

Product name: Granuscan Colour SIG

Version 3.0

Revised on: 01.01.2018

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ARTICLE 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1 Product identifier

Mixture

Main component	Quartz
CAS-No.	14808-60-7
REACH- Registration number:	Exempted according to Annex V.7.
Chemical name/synonym	Granuscan Colour SIG is a preparation of monocrystalline Silicon dioxide (quartz, SiO ₂) coated with organic/inorganic pigments and binder in various amounts.
Trade name	Granuscan Colour SIG

1.2 Relevant identified uses of the substance or mixture and uses advised against	Main applications - non exhaustive list: Fillers, composites, flooring applications
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1.3 Details of the supplier of the safety data sheet

	Scanmineral Heljesvägen 10 437 36 Lindome Sweden
Phone №	+46 31 99 49 70
Fax №:	+46 31 99 48 70

E-Mail-adress of responsible person for this Material Safety Data Sheet : info@scanmineral.se

1.4 Emergency telephone Call your local emergency number

ARTICLE 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This product does not meet the criteria for classification as hazardous as defined in the Regulation EC 1272/2008 and in Directive 67/548/EWG.

Depending on the type of handling and use (e.g. grinding, drying), airborne crystalline silica may be generated. Prolonged and/or massive inhalation of fine fraction of crystalline silica may cause lung fibrosis, commonly referred as silicosis. Principal symptoms of silicosis are cough and breathlessness. Occupational exposure to respirable crystalline silica should be monitored and controlled.

This product should be handled with care to avoid dust generation.

Regulation (EC) 1272/2008:	No classification This product contains less than 1 % fine fraction of crystalline silica, which is classified as STOT RE1.
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2.2 Label elements

none

2.3 Other hazards

This product is not an organic substance and does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation.

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ARTICLE 3: COMPOSITION/INFORMATION ON INGREDIENTS

Composition

Name	Amount WT.-%	CAS-No.	EC-No.	Classification according (EC)1272/2008	REACH-Registry-No
Quartz	≥92	14808-60-7	238-878-4	not classified	Exempted in accordance with Annex V.7
Pigments	≤5	Various organic/inorganic pigments			
Binder	≤3	anorganic silica based binder			

Impurities

This product contains less than 1 % fine fraction of crystalline silica, which is classified as STOT RE1.

ARTICLE 4: FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Rinse with copious quantities of water and seek medical attention if irritation persists.
Inhalation	Movement of the exposed person from the area to fresh air is recommended.
Ingestion	No first-aid measure required.
Skin contact	No special first aid measures necessary.

4.2 Most important symptoms and effects, both acute and delayed No acute and delayed symptoms and effects are observed.

4.3 Indication of any immediate medical attention and special treatment needed No specific actions are required.

ARTICLE 5: FIREFIGHTING MEASURES

5.1 Extinguishing media	No specific extinguishing media is needed.
5.2 Special hazards arising from the substance or mixture	Non combustible. No hazardous thermal decomposition.
5.3 Advice for firefighters	No specific fire-fighting protection is required.

ARTICLE 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures	Avoid airborne dust generation. In case of exposure to prolonged or high level of airborne dust, wear a personal respirator in compliance with EN 149 and the national legislation. Wear personal protective equipment in compliance with national legislation.
6.2 Environmental precautions	No special requirements.
6.3 Methods and material for containment and cleaning up	Avoid dry sweeping and use water spraying or vacuum cleaning systems to prevent airborne dust generation. Wear personal protective equipment in compliance with national legislation.
6.4 Reference to other sections	See sections 8 and 13.

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ARTICLE 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid airborne dust generation. Provide appropriate exhaust ventilation at places where airborne dust is generated. In case of insufficient ventilation, wear suitable respiratory protective equipment. Handle packaged products carefully to prevent accidental bursting. If you require advice on safe handling techniques, please contact your supplier or check the Good Practice Guide referred to in section 16.

Do not eat, drink, smoke in work areas; wash hands before entering areas, where food is consumed, take of contaminated clothes and protective equipment

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/Safety precautions: Minimise airborne dust generation and prevent wind dispersal during loading and unloading. Keep containers closed and store packaged products so as to prevent accidental bursting.

7.3 Specific end use(s)

If you require advice on specific uses, please contact your supplier or check the Good Practice Guide referred to in section 16.

ARTICLE 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Follow workplace regulatory exposure limits for all types of airborne dust (e.g. total dust, respirable dust, respirable crystalline silica dust).

The OEL (Occupational Exposure Limit) for respirable crystalline silica dust find attached for all countries of the EU. For the equivalent limits in other countries, please consult a competent occupational hygienist or the local regulatory authority.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Minimise airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organisational measures, e.g. by isolating personnel from dusty areas. Remove and wash soiled clothing.

8.2.2. Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side-shields in circumstances where there is a risk of penetrative eye injuries, e.g. glasses acc. to EN 166). Contact lenses should not be worn when working with this product.

Skin protection

No specific requirement. For hands see below. Appropriate protection (e.g. protective clothing, barrier cream) is recommended for workers who suffer from dermatitis or sensitive skin.

Hand protection

Appropriate protection (e.g. gloves acc. to EN 374, barrier cream) is recommended for workers who suffer from dermatitis or sensitive skin. Wash hands at the end of each work session.

Respiratory protection

In case of prolonged exposure to airborne dust concentrations, wear a respiratory protective equipment that complies with the requirements of European or national legislation (e.g. acc. to EN 149).

The use of filtering facepiece respirators (FP2-FP3) is recommended. See EN 143:2000 respiratory protective equipment – particle filter

8.2.3 Environmental exposure controls

Avoid wind dispersal.

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ARTICLE 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Solid
Odour	odourless
Odour treshold	not relevant
pH in water (100g/l, 20 °C)	9-10
Melting point/freezing point/	>1600 °C
Specific gravity	2,6 g/ml
Solubility in water	negligible
in hydrofluoric acid	yes

9.2 Other information

Quartz is chemically stable under normal conditions and not flammable. It is a rock forming mineral. The behavior under influence of temperature is known from use as a raw material for porcelain and glass production.

ARTICLE 10: Stability and Reactivity

10.1 Reactivity Inert, not reactive

10.2 Chemical stability Chemically stable. The color coating is conditionally resistant against diluted acids and bases.

10.3 Possibility of hazardous reactions No hazardous reactions.

10.4 Conditions to avoid Not relevant.

10.5 Incompatible materials No particular incompatibility.

10.6 Hazardous decomposition products No hazardous decomposition products in regular use of product.

ARTICLE 11: Toxicological Information

11.1 Information on toxicological effects

acute toxicity	Based on available data, the classification criteria are not met.
skin corrosion / irritation	Based on available data, the classification criteria are not met.
serious eye damage / irritation	Based on available data, the classification criteria are not met.
respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
germ cell mutagenicity	Based on available data, the classification criteria are not met.
carcinogenicity	Based on available data, the classification criteria are not met.
reproductive toxicity	Based on available data, the classification criteria are not met.
STOT - single exposure	Based on available data, the classification criteria are not met.
STOT - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.

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ARTICLE 12: Ecological Information

12.1 Toxicity	not relevant
12.2 Persistence and degradability	not relevant
12.3 Bioaccumulative potential	not relevant
12.4 Mobility in soil	negligible
12.5 Results of PBT und vPvB assessment	not relevant
12.6 Other adverse effects	No specific adverse effects known.

ARTICLE 13: Disposal considerations

13.1 Waste treatment methods

Waste from residues / unused products Where possible, recycling is preferable to disposal. Can be disposed of in compliance with local regulations.

Packaging Dust formation from residues in packaging should be avoided and suitable worker protection assured. Store used packaging in enclosed receptacles. The re-use of packaging is not recommended. Recycling and disposal of packaging should be carried out by an authorized waste management company.

ARTICLE 14: Transport information

14.1 UN-Number	not relevant
14.2 UN proper shipping name	Nicht relevant
14.3 Transport hazard class	ADR: not classified IMDG: not classified ICAO/IATA: not classified RID: not classified
14.4 Packaging group	not relevant
14.5 Environmental hazards	not relevant
14.6 Special precautions for user	no special precautions
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	not relevant

ARTICLE 15: Regulatory Information

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

Nationale regulations: TRGS 559

Water hazard classification not classified

Internationale regulations: Exempted in accordance with Annex V.7

15.2 chemical safety assessment The OEL (Occupational Exposure Limit) for respirable crystalline silica dust find attached for all countries of the EU. Exempted from REACH Registration in accordance with Annex V.7 of REACH- Regulation (EG) 1272/2008

ARTICLE 16: OTHER INFORMATION

Indication of the changes made to the previous version of the SDS Adaption to regulation (EG) 453/2010
Adaption to regulation 1272/2008/EU

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Training

Workers must be informed of the presence of crystalline silica and trained in the proper use and handling of this product as required under applicable regulations.

Social dialogue on respirable crystalline silica

A multi-sectoral social dialogue agreement on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it was signed on 25 April 2006. This autonomous agreement, which receives the European Commission's financial support, is based on a Good Practices Guide. The requirements of the Agreement came into force on 25 October 2006. The Agreement was published in the Official Journal of the European Union (2006/C 279/02). The text of the Agreement and its annexes, including the Good Practices Guide, are available from <http://www.nepsi.eu> and provide useful information and guidance for the handling of products containing respirable crystalline silica. Literature references are available on request from EUROSIL, the European Association of Industrial Silica Producers.

Prolonged and/or massive exposure to respirable crystalline silica-containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica.

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However it pointed out that not all industrial circumstances, nor all crystalline silica types, were to be incriminated. (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.)

In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003).

So there is a body of evidence supporting the fact that increased cancer risk would be limited to people already suffering from silicosis. Worker protection against silicosis should be assured by respecting the existing regulatory occupational exposure limits and implementing additional risk management measures where required.

Health & Safety Executive (specific for UK): Detailed reviews of the scientific evidence on the health effects of crystalline silica have been published by HSE (Health and Safety Executive, UK) in the Hazard Assessment Documents EH75/4 (2002) and EH75/5 (2003). The HSE points out on its website that "Workers exposed to fine dust containing quartz are at risk of developing a chronic and possibly severely disabling lung disease known as "silicosis". In addition to silicosis, there is now evidence that heavy and prolonged workplace exposure to dust containing crystalline silica can lead to an increased risk of lung cancer. The evidence suggests that an increased risk of lung cancer is likely to occur only in those workers who have developed silicosis.

Third party material

Insofar as materials not manufactured or supplied by Scanmineral are used in conjunction with, or instead of Scanmineral materials, it is the responsibility of the customer himself to obtain, from the manufacturer or supplier, all technical data and other properties relating to these or other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of Gebr. Dorfner's Kaolin FP 80 ground in conjunction with materials from another supplier.

Liability

The information describes exclusively the safety requirements for the product(s) and is based on the present level or our knowledge. This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. No liability can be accepted in respect of the use of our product(s) in conjunction with materials from another supplier.

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Attachment

Occupational Exposure Limits in mg/m³ 8 hours TWA – Respirable dust – in EU 27₁ + Norway & Switzerland

Country/ Authority (see next page)	Non specified (inert) dust	Quartz	Cristobalite	Tridymite	Diatomaceous earth	Amorphous silica	Fused silica	Kaolin	Mica	Talc
Austria/I	6	0,15	0,15	0,15			0,3			5
Belgium/II	3	0,1	0,05	0,05	3	2	0,1	2	3	2
Bulgaria/III	4	0,07	0,07	0,07	1					3
Czech Republic/IV		0,1	0,1	0,1					2	2
Cyprus/V	/	10k/Q2	/	/	/	2	/	/	/	/
Denmark/VI	5	0,1	0,05	0,05	1,5		0,1	2		
Estonia		0,1	0,05	0,05		2				
Finland/VII	/	0,2	0,1	0,1	5					5
France/VIII		5 or 25k/Q								
France/IX	5	0,1	0,05	0,05				10		
Germany/X	3	³	/	/			0,3			2
Greece/XI	5	0,1	0,05	0,05						2
Hungary		0,15	0,1	0,15						2
Ireland/XII	4	0,05	0,05	0,05		2,4	0,08	2	0,8	0,8
Italy/XIII	3	0,025	0,025	0,025			0,1	2	3	2
Lithuania/XIV	10	0,1	0,05	0,05						1
Luxembourg/XV	6	0,15	0,15	0,15			0,3			2
Malta4/XVI		/	/	/	/					
Netherlands/XVII	5	0,075	0,075	0,075				10	2,5	0,25
Norway/XVIII	5	0,1	0,05	0,05	1,5	1,5			3	2
Poland		0,3	0,3	0,3	2		1			1
Portugal/XIX	5	0,025	0,025	0,025			0,1	2	3	2
Romania/XX	10	0,1	0,05	0,05				2	3	2
Slovakia		0,1	0,1	0,1		2			2	2
Slovenia		0,15	0,15	0,15			0,3			2
Spain/XXI	3	0,1	0,05	0,05			0,1	2	3	2
Sweden/XXII	5	0,1	0,05	0,05						1
Switzerland/XXIII	6	0,15	0,15	0,15		0,3	0,3	3	3	2
UK/XXIV	4	0,1	0,1	0,1	1,2	2,4	0,08	2	0,8	1

¹ Missing information for Latvia – To be completed.

² Q : quartz percentage – K=1

³ Germany has no more OEL for quartz, cristobalite and tridymite. Employers are obliged to minimize exposure as much as possible, and to follow certain protective measures.

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⁴When needed, Maltese authorities refer to values from the UK for OELVs which do not exist in the Maltese legislation.

Country Adopted by/Law denomination OEL Name (if specific)

Austria I	Bundesministerium für Arbeit und Soziales Maximale ArbeitsplatzKonzentration (MAK)
Belgium II	Ministère de l'Emploi et du Travail
Bulgaria III	Ministry of Labour and Social Policy and Ministry of Health. Ordinance n°13 of 30/12/2003 Limit Values
Cyprus IV	Department of Labour Inspection. Control of factory atmosphere and dangerous substances in factories, Regulations of 1981.
Czech Republic V	Governmental Directive n°441/2004
Denmark VI	Direktoratet for Arbejdstilsynet Threshold Limit Value (TLV)
Finland VII	National Board of Labour Protection Occupational Exposure Standard
France VIII	Ministère de l'Industrie (RGIE) Empoussiérage de référence
IX	Ministère du Travail Valeur limite de Moyenne d'Exposition
Germany X	Bundesministerium für Arbeit Maximale ArbeitsplatzKonzentration (MAK)
Greece XI	Legislation for mining activities
Ireland XII	2002 Code of Practice for the Safety, Health & Welfare at Work (CoP)
Italy XIII	Associazione Italiana Degli Igienisti Industriali Threshold Limit Values (based on ACGIH TLVs)
Lithuania XIV	Dėl Lietuvos higienos normos HN 23:2001 Ilgalaikio poveikio ribinė vertė (IPRV)
Luxembourg XV	Bundesministerium für Arbeit; Maximale Arbeitsplatz Konzentration (MAK)
Malta XVI	OHSa – LN120 of 2003, www.ohsa.org.mt OELVs
Netherlands XVII	Ministerie van Sociale Zaken en Werkgelegenheid Publieke grenswaarden http://www.ser.nl/en/oel_database.aspx
Norway XVIII	Direktoratet for Arbejdstilsynet Administrative Normer (8hTWA) for Forurensing I Arbeidsmiljøet
Portugal XIX	Instituto Portuges da Qualidade, Hygiene & Safety at Workplace NP1796:2007 Valores Limite de Exposição (VLE)
Romania XX	Government Decision n° 355/2007 regarding workers' health surveillance. Government Decision n° 1093/2006 regarding carcinogenic agents (in Annex 3: Quartz, Cristobalite, Tridymite). OEL
Spain XXI	Instrucciones de Técnicas Complementarias (ITC) Orden ITC/2585/2007 Valores Limites
Sweden XXII	National Board of Occupational Safety and Health Yrkeshygieniska Gränsvärden
Switzerland XXIII	Valeur limite de Moyenne d'Exposition
United Kingdom	
XXIV	Health & Safety Executive Workplace Exposure Limits (WEL)