

MATERIAL SAFETY DATA SHEET

ULTRAMARINE BLUE

MSDS

1. PRODUCT NAME AND COMPANY IDENTIFICATION

Product Name: ULTRAMARINE BLUE
Product Use: Personal Care Formulations
Company Name: Natural Sourcing
Company Address: 341 Christian Street, Oxford, CT 06478, USA
Date Issued: 4/20/2009
Emergency Telephone Number: Chemtrec Tel: (800) 262-8200

2. COMPOSITION/INGREDIENT INFORMATION

Trade Name: Ultramarine Blue
C.I. Number: 77007
CAS Number: 57455-37-5
EINECS Number: 3-099-283
Synonyms: C.I. Pigment Blue 29
Chemical Family: Sodium Alumino Sulphosilicate
Formula: $\text{Na}_6\text{Al}_6\text{Si}_6\text{O}_{24}\text{S}_4$

3. HAZARDS IDENTIFICATION

Emergency Overview:

- Contact with acids liberates hydrogen sulfide, a highly flammable, toxic gas. This risk is reduced greatly with acid resistant grades.
- Can create nuisance dust.

Effects and Symptoms:

Eye Contact: Mild irritation may occur
Skin Contact: May cause mild irritation to sensitive skin
Ingestion: None
Inhalation: None

4. FIRST AID MEASURES

Eyes: Remove contacts. Flush with plenty of water for 15 minutes. Get medical attention if irritation persists.
Skin: Wash with soap and water. Seek medical attention if symptoms persist.
Ingestion: Non-toxic. No action necessary
Inhalation: Non-toxic. Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms persist, seek medical attention.

5. FIRE FIGHTING MEASURES

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| Flammability of Product: | Non-flammable |
| Extinguishing Media: | Water spray, foam, dry chemical or CO ₂ . |
| Special Firefighting Procedures: | Wear self-contained breathing apparatus and full protective clothing. |
| Unusual Fire & Explosion Hazards: | None |
| Hazard Thermal Decomposition Products: | Toxic, irritating sulfur dioxide gas can be generated if this product undergoes chemical change during a fire sustained by other combustible materials. |

6. ACCIDENTAL RELEASE MEASURES (STEPS FOR SPILLS)

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| Methods for Cleaning Up: | Scoop spilled material into appropriately labeled containers for proper disposal. Finish cleaning by washing area with water. For large spills, check TLV in Section 8 of MSDS and check with local authorities. In case of accidental major discharge into drains, flush with copious amounts of water to dilute any acidic conditions which may prevail. |
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7. HANDLING AND STORAGE

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| Handling | |
| Safe Handling: | Avoid generating dust. Avoid breathing dust. Use only with adequate ventilation. Avoid prolonged, contact with skin. Avoid contact with eyes. Keep container closed. Wash thoroughly after handling. |
| Storage | Keep container dry. Keep containers sealed until ready to use. Do not store in areas where there is a risk of fire. Do not mix or store with acids or flammable material. |
| Packaging Materials: | Suitable – Paper, Polyethylene Not Suitable – Polyvinyl Chloride based materials |

8. EXPOSURE CONTROL/PERSONAL PROTECTION

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| Engineering Controls: | Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. |
| Threshold Limit Values: | ACGIH: 10 mg/m ³ (Total) 5 mg/m ³ (Respirable) |
| Eye: | Safety glasses |
| Skin/Body: | Gloves & Lab Coats |
| Respiratory: | Use adequate ventilation or NIOSH-approved respiratory devices to prevent inhalation of dust. Use additional appropriate respiratory protection if there is potential to exceed the exposure limits. |
| Other: | Evaluate need based on application. |
| Personal Protection in Case of Large Spills: | Splash goggles, synthetic apron, Gloves, MSHA/NIOSH approved self-contained breathing apparatus or equivalent and full protective gear. |

9. PHYSICAL AND CHEMICAL PROPERTIES

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| Appearance: | Fine Blue Powder |
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| Odor: | Odorless |
| pH: | 6 to 9 |
| Decomposition Temperature: | Loss of Sulphur above 400°C |
| Specific Gravity: | 2.25 to 2.35 |
| Flammability: | This product is not flammable and does not provide conditions favorable to combustion. |
| Solubility: | Insoluble in water and organic solvents |

10. STABILITY AND REACTIVITY

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| Stability: | Stable in air at temperatures less than 350°C |
| Hazardous Decomposition or Byproducts: | Hydrogen Sulfide Gas (H ₂ S), Sulfur Dioxide (SO ₂) |
| Conditions to Avoid: | At temperatures in excess of 440°C in the presence of air, an exothermic chemical reaction can occur with the evolution of sulfur dioxide gas. Contact with acids liberates hydrogen sulfide gas. |
| Materials to Avoid: | Acids, Fire |

11. TOXICOLOGICAL INFORMATION

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| Classification: | Non-Toxic |
| Acute Oral Toxicity: | LD ₅₀ > 10,000 mg/kg |
| Mutagenicity: | None |
| Teratogenicity: | None |
| Skin Irritation: | None |

12. ECOLOGICAL INFORMATION

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| Persistence & Degradability: | Ultramarine pigments are synthetic equivalents of the mineral lapis lazuli. They are extremely stable, except under acidic conditions when they will decompose to white siliceous material with the evolution of hydrogen sulfide. |
| Ecotoxicity: | Ultramarine pigments pose no threat to the environment if disposed of responsibly. |
| CL₅₀ 96 Hours (Fish): | Greater than 32,000 mg/kg |

13. DISPOSAL CONSIDERATIONS

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| Treatment: | Dispose of according to all federal, state and local regulations. Ultramarine pigments should not be washed into waste water or drains. Ultramarine pigments should not be disposed of where there is a risk of contact with acids. |
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14. TRANSPORT INFORMATION

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| Ultramarine pigments are not classified as dangerous substances for supply or conveyance under US or International shipping regulations. Do not transport with acids. | |
| DOT Description: | Ultramarine Lumps or Powder |
| Harmonized Tariff Code: | 3206.41.0000 |

15. REGULATORY INFORMATION

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| National Inventory Numbers: | EINECS (Europe) | 3-099-283 |
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| TSCA (US) | 57455-37-5 |
| AICS (Australia) | CAS Number |
| DSL (Canada) | CAS Number |
| MITI (Japan) | 1-22 |

California Proposition 65:

Ultramarine pigments may contain the following Proposition 65 regulated chemicals in the following typical amounts as a result of their natural presence in the raw materials from which ultramarines are produced:

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| Arsenic: | < 3 ppm |
| Cadmium: | < 0.5 ppm |
| Chromium: | 12 ppm |
| Mercury: | < 1 ppm |
| Lead: | 17 ppm |
| Beryllium: | Not Detected |
| Nickel: | < 1 ppm |

16. ADDITIONAL INFORMATION

ALTHOUGH ULTRAMARINE PIGMENTS ARE NON-HAZARDOUS, INHALATION OF DUSTS OF ANY KIND SHOULD BE AVOIDED IN THE INTEREST OF GENERAL HEALTH AND SAFETY.

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This safety sheet cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers.