



SAFETY DATA SHEET ULTRAMARINE BLUE REVISION 4, DATE 19 AUG 2022

1. IDENTIFICATION

Product Name	Ultramarine Blue
Other Names	C.I. 77007
Uses	Pigments; Paints and coatings.
Chemical Family	No Data Available
Chemical Formula	Na ₆ Al ₆ Si ₆ O ₂₄ S ₄
Chemical Name	C.I. Pigment Blue 29
Product Description	Sodium alumino-sulphosilicate.

Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Ltd	11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222
Redox Inc.	3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	Suite 13A.03, Menara Summit Persiaran Kewajipan USJ1 47600 UEP Subang Jaya Selangor, Malaysia	+60-3-5614-2111

Emergency Contact Details

For emergencies only; DO NOT contact these companies for general product advice.

Organisation	Location	Telephone
Poisons Information Centre	Australia – Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
National Poison Centre	Malaysia	+60-4-6536-999
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420 +1-703-527-3887

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust) Not Scheduled



Globally Harmonised System

Hazard Classification NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Signal Word None

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Safe Work Australia

National Guide for Classifying Hazardous Chemicals under the Model WHS Regulations

Hazard Classification NOT hazardous according to the criteria of Safe Work Australia under Model WHS Regulations

3. COMPOSITION/INFORMATION ON INGREDIENTS*Ingredients*

Chemical Entity	Formula	CAS Number	Proportion
C.I. Pigment Blue 29	Na ₆ Al ₆ Si ₆ O ₂₄ S ₄	57455-37-5	<=100 %

4. FIRST AID MEASURES*Description of necessary measures according to routes of exposure*

Swallowed	IF SWALLOWED: Rinse mouth. Do not induce vomiting unless directed to do so by medical personnel. Get medical advice/attention if you feel unwell. Never give anything by mouth to an unconscious person.
Eye	IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists, get medical advice/attention.
Skin	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs, get medical advice/attention.
Inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If respiratory symptoms persist, get medical advice/attention. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.
Advice to Doctor	Treat symptomatically and supportively.
Medical Conditions Aggravated by Exposure	No information available.

5. FIRE FIGHTING MEASURES

General Measures If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out. Non-combustible.

Flammability Conditions	
Extinguishing Media	If material is involved in a fire, use dry chemical, Carbon dioxide (CO ₂), foam or water spray for extinction.
Fire and Explosion Hazard	Contact with acids evolves flammable hydrogen sulphide gas.
Hazardous Products of Combustion	Fire may produce irritating and/or toxic gases, including Sulphur dioxide.
Special Fire Fighting Instructions	Contain runoff from fire control or dilution water - Runoff may cause pollution.
Personal Protective Equipment	Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.
Flash Point	No Data Available
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Ensure adequate ventilation. Do not touch or walk through spilled material. Avoid generating dust. Avoid breathing dust and contact with eyes, skin and clothing.
Clean Up Procedures	Sweep or shovel into suitable containers for reclamation or disposal (see SECTION 13).
Containment	Stop leak if you can do it without risk. Prevent dust cloud. Prevent entry into waterways, sewers, basements or confined areas.
Decontamination	No information available.
Environmental Precautionary Measures	Prevent entry into soils, drains and waterways.
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unauthorised personnel away.
Personal Precautionary Measures	Use personal protective equipment as required (see SECTION 8).

7. HANDLING AND STORAGE

Handling	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Minimise dust generation and accumulation. Avoid breathing dust and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8).
Storage	Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed. Keep away from heat and sources of ignition - No smoking. Keep away from incompatible materials (see SECTION 10).
Container	Keep in the original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No specific exposure standards are available for this product. For dusts from solid substances without specific occupational exposure standards: - Safe Work Australia Exposure Standard (Nuisance dusts): 8 hr TWA = 10 mg/m ³ (measured as inhalable dust). - New Zealand WES (Particulates not otherwise classified): TWA = 10 mg/m ³ ; TWA = 3 mg/m ³ (respirable dust).
Exposure Limits	No Data Available
Biological Limits	No information available.
Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust

ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

Personal Protection Equipment

- Respiratory protection: Wear respiratory protection in case of inadequate ventilation or if an inhalation risk exists. Recommended: Dust mask/particulate respirator (refer to AS/NZS 1715 & 1716).
- Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Safety glasses or chemical goggles.
- Hand protection: Handle with gloves. Recommended: Impervious gloves.
- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Overalls, safety shoes.

Special Hazards Precautions

No information available.

Work Hygienic Practices

Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Take off contaminated clothing and wash it before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Powder
Odour	Odourless
Colour	Blue
pH	6 - 9
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	No Data Available
Melting Point	No Data Available
Freezing Point	No Data Available
Solubility	Insoluble in water and organic solvents
Specific Gravity	2.25 - 2.35
Flash Point	No Data Available
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	400 °C
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	No information available.

Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	Non-combustible.
Reactions That Release Gases or Vapours	At temperatures in excess of 400 °C in the presence of air, an exothermic chemical reaction can occur, with the evolution of sulfur dioxide gas.
Release of Invisible Flammable Vapours and Gases	Contact with acids evolves flammable hydrogen sulphide gas.

10. STABILITY AND REACTIVITY

General Information	No hazardous reactions if stored and handled as prescribed/indicated.
Chemical Stability	Stable under normal conditions.
Conditions to Avoid	Avoid generating dust. Avoid overheating (decomposition).
Materials to Avoid	Incompatible/reactive with acids.
Hazardous Decomposition Products	At temperatures in excess of 400 °C in the presence of air, an exothermic chemical reaction can occur, with the evolution of sulfur dioxide gas. Contact with acids evolves flammable hydrogen sulphide gas.
Hazardous Polymerisation	Will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	Information on possible routes of exposure: - Ingestion: May cause gastrointestinal tract irritation with nausea, vomiting and diarrhoea. - Eye contact: May cause eye irritation. - Skin contact: May cause skin irritation. May cause an allergic reaction in certain individuals. - Inhalation: May be harmful if inhaled. Chronic effects: Prolonged or repeated skin contact may cause irritation and dermatitis. Prolonged or repeated inhalation exposure may cause chronic bronchitis.
Acute	
Ingestion	Acute toxicity (Oral): - LD50, Rat: >10,000 mg/kg [Supplier's SDS].
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic toxicity: - LC50, Fish: >32,000 mg/kg (96 h) [Supplier's SDS].
Persistence/Degradability	This material is not expected to biodegrade when released into the soil.
Mobility	No information available.
Environmental Fate	Prevent entry into soils, drains and waterways.
Bioaccumulation Potential	This material is not expected to significantly bioaccumulate.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Dispose of contents/container in accordance with local/regional/national regulations.
Special Precautions for Land Fill	Ultramarine pigments should not be disposed of where there is a risk of contact with acids.

14. TRANSPORT INFORMATION**Land Transport (Australia)**

ADG Code

Proper Shipping Name	Ultramarine Blue
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (Malaysia)

ADR Code

Proper Shipping Name	Ultramarine Blue
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (New Zealand)

NZS5433

Proper Shipping Name	Ultramarine Blue
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (United States of America)

US DOT

Proper Shipping Name	Ultramarine Blue
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (Vietnam)

Proper Shipping Name	Ultramarine Blue
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Sea Transport

IMDG Code

Proper Shipping Name	Ultramarine Blue
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	No
Comments	NON-DANGEROUS GOODS: Not regulated for SEA transport.

Air Transport

IATA DGR

Proper Shipping Name	Ultramarine Blue
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for AIR transport.

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification

NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

15. REGULATORY INFORMATION**General Information**

No Data Available

Poisons Schedule (Aust)

Not Scheduled

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code

Not Hazardous

National/Regional Inventories**Australia (AIC)**

Listed

Canada (DSL)

Listed

Canada (NDSL)

Not Determined

China (IECSC)

Listed

Europe (EINECS)

309-928-3

Europe (REACH)

Not Determined

Japan (ENCS/METI)

Listed

Korea (KECI)

Listed

Malaysia (List of Classified Substances)

Not Determined

New Zealand (NZIoC)

Listed

Philippines (PICCS)

Listed

Taiwan (TCSI)

Listed

USA (TSCA)

Listed

Mexico (INSQ)

Not Determined

16. OTHER INFORMATION**Related Product Codes**

ULMABL0400, ULMABL0500, ULMABL0800, ULMABL0900, ULMABL1000, ULMABL1001, ULMABL1002, ULMABL1003, ULMABL1004, ULMABL1005, ULMABL1006, ULMABL1007, ULMABL1008, ULMABL1100, ULMABL2000, ULMABL2001, ULMABL8000

SAFETY DATA SHEET ULTRAMARINE BLUE REVISION 4, DATE 19 AUG 2022

Revision	4
Revision Date	19 Aug 2022
Key/Legend	< Less Than > Greater Than AICS Australian Inventory of Chemical Substances atm Atmosphere CAS Chemical Abstracts Service (Registry Number) cm² Square Centimetres CO₂ Carbon Dioxide COD Chemical Oxygen Demand deg C (°C) Degrees Celcius EPA (New Zealand) Environmental Protection Authority of New Zealand deg F (°F) Degrees Farenheit g Grams g/cm³ Grams per Cubic Centimetre g/l Grams per Litre HSNO Hazardous Substance and New Organism IDLH Immediately Dangerous to Life and Health immiscible Liquids are insoluable in each other. inHg Inch of Mercury inH₂O Inch of Water K Kelvin kg Kilogram kg/m³ Kilograms per Cubic Metre lb Pound LC₅₀ LC stands for lethal concentration. LC₅₀ is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours. LD₅₀ LD stands for Lethal Dose. LD₅₀ is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals. ltr or L Litre m³ Cubic Metre mbar Millibar mg Milligram mg/24H Milligrams per 24 Hours mg/kg Milligrams per Kilogram mg/m³ Milligrams per Cubic Metre Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present. mm Millimetre mmH₂O Millimetres of Water mPa.s Millipascals per Second N/A Not Applicable NIOSH National Institute for Occupational Safety and Health NOHSC National Occupational Heath and Safety Commission OECD Organisation for Economic Co-operation and Development Oz Ounce PEL Permissible Exposure Limit Pa Pascal ppb Parts per Billion ppm Parts per Million ppm/2h Parts per Million per 2 Hours ppm/6h Parts per Million per 6 Hours psi Pounds per Square Inch R Rankine RCP Reciprocal Calculation Procedure STEL Short Term Exposure Limit TLV Threshold Limit Value tne Tonne TWA Time Weighted Average ug/24H Micrograms per 24 Hours UN United Nations wt Weight