



SAFETY DATA SHEET

Date of issue: 1 June 2007
Commercial product name: MIN-U-GEL
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1. Identification of the substance / preparation and the company.

Product name and code: **MIN-U-GEL**
Synonym: Attapulgite clay.
Material uses: Filler, rheological additive, binder.
Identification company: Faber & VanderEnde B.V.
Benedendorpsweg 53
6862 WC Oosterbeek
The Netherlands
E - fax (1): +31(0)84 87 30 332
E - fax (2): +31(0)20 52 41 203
E - mail: info@fabervanderende.com
Emergency telephone number: (24 hours), (31)30 – 2748888, www.rivm.nl,
Utrecht Poisoning Information Centre, The Netherlands.

2. Hazard identification.

The preparation is classified according to Directive 1999/45/EC or Directive 67/548/EEC and its amendments.

Irritating effects.

Mild mechanical irritation to skin, eyes and upper respiratory system may result from dust exposure. These effects are usually temporary. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

Chronic respiratory health effects.

This product contains sometimes small quantities of respirable crystalline silica (quartz and cristoballiet). Prolonged / repeated inhalation of respirable crystalline silica dust may cause delayed lung injury (silicosis) and increase the risks of developing respiratory cancer. IARC (International Agency for Research on Cancer) states that there is "sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the form of quartz or cristoballiet from occupational sources to classify crystalline silica as carcinogenic to humans (Group 1)" (Monograph 68). In making the overall evaluation the Working Group noted however that carcinogenicity in humans was not detected in all industrial circumstances studied.

3. Composition / information on ingredients.

Ingredient	% weight	danger	CAS#	EG#	REACH#
Hydrated aluminium-magnesium silicate (palygorskite)	> 90	-	12174-11-7	-	-
Quartz (SiO ₂)	< 10	-	14808-60-7	238-878-4	-



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4. First – aid measures.

After contact with eyes:	In case of irritation. Remove contact lenses, and rinse with water while keeping the eyelids open for at least 15 minutes. Consult an optometrist.
After contact with skin:	Remove mechanically. In case of skin irritation rinse affected areas with water (and soap), wash gently. Carefully apply cream to clean skin. Do not rub or scratch exposed skin.
After ingestion:	Provided the patient is conscious, rinse mouth with water and drink minimum 2 glasses of water. DO NOT induce patient to vomit. Obtain immediate medical assistance. The person should be placed and kept in the recovery position if unconscious. Make tightly sitting clothing loose, such as a shirt, tie or belt.
If aerosol or vapour is inhaled in high concentrations:	If these become irritated move to a dust free area, drink water and blow nose to remove particulates from nasal passages. Seek medical attention in case of symptoms.
Further medical treatment:	Symptomatic treatment and supportive therapy as indicated.

5. Fire – fighting measures.

Extinguishing media suitable:	CO ₂ , alcohol-resistant foam, dry powder, water spray or water jet.
Extinguishing media which must not be used for safety reasons:	None.
Special exposure hazards arriving from substance or preparation itself, combustion products, resulting gases:	No specific fire dangers.
Protection of fire-fighters:	Fire-men have to wear self-contained breathing apparatus. Use qualified personnel who are well aware of the dangers of this product. After use clean the equipment thoroughly (shower, clean clothing thoroughly and check suitability).
Additional information:	Packaging and surrounding materials may be combustible. Extinguishing with water may cause slipperiness.

6. Accidental release measures.

Personal precautions:	Where dust concentrations occur, provide the workers with appropriate protective equipment. If brushing is used, ensure that the area is wetted down first. Avoid dust engendering and use adequate ventilation. Prevent further dust dispersion for example by damping the materials.
Environmental precautions:	Do not discharge into drains, sewers, watercourses or the environment. If significant quantities are being released in the environment, inform the authorities according to the local rules.
Methods for cleaning up / taking up:	Collect in suitable containers for waste disposal. To gather the powder use a vacuum cleaner with high efficiency air filter (HEPA). The area in question should first be moistened before being brushed clean (not too wet, in order to avoid a slippery surface). Do not use compressed air for clean up. Ensure that the wind cannot carry away any of the substance and that all personnel stay upwind. Information concerning waste treatment may be found in section 13.



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7. Handling and storage.

Handling:	Handling can be a source of dust emission and working practices should be designed to reduce exposure to a minimum and to prevent the accumulation of dust. The product should where possible be used in controlled conditions (for example by using a dust extractor with filter unit). A clean and tidy workplace also contributes to dust control. Damage to the containers should be avoided. Reduce the release of the product during unpacking. Empty containers that may contain traces of the product should be cleaned before being thrown away or reused.	
Storage:	Store the product ready for use in its original packing in a dry place. Always use closed and clearly and visibly labelled storage containers.	
	Storage material, suitable:	Original packaging or closed containers.
	Storage temperature:	No specific requirements.
Specific use(s):	Basic raw material for blends.	

8. Exposure controls / personal protection.

Exposure limits.	
Ingredient name	Workplace exposure limits UK (OES / MAC – list, 01-2007).
Hydrated aluminium-magnesium silicate	TGG 8 hrs. 10 mg / m ³ (respirable, total dust) 3 mg / m ³ (respirable) (ACGIH result as suppliers value)
Silicon dioxide	TWA 8 hrs. 0,1 mg / m ³ (as respirable dust, EH40 / 2005 from 1 October 2006)
Personal protection:	Do not smoke, eat or drink whilst working. Wear suitable protective clothing (preferably cotton).
Health limits and safeguards:	Norms for the protection of personnel and exposure limits at the workplace may vary by country. You must keep to the limits applicable to your company. If no instructions or other norms concerning dust exist then a qualified expert in the field of personnel protection may be brought in to analyse the workplace and advise on suitable respiratory equipment to be worn (see further under the reference to Nepsi under heading 16).
Technical safeguards:	Review your applications in order to identify potential sources of dust exposure. Local exhaust ventilation, which collects dust at source, can be used. For example down draft tables, emission controlling tools and materials handling equipment. Keep the workplace clean. Use a vacuum cleaner fitted with a High Efficiency Particle Air (HEPA) filter, avoid brushing and compressed air.

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8. Exposure controls / personal protection (continue).

Personnel information and training: Employees must be trained to handle this product and informed regarding national handling requirements. Personnel checks: Free silicic acid is on the list of agents whose inhalation can cause illness. Employees who work with this product must undergo an annual check consisting of a chest X-ray.

Respiratory protection: Requires at not sufficient ventilated working places. Suitable self-contained breathing apparatus must be worn if ventilation is insufficient or if company regulations so demand. Eating, drinking and smoking are prohibited in areas where this material is handled and stored. For dust concentrations below the exposure limit value, respiratory protection is not required but FFP2 (mask according to EN149: 2001). respirators may be used on a voluntary basis. For short-term operations where excursions are less than ten times the limit value use FFP2 respirators. In case of higher concentrations or where the concentration is not known, please seek advice from an expert.

Skin and body:



Wear suitable protective clothing (preferably heavy cotton), (overall, preferably heavy cotton or protecting clothing for once-only use). Soiled clothes should be cleaned to remove material dust before being taken off (e.g. use vacuum cleaning, not compressed air). Keep working clothes separate.

Hands:



Wash hands before breaks and at the end of workday. Protective gloves should be worn when handling the product and a possibility for skin contact. For prolonged or repeated handling, use thick gloves (for example leather).

Eyes:



Appropriate eye protection (safety eyewear with side shields) should be worn. Eye - wash.

9. Physical and chemical properties.

General information.

Appearance: Powder.
Colour: Yellow brown till grey.
Odour: No specific odour.

Important health, safety and environmental information.

pH: 9,0.
Boiling point: -
Flash point: -
Explosive properties: -
Vapour pressure: -
Relative density: 2,62 (water = 1).
Solubility in water: Mainly insoluble.
Viscosity: -
Vapour density: -
Evaporation rate: -



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10. Stability and reactivity.

Stability:	Stable below 900 °C.
Conditions to avoid:	Avoid dust formation.
Materials to avoid:	Reacts with strong oxidizing substances. Fire and explosion hazard present. Contact of dry hydrated aluminium-magnesium silicate with turpentine, vegetable oil, or other unsaturated organic compounds, or with hydrofluoric acid may generate heat.
Hazardous decomposition products:	Upon heating above 900°C for sustained periods, this amorphous material begins to transform to mixtures of crystalline phases.

11. Toxicological information.

Acute toxicity from the components.

Product information: Quartz (SiO₂).
LD₅₀ (oral, rat): 500 mg / kg.

This health hazard assessment is based on information of the components.

Effects on the eyes:	Particle matter may cause physical injury to the eye.
Effects on the skin:	Contains silicon dioxide which may cause light irritation, and may lead to itching and sometimes to light reddening of the skin, particularly in sensitive individuals. In contrast to reactions to other irritating substances this is not a consequence of an allergy or chemical skin damage, but is caused by temporary mechanical effects.
Effect on the respiratory organs:	Immediate effects of dust inhalation may include coughing and minor transient respiratory irritation. Acute silicosis has been reported following exposure to extremely high crystalline silica exposures particularly when the particle size of the dust is very small. There is evidence that exposure to respirable silica or the disease silicosis is associated with an increased incidence of scleroderma, tuberculosis and kidney disorders. There is no specific treatment for silicosis, the most important measure being to avoid exposure.
Ingestion:	Contains hydrated aluminium-magnesium silicate which inhibits diarrhoea. Consumption may lead to blockage of the gastrointestinal tract.

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11. Toxicological information (continue).

Toxicological information: Concerns silicon(di)oxide (silica).
This product can contain small quantities (< 1 %) of respirable crystalline silica.

Experimental study: Animals exposed to very high concentrations of crystalline silica, artificially or by inhalation, have reported fibrosis and tumours (IARC Monographs 42 and 68). Inhalation and intratracheal installation of crystalline silica in rats caused lung cancer. However, studies in other species such as mice and hamsters caused no lung cancer. Crystalline silica also caused fibrosis in rats and hamsters in several inhalation and intratracheal installation studies.

Epidemiology: Prolonged / repeated inhalation of respirable crystalline silica dust may cause delayed lung injury (silicosis). In evaluating crystalline silica as a cancer risk, the International Agency for Research on Cancer (IARC) reviewed several studies from different industries and concluded that crystalline silica from occupational sources inhaled in the form of quartz or cristobalite is carcinogenic to humans (Group 1) [IARC Monograph; vol.68; June 1997]. However, in reaching its conclusion, IARC stated that the carcinogenicity in humans could not be found in all industries reviewed and that carcinogenicity might be dependent on inherent characteristics of crystalline silica or on external factors affecting biological activity (e.g., cigarette smoking) or distribution of its polymorphs.

12. Ecological information.

Mobility: Mainly insoluble in water.
Persistence / degradability: This product is not biological degradable.
Bioaccumulation: No data, no bio-accumulation expect on the basis of the components.
Other harmful effects: Possible only in case of unintentional release of larger quantities in combination with water because of a higher pH – value. Silica as dust can give inhalation effects in the way as described, by animals with lungs.
WGK: 1 (Wassergefährdungsklasse, or water pollution class, German Water Resources Act., water pollutant, suppliers classification).

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13. Disposal considerations.

Product waste:	Waste from these products may generally be disposed of at landfill, which has been licensed for this purpose. In case of dust the product must be wetted and so should be properly sealed in clearly labelled containers for disposal. At some authorised disposal sites, dusty waste may be treated differently in order to ensure they are dealt with promptly to avoid them being wind blown. Given that infection is possible during use, the advice of an expert must be sought. Relevant regulations from the country in question should be respected. Waste, even small quantities, should never be poured down drains, sewers or watercourses.
Eural code for waste:	06 08 99. WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) of silicon and silicon derivatives. Wastes not otherwise specified.
Empty containers:	Remove any residue adhering to the walls.

14. Transport information.

Not classified as dangerous good for transport.
Ensure that no dust is created (and wind blown) during transportation.

15. Regulatory information.

EC classification.	
EC hazard symbol:	-
Hazard description:	-
R – (risk) phrases:	-
S – (safety) phrases:	S22 Do not breathe dust.
WGK:	1 (Hazard to water, German regulation).
VOC content:	Contains no VOC components.
Additional warning:	-

Waste symbol:



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16. Other information.

List of relevant R - phrases referred to under headings 2 and 3:

None.

History:

Date of PDF printing: 6 June 2007.

Date of previous issue: None.

Version: 1.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the properties of the product. It is always the duty of users to determine the applicability of such information and recommendations and the suitability of any products for their own particular purpose.

Information source

- IUCLID dataset substance ID: 14808-60-7, date 18.02.2000;
- Agreement on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products containing it (www.nepsi.eu).

Respirable crystalline silica may be present in concentrations exceeding 1 % as a consequence of fluctuations in raw material composition.

Safety data sheet according regulation (EC) No 1907/2006 of the European parliament and of the council from 18 December 2006 concerning the registration, evaluation, authorisation and restriction of chemicals (REACH).

MIN-U-GEL is a product of the Active Minerals International, LLC. (USA) and is brought on the European market by Faber & VanderEnde B.V..

Annex.

From the raw materials in this recipe, at the moment of drafting this safety data sheet, no chemical safety reports according to regulation (EC) no. 1907/2006 has been registered.