

Material Safety Data Sheet

1. Identification

Product: Anti-blocking / Slip / Matting Additive

Product Name: MATT 412, MATT T

CAS No. 7631-86-9 (112926-00-8, 9002-88-4)

Application: Coating, Ink, Plastic, Rubber, Leader

Manufacturer/Supplier Identification

Manufacturer/Supplier: Formula Chemicals Co., Ltd.

Emergency telephone number: +886 922582639

2. Composition/Information on Ingredients

Chemical Name	CAS Number	EINEC/ELINCS Number	Percentage (%)
Silicon Dioxide	7631-86-9	231-545-4	>99.3

3. Hazards Identification

Indication of danger: NOT a hazardous substance or preparation according to GB16483-2000 and their various amendments and adaptations.

Principle Route of Exposure: Inhalation, Skin contact, Eye contact

POTENTIAL HELTH EFFECTS

Eye contact: May cause mechanical irritation. Irritating, but will not permanently injure eye tissue. hazard for usual industrial or commercial handling.

Skin Contact: Repeated exposure may cause skin dryness or cracking

Inhalation: Dust may be irritating to respiratory tract. Provide appropriate exhaust ventilatio machinery and at places where dust can be generated. See also Section 8.

Ingestion: Health injuries are not known or expected under normal use. Low hazard for industrial or commercial handling.

Carcinogenic Effects: Does not contain any substances greater than 0.1% listed by IARC (International Agenc Research on Cancer), NTP (National Toxicology Program), OSHA (Occupational Safet Health Administration), ACGIH (American Conference for Governmental Indu Hygienists) or EU (European Union). See also Section 11.

Target Organ Effects: Lungs

Medical Conditions Aggravated: Asthma, Respiratory disorder

Potential Environmental Effects: No special environmental precautions required.

4. Emergency and First Aid Procedure

Eyes: Flush eyes immediately with large amounts of water for 15 minutes. Seek medical attention if redness, swelling, itching, burning or visual disturbances occur.

Skin: Wash thoroughly with soap and water. Seek medical attention if redness, swelling, itching , or burning occurs.

Inhalation: If cough, shortness of breath or other breathing problems occur, move to fresh

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air. Seek medical attention if symptoms persist. If necessary, restore normal breathing through standard first aid measures.

Ingestion: Do not induce vomiting. If conscious, give several of water. Never give anything by mouth to an unconscious person.

Notes to Physician: Treat symptomatically.

5. Firefighting Measures

Extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special Protective Equipment for Firefighters: wear suitable protective equipment. In the event of fire, wear self-contained breathing apparatus.

Specific Hazards: Product resists ignition and does not promote flame spread.

Hazardous Decomposition / Combustion Products: None

Risk of Dust Explosion: This material is an inorganic dust and will not create nor support conditions that would result in a dust explosion or fire.

6. Accidental Release Measures

Personal Precautions: Avoid dust formation. Remove all sources of ignition. Ensure adequate ventilation. Use personal protective equipment. See also Section 8.

Methods for Cleaning Up: Clean up promptly by vacuum. Use a suitable vacuum cleaner. Do not create a dust cloud by using a brush or compressed air. Pick up and transfer to properly labeled containers. See Section 13.

Environmental Precautions: No special environmental precautions required. Local authorities should be advised if significant spillages cannot be contained.

7. Handling and Storage

Handling: Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Do not create a dust cloud by using a brush or compressed air. Take precautionary measures against static discharge. All metal parts of the mixing and processing equipment must be earthed/grounded. Ensure all equipment is electrically earthed/grounded before beginning transfer operations.

Storage: Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store together with volatile chemicals as they may be adsorbed onto product. Keep at ambient temperatures.

8. Exposure/ Protection method

EXPOSURE LIMITS

Amorphous Silica, The regulatory exposure limits are found under the general silica, CAS RN 7631-86-9:

Australia	2 mg/m ³ , TWA, Respirable
Austria MAK	4 mg/m ³ , TWA, Inhalable fraction

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Finland	5 mg/m ³
Germany TRGS 900	4 mg/m ³ , TW, Inhalable fraction (a1)
India	10 mg/m ³ , TWA
Ireland	2.4 mg/m ³ TWA, Respirable
Norway:	1.5 mg/m ³ , TWA, Respirable
Switzerland	4 mg/m ³ , TWA
	6 mg/m ³ TWA, Total inhalable fraction
UK WEL	2.4 mg/m ³ , TWA, Respirable
US OSHA PEL	6mg/m ³
Dust or Particulates Not	
(US ACGIH) –(TLV)	10 mg/m ³ · (TWA), inhalable fraction
	3 mg/m ³ · TWA · Respirable
Belgium	10 mg/m ³ , TWA · inhalable fraction
	3 mg/m ³ ,TWA, Respirable
China	8 mg/m ³ ,TWA,STEL
	10 mg/m ³ , STEL
France	10 mg/m ³ · STEL
	10 mg/m ³ · TWA, inhalable
Italy	10 mg/m ³ ,TWA,inhalable
	3mg/m ³ ,TWA,Respirable
Malaysia	10 mg/m ³ ,TWA,inhalable
	3mg/m ³ ,TWA,Respirable
Spain	10 mg/m ³ ,VLA,inhalable
	3mg/m ³ ,VLA,Respirable
Note : MAK: Maximale Arbeitsplatzkonzentration (Maximum Workplace Concentration) OEL: Occupational Exposure Limit PEL: Permissible Exposure Limit STEL: Short Term Exposure Limit TLV: Threshold Limit Value TRGS: Technische Regeln für Gefahrstoffe (Technical Rule for Hazardous Materials) TWA: Time Weighted Average US ACGIH: United States American Conference of Governmental Industrial Hygienists US OSHA: United States Occupational Safety and Health Administration VLA: Valore Limite Ambientales (Environmental Limit Value) WEL: Workplace Exposure Limit	
ENGINEERING CONTROLS PERSONAL PROTECTIVE EQUIPMENT: Ensure adequate ventilation to maintain exposures below occupational limits. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Respir Respiratory: Approved respirator may be necessary if local exhaust ventilation is not	

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adequate.

Hand Protection: Repeated exposure may cause skin dryness or cracking. Use protective skin cream before handling the product. Wear suitable gloves.

Eye Protection: Wear eye/face protection. Safety glasses with side-shields. Goggles.

Skin and Body Protection: Wear suitable protective clothing. No special protective equipment required.

Other: Handle in accordance with good industrial hygiene and safety practice. Emergency eyewash and safety shower should be located nearby.

9. Physical and Chemical Data

Appearance:	White Powder
SiO₂ Content(Base dry),%:	99.3
Odor:	None
Pore Volume ,ml/g:	1.8-2.0
Oil Absorptiong/100g:	260-310
Particle Size(Coulter):	2-2.5
Drying Loss(105°C,2Hrs):	≤5.0
Loss on ignition: (1000°C,2Hrs), %:	≤7.0
Whiteness:	93
PH Value(5% Disperse in Water):	6-7
Flash Point:	Not determined
Method:	Not applicable
Explosion Limits in Air-Upper(%):	Not determined
Explosion Limits in Air-Lower(%):	Not applicable
Autoignition Temperature:	Not determined
Method:	Not determined

10. Stability and Reactivity

Stability: Stable

Hazardous Polymerization: Hazardous polymerization does not occur.

Mechanical Sensitivity (shock): Not sensitive to mechanical impact.

Conditions to Avoid: Keep away from heat and sources of ignition. Avoid dust formation. Product resists ignition and does not promote flame spread.

Hazardous Decomposition/Combustion Products: None

Static Discharge Effects: Take precautionary measures against static discharges. Avoid dust formation. All metal parts of the mixing and processing equipment must be earthed/grounded. Ensure all equipment is electrically earthed/ grounded before beginning transfer operations. This material is an inorganic dust and will not create nor support conditions that would result in a dust explosion or fire.

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11. Toxicological Data:

ACUTE TOXICITY

Oral LD50: LD50/oral/rat = > 5000 mg/kg.

Inhalation LC50: Due to the product's physical characteristics, no suitable testing procedure is available.

Dermal LD50: LD50/dermal/rabbit = > 2000 mg/kg.

Eye Irritation: Draize score 0.7/110 @ 24 hr. Non-irritating.

Skin Irritation: 0/8. Non-irritating.

SUBCHRONIC TOXICITY No data are available on the product itself.

CHRONIC TOXICITY

Carcinogenic Effects: Does not contain any substances greater than 0.1% listed by IARC (International Agency for Research on Cancer), NTP (National Toxicology Program), OSHA (Occupational Safety and Health Administration), ACGIH (American Conference for Governmental Industrial Hygienists) or EU (European Union).

Mutagenic Effects: Not mutagenic in AMES Test, unscheduled DNA synthesis, chromosomal aberration in Chinese hamster ovary (CHO) cells.

Reproductive Toxicity: Did not show teratogenic effects in animal experiments. According to experience not expected.

Sensitizing Effects: A delayed contact hypersensitivity study in guinea pigs utilizing the Magnusson and Kligman. Maximization technique was performed. No sensitization responses were observed.

Synergistic Materials: None reasonably foreseeable.

12. Ecological Information

Aquatic Toxicity: Fish (Brachydanio rerio) ECO (96 hours): > 10,000 mg/l; (Method: OECD 203) Daphnia magna ECO (24 hours): > 10,000 mg/l; (Method: OECD 202)

ENVIRONMENTAL FATE

Mobility: Not expected to migrate.

Bioaccumulation: According to experience not expected.

Persistence / Degradability: The methods for determining biodegradability are not applicable to inorganic substances.

Distribution to Environmental: Not determined.

13. Disposal Considerations

Compartments: Can be landfilled or incinerated, when in compliance with local regulations.

14. Transport Data

Not classified as dangerous in the meaning of transport regulations.

-US Department of Transportation

-Canadian Transport of Dangerous Goods Regulation

- European Transport of Dangerous Goods Regulation

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-GGVS, GGVE, RID, ADR, IMDG Code, ICAO-TI

-United Nations (no UN number)

15. Regulatory Information

Not a hazardous substance or preparation according to Chemical Danger Products Safety Management Statute (Issued in 1997-2-17)

EU Food Contact Information

Listed as E551 on and is authorized for use according to EC-Directive 95/2/EC and its various amendments and adaptations. Meets all required purity criteria according to the Joint FAO/WHO Expert Committee on Food Additives (JECFA).

Cosmetic Use:

Listed by the Cosmetic, Toiletry and Fragrance Association (CTFA) for use in cosmetics and personal care products.

California Proposition 65:

This product is not listed on California Proposition 65.

International Inventories

All components of this product are listed on or exempt from the following inventories:

YES - Australian Inventory of Chemical Substances (AICS) YES - Canadian Domestic Substances List (DSL)

YES - Chinese Inventory

YES - European Inventory of Existing Commercial Chemical Substances (EINECS) YES - Japanese Existing and New Chemical Substances (ENCS)

YES - Korean Existing Chemicals List (KECL)

YES - New Zealand Hazardous Substances and New Organisms Act (HSNO) YES - Philippine Inventory of Chemicals and Chemical Substances (PICCS) YES - United States Toxic Substances Control Act (TSCA) Inventory

Germany Water Endangering Class (WGK) Class Chemical Name

Synthetic Amorphous, nwg (not water endangering): 849 Pyrogenic Silica

Switzerland Giftklasse (Poison Class) Toxic Category Chemical Name

Synthetic Amorphous, --(tested and found to be not toxic): G-8311 Pyrogenic Silica

16. Other Information

This data sheet was prepared in accordance with Directive 91/155/EEC and according to Regulation (EC) No 1907/2006 (REACH), Annex II.

The information presented herein has been compiled from sources considered to be dependable and is accurate to the best of Formula Chemicals Co., Ltd.'s knowledge; however, Formula Chemicals makes no warranty regarding the accuracy of such data or the results to be obtained from use thereof. Formula Chemicals assumes no responsibility for injury to recipient or to third persons or for any damage to any property and recipient assumes all such risks. You are therefore advised to check that this sheet is the most recent issue.