



SAFETY DATA SHEET AQUEOUS COLLOIDAL SILICA REVISION 3, DATE 19 APR 19

1. IDENTIFICATION

Product Name	Aqueous Colloidal Silica
Other Names	LEVASIL 200/40%
Uses	Chemicals industry.
Chemical Family	No Data Available
Chemical Formula	Unspecified
Chemical Name	Amorphous silica, aqueous colloidal solution
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 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)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Amorphous silica, aqueous colloidal solution	Unspecified	Unspecified	100 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	IF SWALLOWED: Rinse mouth, then drink plenty of water. 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 10 - 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 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. Apply resuscitation if victim is not breathing; Administer oxygen if breathing is difficult.
Advice to Doctor	Treat symptomatically.
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.
Flammability Conditions	Non-combustible; Material does not burn.
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	Containers may explode when heated.
Hazardous Products of Combustion	Fire or heat may produce irritating, toxic and/or corrosive fumes, including Silicon oxides.
	Contain runoff from fire control or dilution water - Runoff may pollute waterways.

Special Fire Fighting Instructions

Personal Protective Equipment	Wear self-contained breathing apparatus (SCBA) and chemical splash suit. SCBA and structural firefighter's uniform may 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	No action shall be taken involving any personal risk or without suitable training. Ensure adequate ventilation. Do not touch or walk through spilled material - Hazard of slipping on spilt product. Avoid contact with eyes, skin and clothing.
Clean Up Procedures	Absorb with earth, sand or other non-combustible material and transfer to a suitable container for disposal (see SECTION 13).
Containment	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Move containers from spill area.
Decontamination	No information available.
Environmental Precautionary Measures	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution.
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. Avoid contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8).
Storage	Store at temperatures between 5 - 35°C in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed. Do not allow product to freeze. Keep away from foodstuffs and incompatible materials (see SECTION 10).
Container	Keep in the original container or dark containers made of anti-corrosive material(s).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No specific exposure standards are available for this product.
Exposure Limits	No Data Available
Biological Limits	No information available.
Engineering Measures	No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Personal Protection Equipment	<ul style="list-style-type: none"> - Respiratory protection: Use a properly fitted air-purifying or air-fed respirator complying with An approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator (refer to AS/NZS 1715 & 1716). - Eye/face protection: Wear appropriate eye protection to avoid eye contact. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure. Recommended: Safety glasses with side-shields. - Hand protection: Handle with gloves. Chemical resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Recommended: Nitrile rubber (NBR), Polychloroprene (CR), Polyvinyl chloride (PVC).

- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. No recommendation.

Special Hazards Precautions

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Work Hygienic Practices

Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Take off contaminated clothing and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Liquid
Odour	Odourless
Colour	White
pH	9 - 11
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	100 °C
Melting Point	No Data Available
Freezing Point	No Data Available
Solubility	Miscible with water
Specific Gravity	No Data Available
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	No Data Available
Density	1.2 - 1.4 kg/L
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	<20 mPa.s (@ No Data Available)
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	Not applicable.
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.
Reactions That Release Gases or Vapours	Fire or heat may produce irritating, toxic and/or corrosive fumes, including Silicon oxides.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

General Information	Under normal conditions of storage and use, hazardous reactions will not occur.
Chemical Stability	The product is stable.
Conditions to Avoid	Do not allow product to freeze.
Materials to Avoid	No information available.
Hazardous Decomposition Products	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Fire or heat may produce irritating, toxic and/or corrosive fumes, including Silicon oxides.
Hazardous Polymerisation	No information available.

11. TOXICOLOGICAL INFORMATION

General Information	Information on possible routes of exposure: <ul style="list-style-type: none">- Ingestion: Colloidal silica is not classified as harmful, but ingestion may cause irritation of the mucous membranes.- Eye contact: May cause eye irritation.- Skin contact: Causes mild skin irritation. Can have a drying effect on the skin.- Inhalation: May cause respiratory tract irritation. Chronic effects: No information available.
Acute	
Ingestion	Acute toxicity (Oral): <ul style="list-style-type: none">- LD50, Rat: >2,000 mg/kg [Test results on an analogous product; Supplier's SDS].
EyeIrritant	Eye damage/irritation: <ul style="list-style-type: none">- Non-irritating [Test results on an analogous product].
SkinIrritant	Skin corrosion/irritation: <ul style="list-style-type: none">- Non-irritating [Test results on an analogous product].
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic toxicity: <ul style="list-style-type: none">- LC50, Fish: >5,000 mg/l (96 h) [Supplier's SDS]. Activated sludge: <ul style="list-style-type: none">- EC50: >10,000 mg/l *Ecological data refers to the main components.
Persistence/Degradability	No information available.
Mobility	No information available.
Environmental Fate	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Bioaccumulation Potential	No information available.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	The generation of waste should be avoided or minimised wherever possible. Product residues and empty containers should be reused, recycled or disposed of in accordance with local/regional/national regulations. Incineration or landfill should only be considered when recycling is not feasible.
Special Precautions for Land Fill	This material and its container must be disposed of in a safe way. When uncleaned empty containers are passed on, the recipient must be warned of any possible hazard that may be caused by residues.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name	Aqueous Colloidal Silica
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	Aqueous Colloidal Silica
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	Aqueous Colloidal Silica
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	Aqueous Colloidal Silica
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	Aqueous Colloidal Silica
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	Aqueous Colloidal Silica
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 Assessed

National/Regional Inventories

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

16. OTHER INFORMATION

Related Product Codes COSILI2400, COSILI2401, COSILI2410, COSILI2500, COSILI3500

Revision 3

Revision Date 19 Apr 2019

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