

Ultramarine Blue

Identification of the substance

Lapis Lazuli Ultramarine Blue 462, 463, TL136, TL139, TL1312, 800, 819, TL1515, TL1516

Uses of the substance

Colourant in plastics, paper, inks, coatings, detergent and cosmetics

Hazard Identification

Ultramarine pigments are not classified as dangerous for supply or transport. However ultramarine blue can form dusts that may aggravate breathing. Contact with acid releases hydrogen sulphide which is a highly flammable toxic gas.

Composition and ingredients	
Component	Ultramarine pigment
Chemical name	Sodium alumina sulpho silicate
Colour Index number	Pigment Blue 29: 77007
CAS number	57455-37-5 101357-30-6
EINECS (Europe)	309-928-3 (REACH registered)
TSCA (USA)	CAS no. 57455-37-5
AICS (Australia)	CAS no. 57455-37-5
DSI (Canada)	CAS no. 57455-37-5
MITI (Japan)	1-22

First Aid Measures

- Inhalation: Remove person from source and allow to breathe fresh air.
- Skin Contact: Wash with soap and water.
- Eye Contact: Immediately rinse with plenty of water. If irritation continues seek medical attention.
- Ingestion: This product is not toxic.

Fire Fighting Measures

Any extinguisher is safe to use on this product

- Specific Dangers: Sulphur dioxide gas can be emitted if there is a chemical change to the product during fire sustained by other materials.
- Protective Equipment: Suitable breathing apparatus should be worn.

Accidental Release

- Personal Precautions: No special precautions necessary unless contact with acids or fire should occur. If this does happen a self contained breathing apparatus should be worn.
- Environmental Precautions: Do not flush into surface water or sewer systems.
- Cleaning Methods: Sweep up spillages. In case of accidental major discharge into drains, flush with large amounts of water to dilute any acid.

Handling and Storage

- Protective Measures: Avoid excessive dust generation. Use extraction where possible and wear a dust mask (EN149, FFP1).
- Storage: Store in a dry, well ventilated area. Do not store near acids or flammable materials.
- Packaging Materials: Paper sacks, PE sacks or drums.

Exposure controls / Personal protection

- OEI (UK): 10mg/m³ 8 hour TWA (inhalable dust)
- DEL (UK): 4mg/m³ 8 hour TWA (respirable dust)

Ultramarine blue is considered non toxic.

- Respiratory Protection: Wear a suitable dust mask rated to EN149 FFP 1. In the event of contact with acids or fire, use a self-contained breathing apparatus.
- Hand Protection: Protection is not essential as the product is a non-irritant. However if handling bulk quantities it is recommended that handlers use disposable gloves.
- Eye Protection: Safety eye wear rated to EN166 should be worn.
- Body Protection: When handling bulk quantities cotton or polyester overalls should be worn. Chemical resistant materials are not required.

Physical and chemical properties	
Form	Fine blue powder
Odour	Non present
pH (10% suspension)	7-9
Flammability	Not applicable
Explosive limits	Not applicable
Specific gravity	2.35
Solubility	This pigment is Insoluble in water and organic solvents

Stability and reactivity	
Stability	Stable in air up to 350°C (660°F)
Conditions to avoid	<p>At temperatures above 400°/750°C in the presence of air an exothermic reaction can occur with the emission of sulphur dioxide (SO₂) gas.</p> <p>Contact with acids emits hydrogen sulphide (H₂S) gas.</p>
Decomposition products	<p>Hydrogen sulphide on contact with acids</p> <p>Sulphur dioxide in combustion</p>

Toxicological information	
OralLD50 (Rat)	>10000 mg/Kg

Ecological effects

Ultramarine pigments are extremely stable, except under acidic conditions when they decompose to a white siliceous material with the evolution of hydrogen sulphide gas.

Disposal

- Method of disposal: Dispose in accordance with local and national regulations governing chemical waste.
- Additional information: Ultramarine pigments should not be washed into waste water drains. Ultramarine pigments should not be disposed of where there is a risk of contact with acids.

Transport information

Ultramarine pigments are not classified as dangerous substances for supply or transport under international regulations, however they should not be transported with acids.

Regulatory information

Ultramarine pigments are not classified as dangerous goods. Packages carry the following safety advice:

- S14: Keep away from acids
- S29: Do not empty into drains

Other information

Although Ultramarine pigments are non toxic, inhalation of dusts and powders should be avoided. Use dust extraction systems and wear a dust protection mask when handling bulk material.

The material supplied is intended only for industrial or laboratory use.

This document contains important information to ensure the safe handling and use of the material. The information in this document should be brought to the attention of the person in your organization responsible for safety matters. The technical information provided in this MSDS should only be used for the purpose of assessing hazards with respect to safety or the environment. This document is not a technical specification. If you wish a Technical Data Sheet for this product, please contact Lapis Lazuli Pigments (contact details on Page 1 of this document).

The information contained in this document is accurate to the best knowledge of Lapis Lazuli Pigments. The purpose of this document is to give guidelines relating to the environment and health and safety requirements. This document should not be taken as a warranty. It remains the user's responsibility to ensure that the information is appropriate for their use of the product. All necessary steps should be taken to meet current legislation.