaminating class (Germany):** 1 - slightly water contaminating

**Technical Rules for Dangerous Substances ( Technische Regeln fur Gefahrstoffe - TRGS):** TRGS 400 TRGS 401  
May be applicable

**Tableaux de Maladies Professionnelles (France):** Not applicable

**Nomenclature des Installations Classees Pour la Protection de L'Environnement (France):** Contains substances that may be covered by regulation.

**Netherlands De Algemene Beoordelingsmethodiek Water ( ABM )-(Netherlands):** ABM Classification 8  
Sulfamic acid

**Ministry of Social Affairs and Employment - (SZW) Netherlands List of CMR:** Not applicable

**CHEMICAL SAFETY ASSESSMENT:** No chemical safety assessment has been done.

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## 16. OTHER INFORMATION

**Revision Summary:** Substantial revision to comply with EU Reg 1272/2008, Reg 1907/2006 and UN GHS ( ST/SG/AC.10/36/Add.3).

**References:** Vendor Information. Patty, Frank A. Industrial Hygiene and Toxicology, 3rd Revised Edition. Volume 2. New York: A Wiley-Interscience Publication, 1981. NIOSH Registry of Toxic Effects of Chemical Substances, 1985-86.

Cincinnati: U.S. Department of Health and Human Services, April, 1987. Sax, N. Irving. Dangerous Properties of Industrial Materials, 7th Ed. New York: Van Nostrand Reinhold Co., 1989. Gosselin, R. E. et al. Clinical Toxicology of Commercial Products, 5th Ed. Baltimore: The Williams and Wilkins Co., 1984. Outside Testing. The Merck Index, 11th Ed. Rahway, New Jersey: Merck and Co., Inc., 1989. Technical Judgment. In-house information. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983.

**Classification Guidance Used.:** Product is a mixture classified and labelled according to EC 1272/2008.

<b>CLASSIFICATION</b>	<b>CLASSIFICATION PROCEDURE</b>
Eye Irrit. 2, H319	Bridging principle "Dilution"
Skin Irrit. 2, H315	Bridging principle "Dilution"
Aquatic Chr. 3, H412	Bridging principle "Dilution"

**Complete Text of H phrases referred to in Section 3:** H319 Causes serious eye irritation. H315 Causes skin irritation. H412 Harmful to aquatic life with long lasting effects.

**Complete Text of R phrases referred to in Section 3:** R 36/38: Irritating to eyes and skin. R 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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**Legend:**

NA - Not Applicable	w/w - weight/weight
ND - Not Determined	w/v - weight/volume
NV - Not Available	v/v - volume/volume

**USER RESPONSIBILITY:** Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

**THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.**

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