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

1.1 Product identifier

REF 815400.1
Product name Silica gel 60 < 0,063 mm, 1 kg

REACH Registration number(s): see SECTION 3.1/3.2 or
A registration number for the substance(s) does not exist because the annual tonnage does not require registration or the substance or its use is excluded from registration.

1 x 1 kg Silica gel

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

Relevant identified uses
a. Product for analytical use.
Exposure Scenario Classification according REACh, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0
The exposure scenario is integrated into sections 1-16.
b. Product used as cleaning and filtration aid. Codes: SU 3, 9, 23, PC 2, 20, 29, 37, PROC 3, 5, ERC 4, 8a, 8b
This exposure scenario is also integrated into sections 1-16.
Uses advised against
not described

1.3 Details of the supplier of the safety data sheet

Manufactured by:
MACHEREY-NAGEL GmbH & Co. KG
Valencienner Str. 11, 52355 Düren, GERMANY
Tel.: +49 2421 969 0 E-mail: sds@mn-net.com (msds@mn-net.com)

1.4 Emergency telephone number

Information not necessary.

You find our current versions of SDS (22 languages) in Internet: **http://www.mn-net.com/SDS**

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

1 kg Silica gel

Do not need labelling as hazardous
Signal word -

No hazard class

2.2 Label elements

1 kg Silica gel

Do not need labelling as hazardous
Signal word: -

2.3 Other hazards

Possible hazards from physicochemical properties
According to our current status of knowledge and experience we state, that this product does not contain any substances, which - in accordance with EC regulations 1272/2008/EC, 1907/2006/EC and German Regulations for Hazardous goods - have to be declared as dangerous goods, either because of their applied concentration or because of their total amount in anyone kit.
An individual package has considerably less hazardous potential. ---

Information pertaining to particular risks to human and possible symptoms
Avoid inhalation of dust. ---

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Version: M V 4.12.0

Information pertaining to particular risks to the environment
---

Other hazards
It is not possible to declare fine dust (< 12 µm) as dangerous or not. We recommend not to inhale product dust. Dust may cause damage of the inhalatory system if inhaled over a longer period.---

SECTION 3: Composition/information on ingredients

3.1 Substances or 3.2 Mixtures

1 kg Silica gel

Chemical:	*silica*		CAS No.: 7631-86-9
Classification:	No criteria for classification or naming of chemical not required.		
Formula:	SiO_2		
Pseudonym:	silicon dioxide, Diatomite, precipitated amorphous silica		
TSCA Inventory:	listed		
REACH Reg. No.:	01-2119379499-16-0166		
EC No.:	231-545-4		
RTECS:	VV7315000	MFCD:	00011232
KE No.:	KE-31032		
Concentration:	95 - <100 %		
acc. CLP (GHS):	The criteria for classification are not fulfilled.		

3.3 Remarks

- - -

SECTION 4: First aid measures

4.1 Description of first aid measures

Place insured person out of danger zone to fresh air immediately.

4.1.1 After SKIN Contact
Remove dust with wetted tissue.

4.1.2 After EYE Contact
Rub dust with teardrops from eyes

4.1.3 After INHALATION of vapours
After inhalation of dust fresh air should be inhaled. ---

4.1.4 After ORAL Intake

4.2 Most important symptoms and effects, both acute and delayed

---

4.3 Indication of any immediate medical attention and special treatment needed

No additionally recommendations. ---

SECTION 5: Firefighting measures

5.1 Extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.

5.2 Special hazards arising from the substance or mixture

None.

5.3 Advice for firefighters

No, for listed product. Product package burns like paper or plastic.

5.4 Additional information

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dusting. Do not breathe dust. .

6.2 Environmental precautions

not necessary

6.3 Methods and material for containment and cleaning up

Remove remaining dust with a vacuum cleaner. If there is no vacuum cleaner, wet dust well and remove mechanical (Inhalation protection). Clean working area with water. Flush used water into drains.

6.4 Reference to other sections

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid dusting.

7.2 Conditions for safe storage, including any incompatibilities

The original product package of MACHEREY-NAGEL allows a safe storage.
Storage class (VCI): 13
Water hazard class (DE): nwg

7.2.1 Requirements for stock rooms and containers

Keep original product packages tightly closed during handling and storage.

7.3 Specific end use(s)

a. Product for analytical use.
b. Product used as cleaning and filtration aid.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1 kg Silica gel
Chemical: *silica* CAS No.: 7631-86-9
DNEL: [inh] 4 mg/m³
DNEL = Derived No-Effect Level (for workers)
PNEC(fresh water) : -
PNEC = Predicted No Effected Concentration
TRGS 900 (DE): 1,25 A / 4 E mg/m³
A/a aveoles passing, E/e respirable, G total
Short-term exposure factor: Y
skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded
SUVA(CH) MAK value: 4 e mg/m³
NIOSH: Occupational Carcinogen List yes; [TWA] 6 mg/m³
[TWA] Time-weighted average to a reference period of 8 hours, [STEL] Short-term exposure limit related to a 15-minute period
OSHA: [TWA] 20 mppcf / 80 mg/m³

8.2 Exposure controls

Not necessary.

8.2.1 Respiratory protection

Not necessary. Use for dusty working a dust mask or a dust protection filter, class P1. Use for regularly working with dry powders a dust mask or a dust protection filter, class P3.

8.2.2 Hand protection

Not necessary, recommended for often use.

8.2.3 Eye protection

Not necessary.

8.2.4 Skin protection

Not necessary.

8.2.5 Personal hygiene

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Information not necessary.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

1 kg Silica gel

Appearance: powder (solid)	Colour: white	Odor: odorless
pH:	5-9	
Boiling point:	1600 °C	
Solubility in water:	<< 1 %	
Particle size:	25-40 / >40 ... µm	

9.2 Other information

Relevant Properties of Substance Group

SECTION 10: Stability and reactivity

10.1 Reactivity

None

10.2 Chemical stability

No known instability.

10.3 Possibility of hazardous reactions

None.

10.4 Conditions to avoid

Not known. None ---

10.5 Incompatible materials

Not known. None.

10.6 Hazardous decomposition products

In the original package all parts/all reagents are safety and separated stored. Decompositions are not observed during the expiration period under recommended conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Following information is valid for pure substances.

1 kg Silica gel

Chemical:	*silica*	CAS No.: 7631-86-9
TSCA Inventory:	listed	California Proposition 65 List: not listed
Exposure Routes:	inhalation, skin and/or eye contact	
Target Organs:	Eyes, respiratory system	
Symptoms:	irritation eyes, pneumoconiosis	
Australia NICNAS:	not listed	Canada CEPA 1999: DSL yes
Japan CSCL/PRTR:	not listed, Japan PDSCL: not listed	
Japan ISHL:	listed ≥0,1%/≥0,1%, Article 57-2 (SDS required)	
South Korea TCCA:	not listed	
Korea Exist.Chem.Inventory:	KE-31032	
$LD50_{orl\ rat}$:	5000 mg/kg	
$LC50_{ihl\ rat}$:	[4h] 140-58 800 mg/m³	
$LD50_{drm\ rbt}$:	2000-5000 mg/kg	
Avoid inhalation of dust.		
TRGS 905 (DE):	R_F C	

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SECTION 12: Ecological information

12.1 Toxicity

Following information is valid for pure substances.

1 kg Silica gel

Chemical: *silica* CAS No.: 7631-86-9

$PNEC_{(fresh\ water)}$: -
PNEC = Predicted No Effected Concentration

$LC50_{fish/96h}$: [4d] 1033-1289 mg/L
$EC50_{daphnia/48h}$: 512; [4d] 2600 mg/L
$EC50_{chlorella\ vulgaris/5d}$: [4d] 218 mg/L
Water hazard class (DE): nwg WGK No.: 0849
Storage class (VCI): 13

12.2 Persistence and degradability

not necessary

12.3 Bioaccumulative potential

not necessary

12.4 Mobility in soil

not necessary

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no additional data available

SECTION 13: Disposal considerations

Not necessary.

13.1 Waste treatment methods

GENERAL: Empty solids into municipal waste, empty liquids diluted into drains.

SECTION 14: Transport information

14.1 - 14.4 Not necessary

14.5 Environmental hazards

none

14.6 Special precautions for user

not necessary

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not applicable

SECTION 15: Regulatory information

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

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013
German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC
Look for your country-specific regulations.

15.2 Chemical safety assessment

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SECTION 16: Other information

16.1 List of H and P phrases

16.1.1 List of relevant H phrases

16.1.2 List of relevant P phrases

16.2 Training advice

Regular safety training.

16.3 Recommended restriction on use

None

16.4 Further information

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16.5 Sources of key data

Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS
Regulation 487/2013/EU, 4th adaptation of CLP regulation to technical and scientific progress
Regulation 669/2018/EU, 4th adaptation of CLP regulation to technical and scientific progress
Regulation 1480/2018/EU, 4th adaptation of CLP regulation to technical and scientific progress
Regulation 849/2021/EU, 4th adaptation of CLP regulation to technical and scientific progress
TRGS 900, German engineering rules governing limits in air at work, updated 03/2019
SUVA .CH, Limits in air at work 2009, revised on 01.2009
TRGS 559, German engineering rules governing mineralic dust from July 2011
KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

Revisions/Updates
Reason for Revision: 2016-03 Adaptation of regulation 1221/2015/EU
2017-11 Adaption of ECHA Registration dossier

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