

BISMUTH OXYCHLORIDE PEARL SHEEN

Revision date: 10/17/06

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NFPA Classification:

Health: 1
 Flammability: 0
 Instability: 0
 Special Hazards:

HMIS Classification:

Health: 1 *
 Flammability: 0
 Physical Hazard: 0
 Personal Protection: F

* Indicates possible chronic health effects.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Chemical Name: Chemical Mixture

Product Use: Colorant.

Supplier: TKB Trading LLC,
 1101 9th Avenue,
 Oakland, CA 94606,
 510-451-9011

2. COMPOSITION / INFORMATION ON INGREDIENTS

| Ingredient CAS Number | Weight in Percent (%) | Notes |
|----------------------------------|-----------------------|-------|
| Bismuth Oxychloride 7787-59-9 | >98.0 | None. |

3. HAZARDS IDENTIFICATION

Emergency Overview:

Color: Silver/white
 Form: Powder
 Odor: Odorless
 Flash Point, °C: Not Applicable

Most Important Hazards: Prolonged or repeated inhalation of dust may cause lung damage. Irritating to eyes and respiratory system May cause skin irritation. Harmful if large amounts are swallowed.

Potential Health Effects:

Inhalation: Causes respiratory tract irritation. Overexposure to dust may cause lung damage.

Ingestion: Not a hazard under normal use conditions. Harmful if large amounts are swallowed.

Skin Contact: May cause skin irritation.

Eye Contact: Causes eye irritation.

Carcinogenicity:

| Ingredient CAS Number | Weight in Percent (%) | NTP (Y/N) | IARC (See Notes) | OSHA (Y/N) | ACGIH (See Notes) |
|----------------------------------|-----------------------------|--------------|---------------------|---------------|----------------------|
| Bismuth Oxychloride 7787-59-9 | >98.0 | N | N | N | N |

Notes:
 IARC: Y1=Carcinogenic to humans; Y2A=Probably carcinogenic to humans; Y2B=Possibly carcinogenic to humans; N3=Not classifiable as to its carcinogenicity; N=Not studied or probably not carcinogenic.
 ACGIH: A1=Confirmed human carcinogen; A2=Suspected human carcinogen; A3=Confirmed animal carcinogen; A4=Not classifiable as a human carcinogen; A5=Not suspected as a human carcinogen; N=Not studied.

Chronic Health Hazards: Prolonged or repeated inhalation of dust may cause lung damage.

Aggravated Medical Conditions: Pulmonary disorders. Allergies.

4. FIRST AID MEASURES

Inhalation: Move person to fresh air. Aid in breathing, if necessary, and get immediate medical attention.

Ingestion: If large quantities are ingested, seek medical advice. Not a hazard under normal use conditions.

Skin Contact: Wash with soap and water. Get medical attention if irritation persists.

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

5. FIRE FIGHTING MEASURES

Flash Point, °C: Not Applicable
Autoignition Temperature, °C: Not Applicable
Lower Explosive Limit, %: Not Applicable
Upper Explosive Limit, %: Not Applicable

Extinguishing Media: None - does not burn. Use extinguishing media appropriate for surrounding fire.

Fire Fighting Procedures: Positive pressure, self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Not a fire or explosion hazard.

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Scoop up or vacuum into a container for reclamation or disposal. Avoid dusting.

7. HANDLING AND STORAGE

- Keep tightly closed and store in a cool, dry and dark place.
- Avoid generating or breathing dust.
- Avoid contact with eyes.
- Wash thoroughly after handling.
- Material may be slippery when wet.
- Use only with adequate ventilation.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| Ingredient CAS Number | Weight in Percent (%) | OSHA PEL | ACGIH TLV |
|----------------------------------|-----------------------------|------------------|------------------|
| Bismuth Oxychloride 7787-59-9 | >98.0 | None Established | None Established |

Unless otherwise noted, all values are reported as 8-hour Time-Weighted Averages (TWAs) and total dust (particulates only). All ACGIH TLVs refer to the 2006 standards. Unless otherwise noted, all OSHA PELs refer to 29 CFR Part 1910 Air Contaminants: Final Rule, June 30, 1993.

Personal Protective Equipment: Safety glasses with side shields. Wear suitable gloves.

Respiratory Protection: Use a NIOSH/MSHA approved respirator as necessary to protect from: dust. If respiratory protection is used, follow all requirements for respiratory programs set forth in OSHA regulations (29 CFR 1910.134).

Ventilation: General ventilation. Local exhaust ventilation is recommended to control exposures to within applicable limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Powder
Color: Silver/white
Odor: Odorless

Boiling Point, °C:
Melting Point, °C: Decomposes
Density: 7.7gm/ml
Bulk Density: 7.0-10.0gm/cu inch
Vapor Pressure: Not Applicable
Specific Gravity: 7.7
Solubility (in water): Insoluble
pH: 4.0-8.0
Average Particle Size, µ: 6 - 15

10. STABILITY AND REACTIVITY

| | |
|--|--------------------------|
| Stability Data: | Stable |
| Conditions/Hazards to Avoid: | None known. |
| Incompatibility (Materials to Avoid): | Oxidizing agents. Acids. |
| Hazardous Decomposition Products: | Hydrogen chloride. |
| Polymerization: | Will not occur. |
| Polymerization - Avoid: | None known. |

11. TOXICOLOGICAL INFORMATION

Information on Product:**Chronic Toxicity:**

Bismuth and bismuth compounds are often poorly absorbed. Should absorption occur, however, exposure may cause loss of appetite, headache, skin rash, exodermatitis, kidney injury and jaundice. Repeated or prolonged exposure may cause a bismuth line or black spots on the gums, foul breath and salivation. The chloride ion generally has a very low toxicity.

Information on Components:

| Ingredient CAS Number | Weight in Percent (%) | Acute Toxicity - Oral | Acute Toxicity - Inhalation | Acute Toxicity - Dermal | Acute Toxicity - Other |
|----------------------------------|-----------------------------|--------------------------|--------------------------------|----------------------------|---------------------------|
| Bismuth Oxychloride 7787-59-9 | >98.0 | 22 g/kg (rat) | Not Available | Not Available | Not Available |

12. ECOLOGICAL INFORMATION

Information on Product:**Environmental Fate:**

No data available.

Ecotoxicological Information:

No data available.

13. DISPOSAL CONSIDERATIONS

US EPA Waste Number: Not Regulated

Disposal of Waste Method: This product, if disposed as received, is a non-hazardous waste. Local disposal laws and regulations will determine the proper waste disposal/recycling/reclamation procedure. Disposal requirements are dependent on the hazard classification and will vary by location and the type of disposal selected.

14. TRANSPORT INFORMATION

International Transport Regulations:

ICAO Class: Not Regulated

IMO Class: Not Regulated

US Transportation Regulations:

DOT Classification: Not Regulated

Proper Shipping Name: Not Regulated

Canadian Transportation of Dangerous Goods (TDG):

TDG Classification: Not Regulated

15. REGULATORY INFORMATION

International Inventories:

United States: This product or its ingredients are listed on or compliant with the TSCA Inventory.
Canada: This product or its ingredients are listed on or compliant with the DSL.
Europe: This product or its ingredients are listed on or compliant with EINECS.
Japan: This product or its ingredients are listed on or compliant with MITI.
Australia: This product or its ingredients are listed on or compliant with AICS.
Korea: This product or its ingredients are listed on or compliant with the ECL.
Philippines: This product or its ingredients are listed on or compliant with PICCS.
China: This product or its ingredients are listed on or compliant with the IECSC.

US Federal Regulations:

| Ingredient CAS Number | Weight in Percent (%) | Subject to SARA 313 Reporting |
|----------------------------------|-----------------------|-------------------------------|
| Bismuth Oxychloride 7787-59-9 | >98.0 | No |

SARA 311/ 312 Hazard Categories:

Acute Health Hazard

CAA 602 Ozone Depleting Substances (ODS):

This product neither contains nor is manufactured with an ozone depleting substance subject to the labeling requirements of the Clean Air Act Amendments 1990 and 40 CFR Part 82.

VOC Content: None

US State Regulations:

VOC Content (CARB): None

Canadian Regulations:

WHMIS Classification:

Not Regulated

16. OTHER INFORMATION

Revision number: 2

Section(s) Revised in this Version: Section 1: Chemical Product and Company Identification
Section 16: Other Information

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