

1. IDENTIFICATION

Product Name	Lithium carbonate
Other Names	No Data Available
Uses	Intermediate; Used in the production of glazes for ceramic and electrical porcelain, as a catalyst in the production of other lithium compounds, coating of arc welding electrodes, nucleonics, luminescent paints and dyes, glass ceramics and in aluminium production.
Chemical Family	No Data Available
Chemical Formula	Li ₂ CO ₃
Chemical Name	Carbonic acid, dilithium salt
Product Description	No Data Available

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	Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, 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	Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
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

Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Hazard Categories

Acute Toxicity (Oral) - Category 4

Skin Corrosion/Irritation - Category 2

Serious Eye Damage/Irritation - Category 2A

Toxic To Reproduction - Category 1B

Specific Target Organ Toxicity (Single Exposure) - Category 3

Specific Target Organ Toxicity (Repeated Exposure) - Category 2

Long-term Hazard To The Aquatic Environment - Category 3

Pictograms



Signal Word

Danger

Hazard Statements

H302

Harmful if swallowed.

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H335

May cause respiratory irritation.

H360Fd

May damage fertility. Suspected of damaging the unborn child.

H373

May cause damage to organs through prolonged or repeated exposure.

H412

Harmful to aquatic life with long lasting effects.

Precautionary Statements

Prevention

P201

Obtain special instructions before use.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P260

Do not breathe dusts or mists.

P273

Avoid release to the environment.

P270

Do not eat, drink or smoke when using this product.

P271

Use only outdoors or in a well-ventilated area.

Response

P308 + P313

IF exposed or concerned: Get medical advice/ attention.

P302 + P352

IF ON SKIN: Wash with plenty of water/...

P337 + P313

If eye irritation persists: Get medical advice/attention.

P312

Call a POISON CENTER or doctor if you feel unwell.

P330

Rinse mouth.

P332 + P313

If skin irritation occurs: Get medical advice/attention.

P362

Take off contaminated clothing.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P304 + P340

IF INHALED: Remove victim to fresh air and keep comfortable for breathing.

Storage

P403 + P233

Store in a well-ventilated place. Keep container tightly closed.

P405

Store locked up.

Disposal

P501

Dispose of contents/container in accordance with local / regional / national / international regulations.

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)

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

HSNO Classifications

Health Hazards	6.1D	Substances that are acutely toxic - Harmful
	6.4A	Substances that are irritating to the eye
	6.8A	Substances that are known or presumed human reproductive or developmental toxicants
	6.9A	Substances that are toxic to human target organs or systems
Environmental Hazards	9.3B	Substances that are ecotoxic to terrestrial vertebrates

3. COMPOSITION/INFORMATION ON INGREDIENTS**Ingredients**

Chemical Entity	Formula	CAS Number	Proportion
Lithium carbonate	Li2CO3	554-13-2	>=99 - 100 %

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

Swallowed	IF SWALLOWED: REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY. Urgent hospital treatment is likely to be needed. Immediately call a Poison Centre or doctor/physician for advice. Rinse mouth. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Wear a protective glove when inducing vomiting by mechanical means. Never give anything by mouth to an unconscious person. If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the SDS.
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. Seek medical attention without delay; if eye irritation persists or recurs, seek medical attention. NOTE: Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin	IF ON SKIN (or hair): Remove contaminated clothing and shoes immediately. Flush skin and hair with running water for several minutes; Wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing and shoes before reuse.
Inhaled	IF INHALED: If fumes or combustion products are inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a Poison Centre or doctor/physician for advice. Apply resuscitation if victim is not breathing - Do not use direct mouth-to-mouth method if victim ingested or inhaled the substance; use alternative respiratory method or proper respiratory device; Administer oxygen if breathing is difficult. Transport to hospital, or doctor, without delay.
Advice to Doctor	Onset of symptoms may be delayed for several hours. Qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition. Ensure that attending medical personnel are aware of identity and nature of the product(s) involved, and take precautions to protect themselves.
Medical Conditions Aggravated by Exposure	Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled. The material may accentuate any pre-

existing dermatitis condition.

5. FIRE FIGHTING MEASURES

General Measures	Alert Fire Brigade and tell them location and nature of hazard. If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out. Use fire fighting procedures suitable for surrounding area.
Flammability Conditions	Non-combustible; Material does not burn.
Extinguishing Media	There is no restriction on the type of extinguisher which may be used; Use extinguishing media suitable for surrounding area.
Fire and Explosion Hazard	Not considered a significant fire risk, however containers may burn.
Hazardous Products of Combustion	Fire or heat will produce irritating, toxic and/or corrosive gases, including metal oxides.
Special Fire Fighting Instructions	Contain runoff from fire control or dilution water - Runoff may pollute waterways.
Personal Protective Equipment	Wear self-contained breathing apparatus (SCBA) in combination with normal firefighting clothing (full fire kit).
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	Clean up all spills immediately. Ensure adequate ventilation. ELIMINATE all ignition sources (no smoking, flares, sparks or flames). Do not touch or walk through spilled material. Avoid dust formation. Avoid breathing dust and contact with eyes, skin and clothing.
Clean Up Procedures	Collect material (sweep or vacuum up) and place it into suitable, properly labelled containers for disposal (see SECTION 13).
Containment	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Prevent dust cloud.
Decontamination	Clean contaminated surface thoroughly. Do not flush into surface water or sanitary sewer system.
Environmental Precautionary Measures	Prevent entry into drains and waterways.
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unauthorised personnel away. Large spill: Alert Emergency Services and tell them location and nature of hazard.
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 - Use only outdoors or in a well-ventilated area. Handle in accordance with good industrial hygiene and safety practice. Try to avoid creating dusty conditions. Avoid all personal contact, including inhalation. Use personal protective equipment as required (see SECTION 8). Prevent concentration in hollows and sumps.
Storage	Store in a cool, dry and well-ventilated place, protected from environmental extremes. Keep containers securely sealed - Check all containers are clearly labelled and free from leaks. Store away from foodstuff containers and incompatible materials (see SECTION 10). Store locked up.
Container	Store in original (polyethylene or polypropylene) containers. Do NOT use aluminium or galvanised containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No value assigned for this specific material by Safe Work Australia. - Emergency Limits (Lithium carbonate): TEEL-1: 0.44 mg/m ³ TEEL-2: 4.8 mg/m ³ TEEL-3: 100 mg/m ³
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: Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures. Recommended: Particulate (refer to AS/NZS 1715 & 1716 or national equivalent). Use approved positive flow mask if significant quantities of dust becomes airborne. - Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Safety glasses with side shields; Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. - Hand protection: Wear protective gloves. Recommended: Polychloroprene, nitrile rubber, butyl rubber (suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present). - Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Overalls; PVC apron; Barrier cream.
Special Hazards Precautions	If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures.
Work Hygienic Practices	Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove contaminated clothing and shoes immediately and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Fluffy powder
Odour	Odourless
Colour	White
pH	11.4 1% soln.
Vapour Pressure	Negligible (@ No Data Available)
Relative Vapour Density	No Data Available
Boiling Point	1,310 °C (Decomposes)
Melting Point	723 °C
Freezing Point	No Data Available
Solubility	Partly miscible with water - Insoluble in alcohol; Soluble in dilute acids
Specific Gravity	2.11 (Water = 1)
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	1,300 °C

Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	73.89 g/mol
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	Nil @ 38 °C
VOC Volume	No Data Available
Additional Characteristics	Solubility in water: 1.54 % @ 5 °C; 0.72 % @ 100 °C
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; Material does not burn. Contact with incompatible materials is often violent and may produce ignition.
Reactions That Release Gases or Vapours	Fire or heat will produce irritating, toxic and/or corrosive gases, including metal oxides.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

General Information	Derivative of very electro-positive metal; Inorganic alkaline metal derivative. Reacts violently with fluorine; may react violently with chlorine trifluoride and bromine trifluoride (hypergolic oxidisers).
Chemical Stability	Product is considered stable; Unstable in the presence of incompatible materials.
Conditions to Avoid	Avoid creating dusty conditions.
Materials to Avoid	Incompatible/reactive with strong acids, acid chlorides, acid anhydrides and chloroformates. Segregate from fluorine, aluminium and zinc.
Hazardous Decomposition Products	Fire or heat will produce irritating, toxic and/or corrosive gases, including metal oxides.
Hazardous Polymerisation	Will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	<ul style="list-style-type: none">- Acute toxicity: Harmful if swallowed; animal experiments indicate that ingestion of less than 150 grams may be fatal or may produce serious damage to health.- Ingestion may cause irritation, abdominal pain, vomiting; Lithium, in large doses, can cause dizziness and weakness; kidney damage can result.- Skin corrosion/irritation: Causes skin irritation; May cause inflammation of the skin; systemic effects may result following absorption- Open cuts, abraded or irritated skin should not be exposed to this material.
---------------------	---

- Eye damage/irritation: Causes serious eye irritation.
- Respiratory/skin sensitisation: Not likely to be a skin sensitiser.
- Germ cell mutagenicity: Considered not to have mutagenic or genotoxic potential.
- Carcinogenicity: No information available.
- Reproductive toxicity: May damage fertility. Suspected of damaging the unborn child. Ample evidence exists from experimentation that reduced human fertility is directly caused by exposure to the material. Ample evidence exists, from results in experimentation, that developmental disorders are directly caused by human exposure to the material. Based on experience with animal studies, exposure to the material may result in toxic effects to the development of the foetus, at levels which do not cause significant toxic effects to the mother.
- STOT (single exposure): May cause respiratory irritation; Symptoms of acute exposure may include coughing, laryngitis, shortness of breath, neuromuscular changes, inflammation of the larynx, chemical pneumonitis and pulmonary oedema.
- STOT (repeated exposure): May cause damage to organs through prolonged or repeated exposure. Chronic exposure may result in central nervous system changes (blackout spells, epileptic seizures, coma), cardiovascular changes (cardiac arrhythmia, hypertension and circulatory collapse) and irreversible renal damage, even death. Lithium compounds can affect the nervous system and muscle. This can cause tremor, incoordination, spastic jerks and very brisk reflexes. Long-term exposure to respiratory irritants may result in airways disease and may cause changes in lung function (pneumoconiosis).
- Aspiration toxicity: No information available.

Acute

Ingestion	Acute toxicity (Oral): - LD50, Rat: 525 mg/kg
Inhalation	Acute toxicity (Inhalation): - LC50, Rat: >0.0008 mg/L (4 h)
Other	Acute toxicity (Dermal): - LD50, Rat: >2,000 mg/kg
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic toxicity: - LC50, Fish: 5.69 mg/L (96 h) [ECHA Registered substances - Ecotoxicological information]. - EC50, Crustacea: 6.24 mg/L (48 h) [ECHA Registered substances - Ecotoxicological information]. - NOEC, Fish: 2.87 mg/L (816 hr) [ECHA Registered substances - Ecotoxicological information].
Persistence/Degradability	Low persistence in water/soil; Low persistence in air.
Mobility	High mobility in soil (KOC = 1).
Environmental Fate	Harmful to aquatic life with long lasting effects - Avoid release to the environment; Prevent entry into drains and waterways.
Bioaccumulation Potential	Low bioaccumulative potential (LogKOW = -0.4605).
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. Recycle wherever possible or dispose of in an authorised landfill and in accordance with local/regional/national regulations. Do NOT allow wash water from cleaning or process equipment to enter drains; It may be necessary to collect all wash water for treatment before disposal.
Special Precautions for Land Fill	Contaminated packaging: Containers may still present a chemical hazard/danger when empty. If container can not be cleaned sufficiently well to ensure that residuals do not remain, or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. Where possible, retain label warnings and SDS and observe all notices pertaining to the product.

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

ADG Code

Proper Shipping Name	Lithium carbonate
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 (Malaysia)

ADR Code

Proper Shipping Name	Lithium carbonate
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 (New Zealand)

NZS5433

Proper Shipping Name	Lithium carbonate
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 (United States of America)

US DOT

Proper Shipping Name	Lithium carbonate
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available

SAFETY DATA SHEET LITHIUM CARBONATE REVISION 6, DATE 20 MAR 21

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	Lithium carbonate
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	Lithium carbonate
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	LITHIUM for therapeutic use, is listed in SCHEDULE 4 of the SUSMP, except when included in Schedule 2.
Poisons Schedule (Aust)	Not Scheduled

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code	HSR006826
---------------	-----------

National/Regional Inventories

Australia (AIIC)	Listed
Canada (DSL)	Listed
Canada (NDSL)	Not Determined
China (IECSC)	Listed
Europe (EINECS)	209-062-5
Europe (REACH)	Not Determined
Japan (ENCS/METI)	Listed
Korea (KECI)	Listed
Malaysia (EHS Register)	Not Determined
New Zealand (NZIoC)	Listed
Philippines (PICCS)	Listed
Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Not Determined
USA (TSCA)	Listed

16. OTHER INFORMATION

Related Product Codes	LICARB0900, LICARB1000, LICARB1002, LICARB1003, LICARB1004, LICARB1005, LICARB1006, LICARB1007, LICARB1008, LICARB1009, LICARB1010, LICARB2000, LICARB2001, LICARB2002, LICARB2003, LICARB3000, LICARB4000, LICARB4001, LICARB4002, LICARB4003, LICARB5100, LICARB5101, LICARB5102, LICARB5103, LICARB5104, LICARB5105, LICARB5106, LICARB5107, LICARB5108, LICARB5109, LICARB5110, LICARB5111, LICARB5112, LICARB5113, LICARB6000, LICARB7000, LICARB7100, LICARB7101, LICARB7200, LICARB7201, LICARB7300, LICARB7301, LICARB7302, LICARB7500, LICARB7600, LICARB8000, LICARB9000, LICARB9001, LICARB9500
Revision	6
Revision Date	20 Mar 2021
Reason for Issue	Update
Key/Legend	<p>< Less Than</p> <p>> Greater Than</p> <p>AICS Australian Inventory of Chemical Substances</p> <p>atm Atmosphere</p> <p>CAS Chemical Abstracts Service (Registry Number)</p> <p>cm² Square Centimetres</p> <p>CO₂ Carbon Dioxide</p> <p>COD Chemical Oxygen Demand</p> <p>deg C (°C) Degrees Celcius</p> <p>EPA (New Zealand) Environmental Protection Authority of New Zealand</p> <p>deg F (°F) Degrees Fahrenheit</p> <p>g Grams</p> <p>g/cm³ Grams per Cubic Centimetre</p> <p>g/l Grams per Litre</p> <p>HSNO Hazardous Substance and New Organism</p> <p>IDLH Immediately Dangerous to Life and Health</p> <p>immiscible Liquids are insoluable in each other.</p>

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 Health 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