

Safety Data Sheet

1. Chemical Products & Company Identification

Name of chemical (Product name)	GRANI QUEEN
Company name of supplier	SK Kaken Co., Ltd
Address	3-5-25 Nakahozumi, Ibaraki-city, Osaka
Division	Technical management team, R&D Centre
TEL	+81-72-643-7100, (At night)+81-72-643-6245
FAX	+81-72-641-5212
E-mail address	msds@sk-kaken.jp
Emergency number	See the above
Recommended use	Architectural coating
Restrictions on use	In case of using for purpose other than recommended use, an expert's decision shall be sought.
Reference No.	040329-00-10 (Tinted goods)

2. Hazards Identification

【GHS classification】

Flammable liquid	Not applicable to category
Acute toxicity (oral)	Classification not possible
Acute toxicity (dermal)	Classification not possible
Acute toxicity: inhalation (air)	Classification not possible
Acute toxicity: inhalation (vapours)	Classification not possible
Acute toxicity: inhalation (dust, mist)	Classification not possible
Skin corrosion/irritation	Classification not possible
Eye damage/irritation	Classification not possible
Sensitization: respiratory	Classification not possible
Sensitization: skin	Category 1
Germ cell mutagenicity	Classification not possible
Carcinogenicity	Category 1A
Reproductive toxicity	Classification not possible
Specific target organ/systemic toxicity (Single exposure)	
Category 2 (respiratory organ)	
Specific target organ/systemic toxicity (Repeated exposures)	
Category 2 (respiratory organ)	
Aspiration toxicity	Not applicable to category
Aquatic environmental toxicity (Acute)	Category 3
Aquatic environmental toxicity (Chronic)	Category 3
Hazardous to the ozone layer	Classification not possible

【GHS label elements】

Hazard symbols



Signal word Danger

Hazardous information

- May cause an allergic skin reaction
- May cause cancer
- Harmful to aquatic life
- Harmful to aquatic life with long lasting effects
- May cause damage to organs (respiratory organ)
- May cause damage to organs (respiratory organ) through prolonged or repeated exposures

Precautionary statement

«Prevention»

- Wear protective gloves/protective clothing/eye protection/face protection.
- Contaminated work clothing should not be allowed out of the workplace.
- Obtain instruction manuals before use.
- DO NOT handle until all safety precautions have been read and understood.
- DO NOT eat, drink or smoke when using this product.
- Wash hands thoroughly after handling.
- DO NOT breathe dust/fume/gas/mist/vapours/spray.
- Avoid release to the environment.

« First Aid Measures »

- IF ON SKIN: Wash with plenty of soap and water.
- If skin irritation or rash occurs: Get medical advice and attention.
- Take off contaminated clothing and wash before reuse.
- If exposed or concerned: Get medical advice/attention.
- Get medical advice/attention if you feel unwell.

« Storage »

- Store locked up.

« Disposal »

- Dispose of contents/container in accordance with applicable local/regional/national/international regulations, and consign to an agent certified by the governor.

3. Composition / Information on Ingredients

Substance or mixture

Mixture

Ingredient and content (For hazardous material)

INGREDIENT NAME	CAS NO.	Official Gazette Code	CONTENT (%)	REMARKS
Cobalt and its compounds	1345-16-0	1-23	<1	
Titanium dioxide	13463-67-7	1-558	<1	
Manganese and its compounds	68186-94-7	-	<1	
Silicon dioxide(Silica)	7631-86-9	1-548	<1	Carcinogenic substance
2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate	25265-77-4	2-778	1-10	
Amorphous silica (Silica gel, Precipitated silica)	112926-00-8	1-548	1-10	

Official Gazette code: 1- Class I specified chemical substance, 2 - Class II specified chemical substance,
M - Monitoring chemical substance, P - Priority assessment chemical substance

4. First Aid Measures

Inhalation

- In case of inhaling a large amount of vapour, immediately remove a victim to fresh air and keep at rest in a position comfortable for breathing.
- If not breathing or when breathing is difficult, give artificial respiration. Keep a victim from swallowing vomit. Get medical attention immediately. Administer oxygen, if necessary.
- If a victim feels sick after inhalation of vapour, gas, etc., immediately remove to fresh air, keep at rest, and get medical attention.

Skin contact

- Wipe off material immediately with cloth.
- If clothing is contaminated, remove the contaminated clothes, wash the affected area with soap and water.
- Flush skin thoroughly with plenty of water and soap or skin cleanser.
- If there is change in the appearance, irritation or pain appears on skin, or you feel unwell, get medical advice.

Eye contact

- Immediately flush eyes with plenty of fresh water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Flush thoroughly the back of eyelids held open.
- Symptoms may be delayed even though victim may seem normal immediately after exposure without pain or vision problems. Get medical attention immediately.

Ingestion

- In case of swallowing the material by mistake, rest a victim and get medical attention immediately.
- DO NOT let a victim swallow vomit.
- DO NOT induce vomiting unless directed to do so by medical personnel.

5. Fire-Fighting Measures

Suitable extinguishing media

- Water, carbon dioxide/bubble/powder extinguisher, and dry sand

Prohibited extinguishing media

- No information

Specific fire-fighting method

- Fire fighting shall be done in response to neighboring fires.

Special protective equipment and preventive measures for fire fighters

- In case of fire fighting, wear appropriate protective clothes (heat-resisting clothes, etc.).

6. Spill and Leak Procedures

Cautions for the human body, protective equipment and emergency procedures

- Wear appropriate protective wears (protective mask, goggles, protective gloves, protective clothes, etc.).
- Make the surrounding area KEEP OUT and NO FIRE. Rope off the leakage area to prohibit the entry of unauthorized people to prevent a subsequent accident.

Environmental precautions

- Avoid the flow of material to river, draining channel, lakes, marshes, waterway, etc. and take precaution to prevent any influence on the environment.
- Dispose of soiled things and collected waste, etc. according to the related regulations.

Methods and materials for containment and cleaning up

- Collect the outflow in an airtight container and remove to a safe place.
- Collect with a shovel, a cloth, etc. In case of large volume leaking, stop the spread by fencing it with soil. When washing, be careful that the contaminated water does not flow into rivers and does not cause environmental pollution.

7. Handling and Storage

Handling

Technical measures

- Make area where the material is handled KEEP OUT except authorized personnel.
- Handle the material in well-ventilated place.
- Seal a container of the material tightly whenever not in use.
- In a confined area, provide adequate local exhaust ventilation and wear protectors.

Precautions for safe handling

- As a handle of a container should be only for carrying by hand, do NOT hang it up with a rope.

Avoidance of contact

- When handling, wear appropriate protective clothes to avoid inhalation and contact to skin, mucous membrane, clothes, and eyes.

Hygiene measures

- After handling, thoroughly wash a face and hands, and gargle.
- DO NOT eat, drink or smoke when using this product.

Storage

Conditions for safe storage

- Avoid direct sunlight and keep materials in a dry and well ventilated place with a lock.
- As this material is for professional use, keep it out of reach of outsiders and children in a fixed place.
- DO NOT store materials where the material may be frozen.
- Avoid storing the material in a place exposed to rain or with high humidity. If a container corrodes, the contents may leak.

8. Exposure Control / Personal Protection

Control parameters (Occupational exposure limit values, Biological limit values)

INGREDIENT NAME	CONTROLLED DENSITY	ACCEPTABLE DENSITY	EIGHT-HOUR CONCENTRATION STANDARD VALUE	SHORT-TERM CONCENTRATION STANDARD VALUE
Cobalt and its compounds	0.02 mg/m ³ (Co)	0.02 mg/m ³ (Co)	-	-
Titanium dioxide	-	10 mg/m ³	-	-
Manganese and its compounds	0.05 mg/m ³ (Mn)	0.05 (Mn)	-	-
Silicon dioxide(Silica)	-	10 mg/m ³	-	-
2,2,4-Trimethyl-1,3-pentenediol monoisobutyrate	-	-	-	-
Amorphous silica (Silica gel, Precipitated silica)	-	10 mg/m ³	-	-

FACILITIES

- In case of working indoors, set up facilities that do not directly expose workers to vapour, or that has local ventilation to protect workers from exposure to vapour.

PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION

- Wear appropriate respiratory protection depending on the situation.
- When handling high concentrations of chemicals, consider wearing a supplied-air respirator.
- If workers are exposed to gases or vapours, consider wearing respiratory protection (a gas mask for organic gas, etc.).

- When selecting a gas mask, pay attention to the following points:
 - Do not use in areas where the oxygen concentration is below 18%.
 - When using a gas mask in an environment where workers are exposed to dust, use a gas mask with a dust-proof function.
 - Choose a gas mask with performance and structure suitable for the work that has passed the type test conducted by a registered testing organization. When doing so, refer to the data described in the instruction manual, etc.

FOR HAND

- Wear protective gloves when workers are exposed to substances that affect the skin, such as skin corrosion/irritation, or chemicals that can be absorbed through the skin and cause health problems.
- Consider wearing impermeable protective gloves.
- When selecting protective gloves, keep the following points in mind:
 - Refer to the permeation resistance class etc. provided in the instruction manual, set a sufficient usage time for the work, and use protective gloves within that time range.

FOR EYE AND FACE

- Wear goggles.

FOR SKIN AND BODY

- Wear protective clothing to avoid direct skin contact. Chemical resistant clothing is recommended.

SPECIAL PRECAUTIONS

- No information

9. Physical and Chemical Properties

Physical state	: Liquid at room temperature
Colour	: See the product label
Odour	: Slight ammonia odour
Melting Point/Freezing Point	: No data available
Boiling point or initial boiling point and boiling range	: 100.0°C
Flammability	: NONE
Explosive limits or upper/lower flammability	: No data available
Flash point	: NONE
Spontaneous ignition point	: No data available
Decomposition temperature	: No data available
pH	: 8.4-9.6
Kinematic viscosity	: No data available
Solubility	: No data available
n-Octanol/Water Partition Coefficient	: No data available
Vapour pressure	: No data available
Density and/or relative density	: 1.030 - 1.130 (25°C)
Relative gas density	: No data available
Particle characteristics	: No data available

10. Stability and Reactivity

Reactivity	: No data available
Chemical stability	: Reactions will not occur under normal conditions.
Possibility of hazardous reactions	: No data available
Conditions to avoid	: No data available
Incompatible hazardous substances	: No data available
Hazardous decomposition products	: This material is incombustible. But if paint film burns, poisonous gas including CO may be generated.
Other hazard information	: No data available

11. Toxicological Information

Harmful effect of constituent substance (For hazardous material)

Material name	Acu tx/Orl (LD50:)	Acu tx/Skn (LD50:)	Acu tx/Inh (LC50:)	Acu tx/Vpr (LC50:)
Cobalt and its compounds	-	-	-	-
Titanium dioxide	N/A	N/A	10000	N/A
Manganese and its compounds	-	-	-	-
Silicon dioxide(Silica)	N/A	3160	N/A	N/A
2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate	N/A	3200	N/A	15200
Amorphous silica (Silica gel, Precipitated silica)	N/A	5000	N/A	N/A

Material name	Acu tx/Dus	(LC50:)	Skn cr/lrr	Ey dmg/irr	respiratory organ	Skn snstz	Grm cl mut	Crcngncty
Cobalt and its compounds	-		-	-	-	-	-	-
Titanium dioxide	N/A	5.09	N/A	-	-	N/A	-	-
Manganese and its compounds	-		-	-	-	-	-	-
Silicon dioxide(Silica)	-		N/A	Category 2	-	-	-	Category 1A
2,2,4-Trimethyl-1,3-pentenediol monoisobutyrate	N/A	5.33	N/A	Category 2B	-	-	-	-
Amorphous silica (Silica gel, Precipitated silica)	-		N/A	Category 2B	-	-	-	-

Material name	Reproduc- tive toxicity	Orgn/sngl	Orgn/rpeat	Asprt hzrd
Cobalt and its compounds	-	-	-	-
Titanium dioxide	-	-	Category 1	-
Manganese and its compounds	-	-	-	-
Silicon dioxide(Silica)	-	-	Category 3	Category 1
2,2,4-Trimethyl-1,3-pentenediol monoisobutyrate	-	-	-	-
Amorphous silica (Silica gel, Precipitated silica)	-	-	Category 3	-

[Abbreviation]

Acu tx/Orl: Acute toxicity/Oral(mg/kg) Acu tx/Skn:Acute toxicity/Skin(mg/kg) Acu tx/Inh:Acute toxicity/Inhalation(ppm)

Acu tx/Dus:Acute toxicity/Dust,mist(ppm) Skn cr/lrr: Skin corrosion/irritation Ey dmg/irr:Eye damage/irritation

Rspr snstz:Respiratory sensitization Skn snstz:Skin sensitization Grm cl mut:Germ cell mutagenicity

Crcngncty:Carcinogenicity

Rprd txcy:Reproductive toxicity Orgn/sngl:Specific target organ/systemic toxicity (single exposure)

Orgn/rpeat:Specific target organ/systemic toxicity (repeated exposures)

Asprt hzrd : Aspiration hazard

12.Ecological Information

Ecotoxicity	No data available
Persistence/degradability	No data available
Bioaccumulation potential	No data available
Mobility in soil	No data available

Harmful effect of constituent substance (For hazardous material)

Material name	Aquatic environmental toxicity Short term (Acute)	Aquatic environmental toxicity Long term (Chronic)	Hazardous to the ozone layer
Cobalt and its compounds	-	-	-
Titanium dioxide	N/A	Category 4	-
Manganese and its compounds	-	-	-
Silicon dioxide(Silica)	-	-	-
2,2,4-Trimethyl-1,3-pentenediol monoisobutyrate	Category 3	N/A	-
Amorphous silica (Silica gel, Precipitated silica)	N/A	-	-

13.Disposal Considerations

Residues

- Consign disposal of waste such as paint and container to an authorized disposal agent.
- Waste water resulted from cleaning containers and machinery shall not be drained to ground or ditch without treatment.
- Dispose of waste resulted from draining, incineration, etc. in accordance with the law of disposal and cleaning or relevant law, or consign the waste to a disposer.

Contaminated container and packing

- Empty containers shall be disposed of after removing the contents completely in accordance with relevant law and the local government standards.
- The waste shall be disposed of by an authorized disposal agent.

14. Transport Information

UN No. -
 UN proper shipping name -
 UN classification -
 Packing group -

Specific precautionary transport measures and conditions

Comply with general notice of handling and storage.

Put the material on board after confirming there is no leakage in containers. Take preventive measures against load shifting so that the containers will not tumble, fall or be damaged.

Domestic restriction

Land transportation Comply with the Fire Service Act, Industrial Safety and Health Law, and Poisonous and Deleterious Substances Control Act if applicable.
 Marine transportation Comply with Ship Safety Act.
 Aviation transportation Comply with Civil Aeronautics Act.
 Emergency Response Guide No. -

15. Regulatory Information

Industrial Safety and Health Law	Labeling materials, notification materials Carcinogenic substance (Substance: See Section 3) Chemical substances that cause skin disorders, etc.
Poisonous and Deleterious Substances Control Act	N/A
Fire Service Act	Nonhazardous material
Pollutant Release and Transfer Register Law (PRTR Law)	N/A
Ship Safety Act	N/A
Civil Aeronautics Act	N/A

16. Other Information

References

Chemical Substances Database for MSDS	: Japan Paint Manufacturers Association
MSDS and Label Preparation Guidebook (For mixture of paint)	: Japan Paint Manufacturers Association
Published data on GHS hazard classification results provided by	: National Institute of Technology and Evaluation
Published data on Chemical Substances information provided by Japan Advanced Information Center of Safety and Health	: Japan Industrial Safety and Health Association
International Chemical Safety Cards (ICSC)	
MSDS information	: Japan Industrial Safety and Health Association

[NOTE]

The information contained herein except some is based on the data available in various technical publications and is not based on the safety test to a product. In addition, the evaluation of hazard and noxiousness may not be perfect and the information contained herein is not all. Therefore, no warranty is expressed or implied regarding the safety and quality. This SDS provides selected Japanese regulatory information of this product, including its components. This is not intended to include all regulations. Recipients are advised to confirm their suitability and compatibility of use basing on their conditions and environmental factors by complying with all their country's regulatory requirements.