



Distributor: Mager Scientific
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Distributor Product No.

AP-1060 AP-1070

Manufacturer: Akasel ApS

Manufacturer Product No.: Fumed Silica Suspension, Water-Free, 1060-1070

Dear Customer:

In order to comply with the Hazard Communication Law which went into effect November 25, 1985, and the Globally Harmonized System (GHS) regulation update introduced by the Occupational Safety and Health Administration (OSHA) in 2015, attached is the safety data sheet pertaining to our product noted above.

Additional sheets are available upon request. Please feel free to contact us if we can be of further assistance.

Sincerely,

Mager Scientific, Inc.
Customer Service

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name

Fumed Silica Suspension, Water free

Product no.

1060-1070

REACH registration number

Not applicable

Other means of identification

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance or mixture

Polishing of metallographic samples

Uses advised against

-

The full text of any mentioned and identified use categories are given in section 16

1.3. Details of the supplier of the safety data sheet

Company and address

AKASEL ApS
Svogerslev Hovedgade 48
DK-4000 Roskilde
tlf: +45 57 84 05 01
fax: +45 57 84 06 01

Contact person

Morten J. Damgaard

E-mail

info@akasel.com

SDS date

01-05-2014

SDS Version

1.0

1.4. Emergency telephone number

Use your national or local emergency number
See section 4 "First aid measures"

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT RE 2, STOT SE 3 // H373, H335, H319, H315, H302
See full text of H/R-phrases in section 2.2.

DPD/DSD Classification

Harmful. (Xn).

Irritating to eyes, respiratory system and skin.(R36/37/38). Harmful if swallowed.(R22).

2.2. Label elements

Hazard pictogram(s)

According to EC-Regulation 1907/2006 (REACH)

Signal word

Warning!

Hazard statement(s)

- Harmful if swallowed. (H302)
- Causes skin irritation. (H315)
- Causes serious eye irritation. (H319)
- May cause respiratory irritation. (H335)
- May cause damage to organs through prolonged or repeated exposure. (H373)

Identity of the substances primarily responsible for the major health hazards

Fumed silica, Ethane-1,2-diol

	General	-
	Prevention	Do not breathe dust/fume/gas/mist/vapours/spray. (P260) Do not eat, drink or smoke when using this product. (P270)
Safety statement(s)	Response	Get medical advice/attention if you feel unwell. (P314) IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. (P301-P312)
	Storage	Store locked up. (P405)
	Disposal	Dispose of contents/container to an approved waste disposal plant. (P501)

2.3. Other hazards

This product contains an organic solvent. Repeated exposure to organic solvents can result in damage to the nervous system and inner organs, such as the liver and kidneys.

Additional labelling

-

Additional warnings

-

VOC

-

SECTION 3: Composition/information on ingredients

3.1/3.2. Substances

NAME: Ethane-1,2-diol
 IDENTIFICATION NOS.: CAS-no: 107-21-1 EC-no: 203-473-3 Index-no: 603-027-00-1
 CONTENT: 80-95%
 DSD CLASSIFICATION: Xn;R22 Xn;R48/22
 CLP CLASSIFICATION: Acute Tox. 4, STOT RE 2
 H302, H373
 NOTE: S

NAME: Fumed silica
 IDENTIFICATION NOS.: CAS-no: 112945-52-5 EC-no: 231-545-4
 CONTENT: 15-25%
 DSD CLASSIFICATION: Xi;R36/37/38
 CLP CLASSIFICATION: STOT SE 3, Skin Irrit. 2, Eye Irrit. 2
 H315, H319, H335

(*) See full text of H/R-phrases in chapter 16. Occupational limits are listed in section 8, if these are available.
 S = Organic solvent

Other informations

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor, if in doubt about the injured person’s condition or if the symptoms continue. Never give an unconscious person water or similar.

Inhalation

Get the person into fresh air and stay with them.

According to EC-Regulation 1907/2006 (REACH)

Skin contact

Remove contaminated clothing and shoes at once. Skin that has come in contact with the material must be washed thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye contact

Remove contact lenses. Flush eyes with plenty of water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Contact a doctor at once.

Ingestion

In the case of ingestion, contact a doctor immediately and take this safety data sheet or the label from the material with you. If the person is conscious, give them water. DO NOT try to induce vomiting, unless this is recommended by a doctor. Hold head facing down so that no vomit runs back into the mouth and throat. Prevent shock by keeping the injured person warm and calm. Give mouth-to-mouth resuscitation if breathing stops. If unconscious, roll the injured person onto side with the top leg bent at both knee and hip. Call an ambulance.

Burns

Rinse with water until the pain stops and continue for 30 minutes.

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

Neurotoxic effect: This product contains organic solvents, which can have an effect on the nervous system. Symptoms of neurotoxicity can be: loss of appetite, headache, dizziness, whistling in the ears, tingling sensations in the skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer. The skin will then be more prone to absorb dangerous substances, e.g. allergens. **Irritation effects:** This product contains substances which cause irritation to skin and eyes, or when inhaled. Contact with locally irritative substances can cause the area of contact to be more prone to absorb damaging substances such as allergens.

4.3. Indication of any immediate medical attention and special treatment needed

Call a POISON CENTER or doctor/physician if you feel unwell.

Information to medics

Bring this safety data sheet.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Water jets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

No special

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapours from waste material. Avoid direct contact with spilled substances.

6.2. Environmental precautions

No specific requirements.

6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. Cleaning should be done as far as possible using normal cleaning agents. Solvents should be avoided.

6.4. Reference to other sections

See section on "Disposal considerations" with regard to the handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Smoking, consumption of food or liquid, and storage of tobacco, food or liquids are not allowed in the workrooms. See section on 'Exposure controls/personal protection' for information on personal protection. Avoid direct contact with the product.

According to EC-Regulation 1907/2006 (REACH)

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Storage temperature

NA No data available.

7.3. Specific end use(s)

This product should only be used for applications described in Section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OEL

Ethane-1,2-diol (EH40/2005)

Long-term exposure limit (8-hour TWA reference period): - ppm | 10 mg/m³

Short-term exposure limit (15-minute reference period): - ppm | - mg/m³

Comments: Sk (Sk = Can be absorbed through skin.)

DNEL / PNEC

No data available.

8.2. Exposure controls

Compliance with the stated exposure limits values should be checked on a regular basis.

General recommendations

Smoking, consumption of food or liquid, and storage of tobacco, food or liquid, are not allowed in the workroom.

Exposure scenarios

If there is an appendix to this safety data sheet, the indicated exposure scenarios must be complied.

Exposure limits

Trade users are covered by the rules of the working environment legislation on maximum concentrations for exposure. See work hygiene threshold values below.

Appropriate technical measures

Airborne gas and dust concentrations must be kept as low as possible and below the current threshold values (see below). Use for example an exhaust system if the normal air flow in the work room is not sufficient. Make sure that eyewash and emergency showers are clearly marked.

Hygiene measures

Whenever you take a break in using this product and when you have finished using it, all exposed areas of the body must be washed. Always wash hands, forearms and face.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible collect spillage during work.

Individual protection measures, such as personal protective equipment



Generally

Only CE-marked personal protection equipment should be used.

Respiratory Equipment

If the ventilation at the work place is not sufficient, use a half or whole mask with an appropriate filter or an air-supplied respiratory protector. The choice depends on the concrete work situation and how long you will be using the product.

Skin protection

Special work clothing should be used. When working with this product for a long period of time, use a protective suit.

Hand protection

Use protective gloves. The concrete work situation is not known. Contact the suppliers of the gloves for help on the glove type. Please note that elastic gloves stretch when used. The thickness of the gloves, and therefore their penetration time, will be reduced. Moreover, the temperature of the glove in use is about 35°C, while the standard test, EN 374-3, is done at 23°C. The penetration time is therefore reduced by a factor of 3.

Eye protection

Use face shield. Use safety glasses with a side shield as an alternative.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Colour	Odour	pH	Viscosity	Density (g/cm ³)
Liquid	White	Sweet	-	-	-

Phase changes

Melting point (°C)	Boiling point (°C)	Vapour pressure (mm Hg)
-	198	-

Data on fire and explosion hazards

Flashpoint (°C)	Ignition (°C)	Self ignition (°C)
111	-	-
Explosion limits (Vol %)	Oxidizing properties	
1,8 - 12,8	-	

Solubility

Solubility in water	n-octanol/water coefficient
Soluble	-

9.2. Other information

Solubility in fat	Additional information
-	N/A

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The product is stable under the conditions, noted in the section on "Handling and storage".

10.3. Possibility of hazardous reactions

No special

10.4. Conditions to avoid

Do not expose to heat (e.g. sunlight), because it can lead to excess pressure.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidising agents, and strong catabolic agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Substance	Species	Test	Route of exposure	Result
Ethane-1,2-diol	Mouse	LD50	Oral	5500 mg/kg
Ethane-1,2-diol	Mouse	LD50	Intraperitoneal	5614 mg/kg
Ethane-1,2-diol	Rat	LD50	Intravenous	3260 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

No data available.

According to EC-Regulation 1907/2006 (REACH)

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

May cause damage to organs.

Aspiration hazard

No data available.

Long term effects

Neurotoxic effect: This product contains organic solvents, which can have an effect on the nervous system. Symptoms of neurotoxicity can be: loss of appetite, headache, dizziness, whistling in the ears, tingling sensations in the skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer. The skin will then be more prone to absorb dangerous substances, e.g. allergens.

Irritation effects: This product contains substances which cause irritation to skin and eyes, or when inhaled. Contact with locally irritative substances can cause the area of contact to be more prone to absorb damaging substances such as allergens.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Species	Test	Test duration	Result
Ethane-1,2-diol	Daphnia	LC50	48 h	13140 mg/L
Ethane-1,2-diol	Fish	LC50	96 h	18500 mg/L

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
No data available.			

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BFC
No data available.			

12.4. Mobility in soil

Ethane-1,2-diol: Log Koc= -0,998584, Calculated from LogPow ().

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other adverse effects

No special

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The product is covered by the regulations on dangerous waste.

Waste

EWC code

-

Specific labelling

-

Contaminated packing

Packaging which contains leftovers from the product must be disposed of in the same way as the product.

SECTION 14: Transport information

Not listed as dangerous goods under ADR and IMDG regulations.

14.1 – 14.4

ADR/RID	14.1. UN number	14.2. UN proper shipping name	14.3. Transport hazard class(es)	14.4. Packing group	Notes
IMDG	UN-no.	Proper Shipping Name	Class	PG*	EmS MP** Hazardous constituent

14.5. Environmental hazards

-

14.6. Special precautions for user

-

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No data available

(*) Packing group

(**) Marine pollutant

SECTION 15: Regulatory information

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

Restrictions for application

People under the age of 18 must not be exposed to this product cf. Council Directive 94/33/EC. For exceptions, see the Danish Working Environment Authority's Executive Order No. 239 of 6 April 2005.

Demands for specific education

-

Additional information

-

15.2. Chemical safety assessment

No

SECTION 16: Other information'

Sources

EC regulation 1907/2006 (REACH)

Directive 2000/532/EC

EC Regulation 1272/2008 (CLP)

Full text of H/R-phrases as mentioned in section 3

R22 - Harmful if swallowed.

R36/37/38 - Irritating to eyes, respiratory system and skin.

R48/22 - Harmful: danger of serious damage to health by prolonged exposure if swallowed.

H302 - Harmful if swallowed.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H335 - May cause respiratory irritation.

H373 - May cause damage to organs through prolonged or repeated exposure.

The full text of identified uses as mentioned in section 1

-

Other symbols mentioned in section 2

-

Other

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

According to EC-Regulation 1907/2006 (REACH)

A change (in proportion to the last essential change (first cipher in SDS version)) is marked with a blue triangle.

The safety data sheet is validated by

AW /CHYMEIA

Date of last essential change

(First cipher in SDS version)

-

Date of last minor change

(Last cipher in SDS version)

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