

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier**Product name** K-RAY® DarkSilver**Recommended use of the chemical and restrictions on use****Recommended use** Coloring agent.**Uses advised against** No information available**Details of the supplier of the safety data sheet****Manufacturer address**Kobo Products, Inc.
3474 South Clinton Avenue
South Plainfield, NJ 07080 USA
Telephone: 1-908-757-0033**Emergency telephone number****Emergency telephone** Chemtrec 1-800-424-9300

2. Hazards Identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Carcinogenicity

Category 2

Label elements**EMERGENCY OVERVIEW****WARNING****Hazard statements**

Suspected of causing cancer

**Appearance** Powder**Physical state** Solid**Odor** Odorless**Precautionary Statements - Prevention**

Use personal protective equipment as required

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None known

Other Information

No information available

3. Composition/information on Ingredients

| Chemical Name | CAS No | Weight-% |
|------------------------|------------|-----------|
| Mica | 12001-26-2 | 55.0-73.0 |
| Titanium Dioxide | 13463-67-7 | 22.0-30.0 |
| Iron Oxides (CI 77499) | 1317-61-9 | 5.0-15.0 |

4. First aid measures**First aid measures**

| | |
|---|---|
| General advice | If symptoms persist, call a physician. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. |
| Skin contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. |
| Inhalation | Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. |
| Ingestion | If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. |
| Self-protection of the first aider | Use personal protective equipment as required. |

Most important symptoms and effects, both acute and delayed

Symptoms No known effects under normal use conditions.

Indication of any immediate medical attention and special treatment needed

Note to physicians Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

5. Fire-fighting measures**Suitable extinguishing media**

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

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

None in particular.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Protective equipment and precautions for firefighters

Use personal protective equipment as required.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- Personal precautions** Use personal protective equipment as required. Avoid contact with eyes. Wash thoroughly after handling.
- For emergency responders** Use personal protective equipment as required.
- Environmental precautions** Collect spillage. Do not allow into any sewer, on the ground or into any body of water.

Methods and material for containment and cleaning up

- Methods for containment** Prevent further leakage or spillage if safe to do so.
- Methods for cleaning up** Avoid creating dust. Sweep up and shovel into suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling

- Advice on safe handling** Use personal protective equipment as required. Use only in well-ventilated areas. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

- Storage conditions** Keep container tightly closed in a dry and well-ventilated place. Store at ambient conditions.
- Incompatible materials** Strong oxidizing agents. Strong acids.

8. Exposure Controls/Personal Protection

Control parameters

Exposure guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|------------------|--|--|--|
| Titanium Dioxide | TWA: 10 mg/m ³ | TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust | IDLH: 5000 mg/m ³ |
| Mica | TWA: 3 mg/m ³ respirable fraction | (vacated) TWA: 3 mg/m ³ respirable dust TWA: 20 mppcf | IDLH: 1500 mg/m ³ TWA: 3 mg/m ³ containing <1% Quartz respirable dust |

Appropriate engineering controls

- Engineering controls** Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

- Eye/face protection** Wear safety glasses with side shields (or goggles).
- Skin and body protection** Wear protective gloves and protective clothing.
- Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.
- General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

| | | | |
|-----------------------|--------------|-----------------------|--------------------------|
| Physical state | Solid | Odor | Odorless |
| Appearance | Powder | Odor threshold | No information available |
| Color | Silver Black | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks</u> • |
|--------------------------------|--------------------|--------------------------|
| pH | 4-11 | |
| Melting point / freezing point | | No information available |
| Boiling point / boiling range | | No information available |
| Flash point | | No information available |
| Evaporation rate | | No information available |
| Flammability (solid, gas) | | No information available |
| Flammability limit in air | | |
| Upper flammability limit | | No information available |
| Lower flammability limit | | No information available |
| Vapor pressure | | No information available |
| Vapor density | | No information available |
| Specific gravity | | No information available |
| Water solubility | Insoluble in water | |
| Solubility in other solvents | | No information available |
| Partition coefficient | | No information available |
| Autoignition temperature | | No information available |
| Decomposition temperature | | No information available |
| Kinematic viscosity | | No information available |
| Dynamic viscosity | | No information available |
| Explosive properties | | No information available |
| Oxidizing properties | | No information available |

Other Information

| | |
|-------------------------|--------------------------|
| Softening point | No information available |
| Molecular weight | No information available |
| VOC content (%) | No information available |
| Density | No information available |
| Bulk density | No information available |

10. Stability and Reactivity

Reactivity

No data available

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization

Hazardous polymerization does not occur.

Conditions to avoid

None known.

Incompatible materials

Strong oxidizing agents. Strong acids.

Hazardous decomposition products

None under normal use conditions.

11. Toxicological Information

Information on likely routes of exposure

Product information

| | |
|---------------------|--------------------|
| Inhalation | No data available. |
| Eye contact | No data available. |
| Skin contact | No data available. |
| Ingestion | No data available. |

Component information

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|------------------------|-----------------------|-------------|-----------------|
| Titanium Dioxide | > 10000 mg/kg (Rat) | - | - |
| Iron Oxides (CI 77499) | > 10000 mg/kg (Rat) | - | - |

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|--|--|
| Skin corrosion/irritation | No information available. |
| Serious eye damage/eye irritation | No information available. |
| Irritation | No information available. |
| Corrosivity | No information available. |
| Sensitization | No information available. |
| Germ cell mutagenicity | No information available. |
| Carcinogenicity | This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B). |

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|------------------|-------|----------|-----|------|
| Titanium Dioxide | | Group 2B | | X |

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

| | |
|---------------------------------|---------------------------|
| Reproductive toxicity | No information available. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Aspiration hazard | No information available. |

12. Ecological Information

Ecotoxicity

None known

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. Disposal Considerations

Waste treatment methods

| | |
|-------------------------------|---|
| Disposal of wastes | Disposal should be in accordance with applicable regional, national and local laws and regulations. |
| Contaminated packaging | Disposal should be in accordance with applicable regional, national and local laws and regulations. |

14. Transport Information

| | |
|--------------------------|---------------|
| <u>DOT</u> | Not regulated |
| <u>ICAO (air)</u> | Not regulated |
| <u>IATA</u> | Not regulated |
| <u>IMDG</u> | Not regulated |
| <u>RID</u> | Not regulated |
| <u>ADR</u> | Not regulated |

15. Regulatory information

International Inventories

| | |
|----------------------|----------|
| TSCA | Complies |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Complies |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

| | |
|-----------------------------------|----|
| Acute Health Hazard | No |
| Chronic Health Hazard | No |
| Fire Hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals

| Chemical Name | California Proposition 65 |
|------------------|---------------------------|
| Titanium Dioxide | Carcinogen |

U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|------------------|------------|---------------|--------------|
| Titanium Dioxide | X | X | X |

16. Other information

| | | | | |
|-------------|------------------|----------------|--------------------|--|
| NFPA | Health Hazards 1 | flammability 0 | Instability 0 | Physical and chemical properties - PERSONAL PROTECTION E |
| HMIS | Health Hazards 1 | flammability 0 | Physical hazards 0 | |

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet