

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

Date of issue : 07.09.2011 – Version : EU_EN/2 – Print date : February 2014

Material Safety Data Sheet

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

Product Identifier

Trade name : Flash Silver
 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. 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)
Mica	12001-26-2	310-127-6	77019	78-82	Not classified
Titanium dioxide	13463-67-7	236-675-5	77891	18-22	Not classified

4. FIRST AID MEASURES

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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

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 : Flash Silver

Odour : odourless

pH : 6.0-9.0 (4% H₂O)

Boiling point, ° C : not applicable

Melting point, ° C : decomposes

Freezing point, ° C : not applicable

Density : 2.9-3.0 kg/L

Bulk density : 13-17g/100g

Vapour pressure : not applicable

Solubility (in water) : insoluble

Particle size : 10-100 µm

10. STABILITY AND REACTIVITY

Reactivity : there may be violent or incandescent reaction of the product with metals at high temperatures (e.g., aluminium; calcium; magnesium; potassium; sodium; zinc; lithium)

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

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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