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Material Safety Data Sheet

Type 1000A1

Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31

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

1.1. Product identifier

Kistler number	1000A1
Product name	grouting compound 1000A1 comp C, filler

1.2. Use of the substance / preparation

sensor moulding/potting

1.3. Details of the supplier of the safety data sheet

Name	Kistler Instrumente AG,
Address	Eulachstrasse 22
District and Country	8408 Winterthur, Switzerland
	Tel: +41 52 224 11 11, Fax: +41 52 224 14 14
	info@kistler.com, www.kistler.com
E-mail address of person responsible for this SDS	info@kistler.com, www.kistler.com

1.4 Emergency telephone

+41797768935 ASTAG AG (8h, GMT +1)
+41442515151 Swiss Toxicology Centre (24h)

2. Hazards identification

2.1. Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments.

Hazard classification and indication:

STOT RE 2 H373

2.1.2. 67/548/EEC and 1999/45/EC Directives and following amendments and adjustments.

Danger Symbols:	Xn
R phrases:	48/20

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

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2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Signal word	Warning
H373	May cause damage to organs through prolonged or repeated exposure.
P314	Get medical advice / attention if you feel unwell.
Contains:	QUARTZ

2.3. Other hazards Information not available.

3. Composition/information on ingredients

3.1. Substances

Information not relevant.

3.2. Mixtures

Contains:

Identification	Conc. %	Classification 67/548/EEC	Classification 1272/2008 (CLP)
QUARTZ CAS. 14808-60-7 EC. 238-878-4 INDEX. -	90 - 94	XN R48/20	STOT RE 2 H373

Note: Upper limit is not included into the range.

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.
T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)

4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice

SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

4.2. Most important symptoms and effects, both acute and delayed

For symptoms and effects caused by the contained substances, see chap. 11.

4.3 Indication of any immediate medical attention and special treatment needed

Information not available.

5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3 Advice for firefighters

GENERAL INFORMATION: Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal firefighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

If there are no contraindications, spray powder with water to prevent the formation of dust. Avoid breathing vapours/mists/gases.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Use spark-proof mechanical equipment to collect the leaked product and place it in containers for recovery or disposal. If there are no contraindications, use jets of water to eliminate product residues.
Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available.

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8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

United Kingdom: EH40/2005 Workplace exposure limits. Containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations (as amended).

Eire: Code of Practice Chemical Agent Regulations 2011.

OEL EU: Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.

TLV-ACGIH: ACGIH 2012

QUARTZ - Threshold Limit Values

Type	Country	TWA/8h mg/m³	TWA/8h ppm	STEL/15min mg/m³	STEL/15min ppm
WEL	UK	0,3			
OEL	IRL	0,1			
MAK	DE	0.15			
MAK	AT, CH	0.15			
VLEP	FR	0.1			
TLV	BE	0.1			
VLA	ES	0.1			
TLV-ACGIH		0,025			

Legend:
(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protection equipment, make sure that the workplace is well aired through effective local aspiration. Personal protection equipment must comply with the rules in force indicated below.

HAND PROTECTION: Protect hands with category II (ref. Directive 89/686/EEC and standard EN 374) work gloves, such as those in PVC, neoprene, nitrile or equivalent. The following should be considered when choosing work glove material: degradation, breakage times and permeation. Work glove resistance to preparations should be checked before use, as it can be unpredictable. Gloves` limit depends on the duration of exposure.

EYE PROTECTION: Wear protective airtight goggles (ref. standard EN 166).

SKIN PROTECTION: Wear category II professional long-sleeved overalls and safety footwear (ref. Directive 89/686/CEE and standard EN 344). Wash body with soap and water after removing overalls.

RESPIRATORY PROTECTION	If the threshold value (if available) for one or more of the substances present in the preparation for daily exposure in the workplace or to a fraction established by the company`s prevention and protection service is exceeded, wear an FFP3 (ref. standard EN 141/EN 143) type half mask. The use of respiratory tract protection equipment, such as masks like that indicated above, is necessary to reduce worker exposure in the absence of technical measures. The protection provided by masks is in any case limited. If the substance in question is odourless or its olfactory threshold is higher than the relative exposure limit and in the event of an emergency, or when exposure levels are unknown or the concentration of oxygen in the workplace is less than 17% volume, wear self-contained, open-circuit compressed air breathing apparatus (ref. standard EN 137) or fresh air hose breathing apparatus for use with full face mask, half mask or mouthpiece (ref. standard EN 138). In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption. Exposure levels must be kept as low as possible to avoid significant build-up in the organism; consequently, personal protective equipment must be managed so as to guarantee maximum protection (e.g. by reducing the replacement times for used PPE).
ENVIRONMENTAL EXPOSURE CONTROLS	The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	solid
Colour	grey
Odour	odourless
Odour threshold	Not available.
pH	Not available.
Melting point / freezing point	Not available.
Initial boiling point	Not applicable.
Boiling range	Not available.
Flash point	Not applicable.
Evaporation Rate	Not available.
Flammability of solids and gases	Not available.
Lower inflammability limit	Not available.
Upper inflammability limit	Not available.
Lower explosive limit	Not available.
Upper explosive limit	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	2,660 Kg/l
Solubility	insoluble
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidising properties	Not available.

9.2. Other information Information not available.

10. Stability and reactivity

10.1. Reactivity There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid None in particular. However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials Information not available.

10.6. Hazardous decomposition products Information not available.

11. Toxicological Information

11.1. Information on toxicological effects

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.
This product may cause functional disorders or morphological mutations after repeated or prolonged exposure and/or may accumulate inside the human body and is thus graded as dangerous.

12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.

12.1. Toxicity Information not available.

12.2. Persistence and degradability Information not available.

12.3. Bioaccumulative potential Information not available.

12.4. Mobility in soil Information not available.

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects Information not available.

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13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations. Avoid littering. Do not contaminate soil, sewers and waterways. Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

15. Regulatory information

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

Seveso category.	None.
Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006	None.
Substances in Candidate List (Art. 59 REACH)	None.
Substances subject to authorisation (Annex XIV REACH)	None.
Substances subject to exportation reporting pursuant to (EC) Reg. 689/2008	None.
Substances subject to the Rotterdam Convention	None.
Substances subject to the Stockholm Convention	None.
Healthcare controls	Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical Safety Assessment

No chemical safety assessment has been processed for the mixture and the substances it contains.

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16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
H373	May cause damage to organs through prolonged or repeated exposure

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R48/20	HARMFUL: DANGER OF SERIOUS DAMAGE TO HEALTH BY PROLONGED EXPOSURE THROUGH INHALATION.

LEGEND:

- ADR	European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER	Chemical Abstract Service Number
- CE50	Effective concentration (required to induce a 50% effect)
- CE NUMBER	Identifier in ESIS (European archive of existing substances)
- CLP	EC Regulation 1272/2008
- DNEL	Derived No Effect Level
- EmS	Emergency Schedule
- GHS	Globally Harmonized System of classification and labelling of chemicals
- IATA DGR	International Air Transport Association Dangerous Goods Regulation
- IC50	Immobilization Concentration 50%
- IMDG	International Maritime Code for dangerous goods
- IMO	International Maritime Organization
- INDEX NUMBER	Identifier in Annex VI of CLP
- LC50	Lethal Concentration 50%
- LD50	Lethal dose 50%
- OEL	Occupational Exposure Level
- PBT	Persistent bioaccumulative and toxic as REACH Regulation
- PEC	Predicted environmental Concentration
- PEL	Predicted exposure level
- PNEC	Predicted no effect concentration
- REACH	EC Regulation 1907/2006
- RID	Regulation concerning the international transport of dangerous goods by train
- TLV	Threshold Limit Value
- TLV CEILING	Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL	Short-term exposure limit
- TWA	Time-weighted average exposure limit
- VOC	Volatile organic Compounds
- vPvB	Very Persistent and very Bioaccumulative as for REACH Regulation.

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GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EC) 453/2010 of the European Parliament
7. Regulation (EC) 286/2011 (II Atp. CLP) of the European Parliament
8. The Merck Index. - 10th Edition
9. Handling Chemical Safety
10. NIOSH - Registry of Toxic Effects of Chemical Substances
11. INRS - Fiche Toxicologique (toxicological sheet)
12. Patty - Industrial Hygiene and Toxicology
13. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
14. ECHA website

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property. The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.

Changes to previous review:

The following sections were modified:
01 / 02 / 03 / 04 / 06 / 07 / 08 / 09 / 11 / 12 / 15 / 16.

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