SAFETY DATA SHEET

Revision date: 02-Nov-2022



Revision Number 4

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier

Product Name CONBEX HT

Product Code(s) 000000052080

Other means of identification

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Anchoring grout for top down grouting of cables in mines and tunnels.

Uses advised against No information available.

Supplier

Minova Australia Pty Ltd ABN: 084 965 962 102 Albatross Road, Nowra, NSW 2541 Australia

Telephone Number: 1300 MINOVA (1300 646 682) Facsimile: 1300 FAXMINOVA (1300 329 646)

Website: www.minovaglobal.com

Emergency telephone number

Emergency telephone number 1800 033 111 (ALL HOURS)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

GHS Classification

Not classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG)

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1

SIGNAL WORD

Danger

Label elements

Corrosion Health hazard **Exclamation mark**



Hazard statements

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H335 - May cause respiratory irritation

H350 - May cause cancer

H372 - Causes damage to organs through prolonged or repeated exposure if inhaled

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Do not breathe dusts or mists

Wash hands thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Contaminated work clothing should not be allowed out of the workplace

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

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention

Specific treatment (see First aid on this SDS)

Get medical advice/attention if you feel unwell

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

Immediately call a POISON CENTER or doctor/physician

IF ON SKIN: Wash with plenty of water and soap

If skin irritation or rash occurs: Get medical advice/attention

Take off contaminated clothing and wash it before reuse

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

Call a POISON CENTER or doctor if you feel unwell

Precautionary Statements - Storage

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

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Other hazards which do not result in classification

Poisons Schedule (SUSMP) None allocated

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical name	CAS No.	Weight-%
Sand (Crystalline silica)	-	30-60%
Portland Cement	65997-15-1	10-<30%
Calcium sulphoaluminate	-	10-<30%
Calcium sulfate	7778-18-9	1-<10%

Ingredients determined not to be hazardous	-	to 100%

4. FIRST AID MEASURES

Description of first aid measures

General advice For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New

Zealand 0800 764 766) or a doctor.

Inhalation Remove to fresh air and keep at rest in a position comfortable for breathing. Administer

oxygen if breathing is difficult. If symptoms persist, call a physician. If breathing has

stopped, give artificial respiration. Get medical attention immediately.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Get immediate

medical advice/attention.

Skin contact Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated

clothing and wash before reuse. In the case of skin irritation or allergic reactions see a

physician.

Ingestion Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Call

a physician immediately. Never give anything by mouth to an unconscious person.

Self-protection of the first aider

Use personal protective equipment as required. See section 8 for more information. Avoid

contact with eyes. Avoid contact with skin. Do not breathe dust.

Most important symptoms and effects, both acute and delayed

Symptoms May cause allergic skin reaction. May cause redness and tearing of the eyes. Irritating.

Difficulty in breathing. Erythema (skin redness). May cause blindness.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically. Can cause corneal burns.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

surrounding environment.

Unsuitable extinguishing media

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

Non-combustible, substance itself does not burn but may decompose upon heating to

produce corrosive and/or toxic fumes. Avoid generation of dust.

Hazardous combustion products Calcium oxides. Oxides of silicon. Oxides of sulfur.

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact

with skin, eyes, and clothing. Wash thoroughly after handling. Use personal protective

equipment as required. See section 8 for more information.

Other information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautionsKeep out of waterways. Local authorities should be advised if significant spillages cannot

be contained.

Methods and material for containment and cleaning up

Methods for containment Absorb or cover with dry earth, sand or other non-combustible material and transfer to

containers. Prevent dust cloud. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Keep in suitable, closed containers for disposal. After cleaning, flush away traces with

water. Avoid generation of dust.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use personal protection equipment. Avoid contact with skin and eyes. Do not get in eyes.

Do not breathe dust. Avoid generation of dust. Do not eat, drink or smoke when using this

product. Handle in accordance with good industrial hygiene and safety practice.

General hygiene considerations Contaminated work clothing should not be allowed out of the workplace. Do not get in eyes,

on skin, or on clothing. Wear suitable gloves and eye/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container closed when not in use. Store under cover in a dry place. Keep away from

water or moist air.

Incompatible materials Acids.

Poisons Schedule (SUSMP) None allocated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits No value assigned for this specific material by Safe Work Australia. However, Workplace

Exposure Standard(s) for constituent(s):

Portland cement: 8hr TWA = 10 mg/m ³

Silica Crystalline - Quartz (respirable dust): 8hr TWA = 0.05 mg/m³, Carcinogen Category 1A

Calcium sulfate: 8hr TWA = 10 mg/m³

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

Carcinogen Category 1A - established human carcinogen. There is sufficient evidence to establish a causal association between human exposure and the development of cancer.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls

Engineering controls Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, DUST MASK.











Eye/face protection

Goggles.

Skin and body protection

Wear suitable protective clothing. Overalls. Protective shoes or boots.

Hand protection

Protective gloves.

Respiratory protection

If determined by a risk assessment an inhalation risk exists, wear a dust mask meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Environmental exposure controls

No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Solid
Appearance Powder
Color Grey
Odor Cementitious

Odor thresholdNo information available.

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pН 11 - 12 None known None known No data available pH (as aqueous solution) None known Melting point / freezing point >1200 C Boiling point / boiling range Not applicable None known Flash point Not applicable None known **Evaporation rate** Not applicable None known Flammability (solid, gas) No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapor pressure No data available None known No data available Vapor density None known Relative density No data available None known None known Water solubility Insoluble in water Reacts with water Solubility(ies) No data available None known **Partition coefficient** No data available None known **Autoignition temperature** Not applicable None known **Decomposition temperature** No data available None known Kinematic viscosity Not applicable None known No data available **Dynamic viscosity** None known

Other information

10. STABILITY AND REACTIVITY

Reactivity

Reactivity Reacts with strong acids.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid

Conditions to avoid Protect from moisture. Dust formation.

Incompatible materials

Incompatible materials Acids.

Hazardous decomposition products

Hazardous decomposition products Calcium oxides. Oxides of silicon. Oxides of sulfur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure

Product InformationNo adverse health effects expected if the chemical is handled in accordance with this

Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the

chemical is mishandled and overexposure occurs are:

Inhalation Irritating to respiratory system.

Eye contact Causes serious eye damage. Causes serious eye irritation. May cause irreversible damage

to eyes.

Skin contactCauses skin irritation. Repeated or prolonged skin contact may cause allergic reactions with

susceptible persons. May cause sensitization by skin contact. Prolonged or repeated

contact may dry skin and cause irritation.

Ingestion Ingestion may cause irritation to mucous membranes. Can burn mouth, throat, and

stomach.

Symptoms Erythema (skin redness). Irritating. May cause allergic skin reaction. May cause redness

and tearing of the eyes. May cause blindness. Difficulty in breathing.

Numerical measures of toxicity - Product Information

No information available.

Component Information

our portion and a market property of the prope				
Chemical name	Oral LD50	Dermal LD50	Inhalation LC50	
Calcium sulfate	> 3000 mg/kg (Rat)	-	-	

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization May cause an allergic skin reaction. May cause sensitization by skin contact.

Germ cell mutagenicity Not classified.

Carcinogenicity May cause cancer. Contains a known or suspected carcinogen.

Reproductive toxicity Not classified.

STOT - single exposure May cause respiratory irritation.

STOT - repeated exposureCauses damage to organs through prolonged or repeated exposure if inhaled. (lungs).

Aspiration hazard Not classified.

Chronic effects: This material contains a small proportion of respirable crystalline silica as quartz(<1%).

Crystalline silica has been classified by the International Agency for Research on Cancer

(IARC) as a Group 1 agent. Group 1 - The agent is carcinogenic to humans.

Epidemiological studies in humans have revealed that crystalline silica may cause lung cancer, silicosis, lymph node fibrosis, airways disease, emphysema and lung inflammation.

It may be progressive, and lead to disability and death.

Crystalline silica has been shown to cause silicosis and lung cancer. Crystalline silica only causes these conditions when inhaled. Long-term overexposure to crystalline silica causes Silicosis, a form of pulmonary fibrosis. Continued overexposure to silica can lead to cardiopulmonary impairment.

For Portland cement: This material may contain trace amounts of chromium (VI). For Chromium (VI): Chromium (VI) compounds cause cancer of the lung. Positive associations have been observed between exposure to chromium (VI) compounds and cancer of the nose and nasal sinuses. This material has been classified by the International Agency for Research on Cancer (IARC) as a Group 1. Group 1 - The agent is carcinogenic to humans.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Calcium sulfate	-	LC50: =2980mg/L (96h, Lepomis macrochirus)	-	EC50: =3200mg/L (120h, Nitscheria linearis)
		LC50: >1970mg/L (96h, Pimephales promelas)		

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation Not expected to bioaccumulate.

Mobility

Mobility in soil No information available.

Other adverse effects

Other adverse effects High concentrations may harm aquatic life by the effect on pH.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Dispose of contents/ container to an approved landfill.

14. TRANSPORT INFORMATION

ADG

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

IATA

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

IMDG

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Australia

Not classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG)

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

See section 8 for national exposure control parameters

Poisons Schedule (SUSMP) None allocated

International Inventories

All the constituents of this material are listed on the Australian Inventory of Industrial

Chemicals.

Legend:

AIIC - Australian Inventory of Industrial Chemicals

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

16. OTHER INFORMATION

Reason(s) For Issue: 5 Yearly Revised Primary SDS

Change in Exposure Controls

Issuing Date: 02-Nov-2022

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

Revision Note:

The symbol (*) in the margin of this SDS indicates that this line has been revised.

Key or legend to abbreviations and acronyms used in the safety data sheet Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

C Carcinogen

Key literature references and sources for data used to compile the SDS

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian Industrial Chemicals Introduction Scheme (AICIS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

Disclaimer

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since The Supplier cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Supplier representative or The Supplier at the contact details on page 1.

The Supplier's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

End of Safety Data Sheet