

According to EC Regulation 1907/2006 (REACH), 1272/2008 (CLP) & 453/2010

## Material Safety Data Sheet

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### Product Identifier

Trade name : 9003 - Perla Mir  
 Relevant identified uses of the substance or mixture and uses advised against : colouring agent  
 Uses advised against : not known  
 Details of the supplier of the safety data sheet  
 Manufacturer: Kolortek Co., Ltd.

### 2. HAZARD IDENTIFICATION

#### Classification of the substance or mixture

According to Regulation (EC) No. 1272/2008 (CLP) : not classified  
 According to Directive 67/548/EEC & Directive 1999/45/EC : not classified  
 Additional information : not available

#### Label elements

GHS label elements : not applicable  
 Hazard pictogram(s) : not applicable  
 Signal word(s) : not applicable  
 Hazard statement(s) : not applicable  
 Precautionary statement(s) : not applicable  
 Other hazards : not known

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical family : mica - titanium oxide- tin dioxide. Contains no hazardous ingredients

Common chemical name	CAS No.	EINECS No.	Colour Index	Chemical composition	Hazard classification According to directive 67/548/EEC & Directive 1999/45/EC, Regulation (EC) No. 1272/2008 (CLP)
Fluorophlogopite	12003-38-2			83.0 - 89.0%	Not classified
Titanium dioxide	13463-67-7		C.I.77891	11.0 - 17.0%	Not classified

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#### 4. FIRST AID MEASURES

##### Description of first aid measures

Inhalation: in case of accident by inhalation	: remove causality to fresh air and keep at rest
Skin contact	: wash affected skin with plenty of water
Eye contact	: if contact with eyes directly, flush with gently flowing fresh water thoroughly; If eye irritation persists, get medical advice/attention
Ingestion	: if ingested, wash out mouth with water, drink milk or egg white
Notes to physician	: no special measures are required

##### Most important systems and effects,

Both acute and delayed	
Actue	: none
Long term (repeated)	: may cause irritation to the respiratory system. Cough. Increased difficulty in breathing

##### Indication of immediate medical attention and special treatment needed

Recommended	:a. Chest XRay b. Lung functionality tests
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#### 5. FIREFIGHTING MEASURES

##### Extinguishing media

Suitable extinguishing media	: extinguish with waterspray, foam or dry chemical
Unsuitable extinguishing media	: carbon dioxide

##### Special hazards arising from the substance or mixture

Thermal hazards	: noncombustible. None anticipated
Advice for firefighters	: fire fighters should wear complete protective clothing including self-contained breathing apparatus

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

Personal precautions	: do not breathe dust
Personal protection equipment	: wear appropriate personal protective equipment, avoid direct contact
In case of emergency	: a self contained breathing apparatus and suitable protective clothing should be worn in fire conditions
Environmental precautions	: do not allow to enter drains, sewers or watercourses
Methods and material for Containment and cleaning up	: collect mechanically and dispose of according to Section 13. Use vacuum equipment for collecting spilt materials, where practicable
Reference to other sections	: see sections 8 and 13

#### 7. HANDLING AND STORAGE

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Precautions for safe handling : avoid breathing dust  
Conditions for safe storage  
including any incompatibilities : keep container in a wellventilated place  
Specific end use(s) : not known

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters : provide adequate ventilation when using the material and follow the principles of good occupational hygiene to control personal exposures

Exposure limit values : not known

##### **Exposure controls**

Appropriate engineering controls : provide adequate ventilation to ensure that the occupational exposure limit is not exceeded. Isolate the dispersive process step away from other operations. This can be achieved by local exhaust ventilation or general ventilation

##### **Individual protections measures, such as personal protective equipment(PPE)**

Hand/eye/face protection : wear gloves, eye protection and an approved dust mask if dust is generated during handling. Goggles giving complete protection to eyes. Dust mask covering nose and mouth

Skin protection : apron or other light protective clothing, boots and plastic or synthetic rubber gloves

Respiratory protection : dust mask covering nose and mouth

Thermal hazards : none

Environmental exposure controls : avoid dust generation. Avoid accumulation of dust

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : powder  
Colour : Rutile Silver  
Odour : odourless  
pH : 6.0-9.0 (4% H<sub>2</sub>O)  
Boiling point, ° C : not applicable  
Melting point, ° C : decomposes  
Freezing point, ° C : not applicable  
Density : 3.0-3.1 kg/L  
Bulk density : 16-20g/100g  
Vapour pressure : not applicable  
Solubility (in water) : insoluble  
Particle size : 10-60µm

#### 10. STABILITY AND REACTIVITY

Reactivity : there may be violent or incandescent reaction of the product with metals at high

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temperatures (e.g., aluminium; calcium; magnesium; potassium; sodium; zinc; lithium)

Chemical stability : stable under normal conditions

Possibility of hazardous reactions : none

Conditions to avoid : high temperature

Incompatible materials : strongly acidic, strongly alkaline, oxidizing agents

Decomposition products : no information available

#### 11. TOXICOLOGICAL INFORMATION

##### Information on toxicological effects

This inorganic pigment in general is considered to be practically nontoxic.

Acute toxicity : not available

Carcinogenicity : not available

#### 12. ECOLOGICAL INFORMATION

Toxicity : no data

Persistence and degradability : insoluble in water. This product is predicted not to degrade in soil and water

Bioaccumulative potential : no data

Mobility in soil : not applicable

Results of PBT and vPvB assessment : not applicable

Other adverse effects : not known

#### 13. DISPOSAL CONSIDERATIONS

Waste treatment methods : dispose of contents in accordance with local, state or national legislation

#### 14. TRANSPORT INFORMATION

Not classed as dangerous for transport.

International Transport Regulations	ADR/RID	ADN	IMDG	ICAO/IATA
UN number	Not applicable	Not applicable	Not applicable	Not applicable
Proper shipping name	Not applicable	Not applicable	Not applicable	Not applicable
Transport hazard class(es)	Not applicable	Not applicable	Not applicable	Not applicable
Packing group	Not applicable	Not applicable	Not applicable	Not applicable
Environmental hazards	None	None	None	None
Special precautions for user	None	None	None	None
Transport in bulk according to Annex II of MARPOL73/78 and The IBC Code	Not applicable	Not applicable	Not applicable	Not applicable

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Hazard label(s)	Not applicable
Additional information	Custom tariff No. 32061900

#### 15.REGULATORY INFORMATION

According to Directive 67/548/EEC & Directive 1999/45/EC : not classified as dangerous for supply/use  
Safety, health and environmental regulations/legislations specific for the substance or mixture :not available

#### 16. OTHER INFORMATION

Annex to the extended Safety Data Sheet (eSDS)

ADR : European Agreement concerning international carriage of Dangerous goods by Road

CAS : Chemical Abstracts Service

EC : European Community

ICAO : International Civil Aviation Organization

IMDG : International Maritime Dangerous Goods

IATA : International Air Transport Association

#### DATA SOURCES

NPIRI Raw Material Handbook, Volume 4, Pigments, Second Edition, 2001

Book on "Safe Handling of Pigments", European Edition 1995, BCMA, EPSOM ETAD, VdMi

HSDB

NIOSH ICSC

Hazardous Substance Fact Sheet, New Jersey Department of Health and Senior Service

We have described our product concerning possible safety requirements by the abovementioned information given to the best of our knowledge and experience. All data given are never meant to guarantee any quality description nor product properties