Safety Data Sheet

Globally Proven Construction Solutions

1. PRODUCT IDENTIFICATION

TRADE NAME (as labeled) : NXT® Level Plus

MANUFACTURER'S/ DISTRIBUTOR'S NAME: LATICRETE South East Asia Pte Ltd
38 Sungei Kadut Street 2
(Level 2 A3),
Singapore 729245.

Phone number for additional information: (65) 6515 3028

Date prepared or revised: 21/08/2024

2. COMPOSITION INGREDIENTS

Chemical Names	CAS Numbers	Percent
Quartz	14808-60-7	<51
Calcium Oxide	1305-787-8	9-15
Cement, alumina, chemicals	65997-16-2	7-13
Calcium Sulfate Dihydrate	13397-24-5	0.3-12
Cement, Portland, chemicals	65997-15-1	3-7
Magnesium Oxide (MgO)	1309-48-4	2-5
Wollastonite (Ca(SiO3))	13983-17-0	>2
Limestone	1317-65-3	0.3-1.4
Kaolin	1332-58-7	<=1
(+)-Tartaric Acid	87-69-4	0.1-1
Silica, amorphous, precipitated and gel	112926-00-8	0.02-0.05
Chromium, ion (Cr6+)	18540-29-9	<0.00001
Methacrylic Acid	79-41-4	<0.001

**Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%)*

***The actual concentration of ingredient(s) is withheld as a trade secrete in accordance with the Hazardous Products Regulations (HPR) SOR/2015-17 and 29 CFR 1910.1200*

3. HEALTH HAZARD INFORMATION

Classification of substance or mixture

GHS–MY Classification

Skin Corr.1C	H314
Eye Dam.1	H318
Skin Sens. 1	H317
Carc.1A	H350
STOT SE 3	H335
STOT RE 1	H372

Signal Word : Danger

Hazard Statements : H314 – Causes severe skin burns and eye damage.
H317 – May cause an allergic skin reaction.
H318 – Causes serious eye damage.
H335 – May cause respiratory irritation.
H350 – May cause cancer (Inhalation).
H372 – Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation).

Precautionary Statements : P201 – Obtain special instructions before use.
P202 – Do not handle until all safety precautions have been read and understood.
P260 – Do not breathe dust.
P264 – Wash hands, forearms, and other exposed areas thoroughly after handling.
P270 – Do not eat, drink or smoke when using this product.
P271 – Use only outdoors or in a well-ventilated area.
P272 – Contaminated work clothing should not be allowed out of the workplace.

P280 – Wear protective gloves, protective clothing, and eye protection.
P301 + P330 + P331 – IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 – IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 – IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 – If exposed or concerned: Get medical advice/attention.
P310 – Immediately call a POISON CENTER or doctor.
P314 – Get medical advice/attention if you feel unwell.
P321 – Specific treatment (see 4 on this SDS).
P333 + P313 – If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364 – Take off contaminated clothing and wash it before reuse.
P403 + P233 – Store in a well-ventilated place. Keep container tightly closed.
P405 – Store locked up.
P501 – Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Other Hazards : Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

4. FIRST AID: EMERGENCY PROCEDURES

General : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible)

Eye Contact : Immediately rinse with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

Skin Contact	:	Immediately remove contaminated clothing. Immediately flush skin with plenty of water for at least 30 minutes. Get immediate medical advice/attention.
Inhaled	:	Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
Ingestion	:	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Most Important Symptoms and Effects Both Acute and Delayed

General	: May cause respiratory irritation. Skin sensitization. Causes severe skin burns and eye damage. May cause cancer (Inhalation). Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation).
Inhalation	: Irritation of the respiratory tract and the other mucous membranes. May be corrosive to the respiratory tract. The three types of silicosis include: 1) Simple chronic silicosis – which results from long-term exposure (more than 20 years) to low amounts of respirable crystalline silica. Nodules of chronic inflammation and scarring provoked by the respirable crystalline silica form in the lungs and chest lymph nodes. This disease may feature breathlessness and may resemble chronic obstructive pulmonary disease (COPD); 2) Accelerated silicosis – occurs after exposure to larger amounts of respirable crystalline silica over a shorter period of time (5 – 15 years); 3) Acute silicosis – results from short-term exposure to very large amounts of respirable crystalline silica. The lungs become very inflamed and may fill with fluid, causing severe shortness of breath and low blood oxygen levels. Inflammation, scarring, and symptoms progress faster in accelerated silicosis than in simple silicosis. Progressive massive fibrosis may occur in simple or accelerated silicosis, but is more common in the accelerated form. Progressive massive fibrosis results from severe scarring and leads to the destruction of normal lung structures.
Skin Contact	: When this product is wet it is corrosive. May cause an allergic skin reaction. Causes severe irritation which will progress to chemical burns.

Eye Contact	: When this product is wet it is corrosive. Causes permanent damage to the cornea, iris or conjunctiva.
Ingestion	: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.
Chronic Symptoms	: May cause cancer by inhalation. Some studies show that exposure to respirable crystalline silica (without silicosis) or that the disease silicosis may be associated with the increased incidence of several autoimmune disorders such as scleroderma (thickening of the skin), systemic lupus erythematosus, rheumatoid arthritis and diseases affecting the kidneys. Silicosis increases the risk of tuberculosis. Some studies show an increased incidence of chronic kidney disease and end-stage renal disease in workers exposed to respirable crystalline silica. Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation).

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

5. FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media	: Water spray, fog, carbon dioxide (CO2), alcohol-resistant foam, or dry chemical.
Unsuitable Extinguishing Media	: Do not use heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard	: Not considered flammable but may burn at high temperatures.
Explosion Hazard	: Product is not explosive.
Reactivity	: May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a

violent reaction. Quartz (silica) will dissolve in hydrofluoric acid producing a corrosive gas, silicon tetrafluoride. Calcium oxide reacts with water to form corrosive calcium hydroxide, with evolution of much heat. Temperatures as high as 800˚C (1472˚F) have been reached with addition of water (moisture in air or soil). Portland Cement reacts slowly with water forming hydrated compounds, releasing heat and producing a strong alkaline solution until reaction is substantially complete.

Advice for Firefighters

Precautionary Measures Fire : Exercise caution when fighting any chemical fire.

Firefighting Instructions : Use water spray or fog for cooling exposed containers.

Protection During Firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products : Carbon oxides (CO, CO2). Sulfur oxides. Nitrous fumes. Metallic oxides. Silica compounds.

Reference to Other Sections

Refer to 9 for flammability properties

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures : Do no breathe dust. Do not get in eyes, on skin, or on clothing. Do not handle until all safety precautions have been read and understood.

For Non-Emergency Personnel

Protective Equipment : Use Appropriate personal protective equipment (PPE).

Emergency Procedures : Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment : Equip cleanup crew with proper protection.

Emergency Procedures : Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

Environmental Precautions

Precent entry to sewers and public waters.

Methods and Materials for Containment and Cleaning Up

For Containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning up : Clean up spills immediately and dispose of waste safely. Recover the product by vacuuming, shovelling or sweeping. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill. Cautiously neutralize spilled solid.

Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed : May released corrosive vapors.

Precautions for Safe Handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid contact with eyes, skin and clothing. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Handle empty containers with care because they may still present a hazard. Do not get in eyes, on skin, or on clothing.

Hygiene Measures : Handle in accordance with good industrial hygiene and safety procedures.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures : Comply with applicable regulations.

Storage Conditions : Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area. Store in original container or corrosive resistant and/or lined container

Incompatible Materials : Reactive or incompatible with the following materials: oxidizing materials, acids, aluminium and ammonium salt.

Portland cement is highly alkaline and will react with acids to produce a violet, heat-generating reaction. Toxic gases or vapors may be given off depending on the acid involved. Reacts with acids, aluminium metals and ammonium salts. Aluminium powder and other alkali and alkaline earth elements will react in wet mortar or concrete, liberating hydrogen gas. Limestone ignites on contact with fluorine and is incompatible with acids, alum, ammonium salts, and magnesium. Silica reacts violently with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride yielding possible fire and/or explosions. Silicate dissolve readily in hydrofluoric acid producing a corrosive gas – silicon tetrafluoride. Strong acids, strong bases, strong oxidizers.

Specific End Use(s)

Underlayment. For professional use only.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control Parameters

For substances listed in 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA(WEEL), NIOSH(REL), OSHA(PEL), or DOSH(PEL).

Exposure Controls

Appropriate Engineering Controls	: Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Personal Protective Equipment	: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection. Face shield.
Materials for Protective Clothing	: Chemically resistant materials and fabrics. Corrosion-proof clothing.
Hand Protection	: Wear protective gloves.
Eye and Face Protection	: Chemical safety goggles and face shield.
Skin and Body Protection	: Wear suitable protective clothing.
Respiratory Protection	: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.
Other Information	: When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	: Solid
Appearance	: Grey powder
Odour	: Not available
Odour Threshold	: Not available
pH	: Not available
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: Not available
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapour Pressure	: Not available
Relative Vapour Density at 20˚C	: Not available
Relative Density	: Not available
Specific Gravity	: 0.531
Solubility	: Not available

Partition Coefficient: N-Octanol/Water : Not available

Viscosity : Not available

10. STABILITY AND REACTIVITY

Reactivity : May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction. Quartz (silica) will dissolve in hydrofluoric acid producing a corrosive gas, silicon tetrafluoride. Calcium oxide reacts with water to form corrosive hydroxide, with evolution of much heat. Temperatures as high as 800˚C (1472˚F) have been reached with addition of water (moisture in air or soil). Portland Cement reacts slowly with water forming hydrated compounds, releasing heat and producing a strong alkaline solution until reaction is substantially complete.

Chemical Stability : Stable under recommended handling and storage conditions (see 7).

Possibility of Hazardous Reactions : Hazardous polymerization will not occur.

Conditions to Avoid : Direct sunlight, extremely high or low temperatures, and incompatible materials.

Incompatible Materials : Reactive or incompatible with the following materials: oxidizing materials, acids, aluminum and ammonium salt. Portland cement is highly alkaline and will react with acids to produce a violent, heat-generating reaction. Toxic gases or vapors may be given off depending on the acid involved. Reacts with acids, aluminum metals and ammonium salts. Aluminum powder and other alkali and alkaline earth elements will react in wet mortar or concrete, liberating hydrogen gas. Limestone ignites on contact with fluorine and is incompatible with acids, alum, ammonium salts, and magnesium. Silica reacts violently with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine

trifluoride, manganese trifluoride, and oxygen difluoride yielding possible fire and/or explosions. Silicate dissolve readily in hydrofluoric acid producing a corrosive gas – silicon tetrafluoride. Strong acids, strong bases, strong oxidizers.

Hazardous Decomposition Products : Not expected to decompose under ambient conditions. Thermal decomposition generates: Corrosive vapors.

11. TOXICOLOGY INFORMATION

Information on Toxicological Effects – Product

Acute Toxicity (Oral) : Not classified.

Acute Toxicity (Dermal) : Not classified.

Acute Toxicity (Inhalation) : Not classified.

LD50 and LC50 Data : Not available.

Skin Corrosion/Irritation : Causes severe skin burns and eye damage.

Eye Damage/Irritation : Causes serious eye damage.

Respiratory or Skin Sensitization : May cause an allergic skin reaction.

Germ Cell Mutagenicity : Not classified.

Carcinogenicity : May cause cancer (Inhalation).

Specific Target Organ Toxicity (Repeated Exposure)
: Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation).

Reproductive Toxicity : Not classified.

Specific Target Organ Toxicity (Single Exposure)
: May cause respiratory irritation.

Aspiration Hazard : Not classified.

Symptoms/Injuries After Inhalation : Irritation of the respiratory tract and the other mucous membranes. May be corrosive to the respiratory tract. The three types of silicosis include: 1) Simple chronic silicosis – which results from long-term exposure (more than 20 years) to low amounts of respirable crystalline silica. Nodules of chronic inflammation and scarring provoked by the respirable crystalline silica form in the lungs and chest lymph nodes. This disease may feature breathlessness and may resemble chronic obstructive pulmonary disease (COPD); 2) Accelerated silicosis – occurs after exposure to larger amounts of respirable crystalline silica over a shorter period of time (5-15 years); 3) Acute silicosis – results from short-term exposure to very large amounts of respirable crystalline silica. The lungs become very inflamed and may fill with fluid, causing severe shortness of breath and low blood oxygen levels. Inflammation, scarring, and symptoms progress faster in accelerated silicosis than in simple silicosis. Progressive massive fibrosis may occur in simple or accelerated silicosis, but is more common in the accelerated form. Progressive massive fibrosis results from severe scarring and leads to the destruction of normal lung structures.

Symptoms/Injuries After Skin Contact

: When this product is wet it is corrosive. May cause an allergic skin reaction. Causes severe irritation which will progress to chemical burns.

Symptoms/Injuries After Eye Contact

: When this product is wet it is corrosive. Causes permanent damage to the cornea, iris or conjunctiva.

Symptoms/Injuries After Ingestion : May cause burns or irritation of the linings of the mouth, throat and gastrointestinal tract.

Chronic Symptoms : May cause cancer by inhalation. Some studies show that exposure to respirable crystalline silica (without silicosis) or that the disease silicosis may be associated with the increased incidence of several autoimmune disorders such as scleroderma (thickening of the skin), systemic lupus erythematosus, rheumatoid arthritis and diseases affecting the kidneys. Silicoses increases the risk of tuberculosis.

Some studies show an increased incidence of chronic kidney disease and end-stage renal disease in workers exposed to respirable crystalline silica. Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation).

Information on Toxicological Effects – Ingredient(s)

LD50 and LC50 Data:

Quartz (14808-60-7)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 5000 mg/kg

Calcium oxide (1305-78-8)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rabbit	> 2500 mg/kg

Magnesium Oxide (MgO) (1309-48-4)	
LD50 Oral Rat	3870 mg/kg

(+) – Tartaric acid (87-69-4)	
LD50 Oral Rat	10000 - 16000 mg/kg

Methacrylic acid (79-41-4)	
LD50 Oral Rat	1060 mg/kg
LD50 Dermal Rabbit	500 – 1000 mg/kg
LC50 Inhalation Rat	7.1 mg/l/4h
ATE US/CA (gas)	4500.00 ppmV/4h
ATE US/CA (dust, mist)	1.50 mg/l/4h

Kaolin (1332-58-7)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 5000 mg/kg

Quartz (14808-60-7)	
IARC Group	1
National Toxicology Program (NTP) Status	Known Human Carcinogens
OSHA Hazard Communication	In OSHA Hazard Communication Carcinogen list

Carcinogen List	

Silica, amorphous, precipitated and gel (112926-00-8)	
IARC Group	3

Chromium, ion (Cr6+) (18540-29-9)	
IARC Group	1
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list
OSHA Specifically Regulated Carcinogen List	In OSHA Specifically Regulated Carcinogen list

Wollastonite (Ca(SiO3)) (13983-17-0)	
IARC Group	3

12. ECOLOGICAL INFORMATION

Toxicity

Ecology-General: Not classified

Calcium oxide (1305-78-8)	
LC50 Fish 1	50.6 mg/l

(+)- Tartaric acid (87-69-4)	
LC50 Fish 1	> 100 mg/l (Exposure time: 96h – Species: Danio rerio [static])

Silica, amorphous, precipitated and gel (112926-00-8)	
LC50 Fish 1	10000 mg/l

Chromium, ion (Cr6+) (18540-29-9)	
LC50 Fish 1	36.2 mg/l (Exposure time: 96h – Species: Pimephales promelas)
LC50 Fish 2	7.6 mg/l (Exposure time: 96h – Specieis: Oncorhynchus mykiss)

Methacrylic acid (79-41-4)	
LC50 Fish 1	85 mg/l (Exposure time: 96h – Species: Oncorhynchus mykiss [flow-through])

ErC50 (algae)	14 mg/l
NOEC Chronic Crustacea	53 mg/l
NOEC Chronic Algae	9.8 mg/l

Persistence and Degradability

NXT® LEVEL Plus	
Persistence and Degradability	Not established

Bioaccumulative Potential

NXT® LEVEL Plus	
Bioaccumulative Potential	Not established

Calcium oxide (1305-78-8)	
BCF Fish 1	(no bioaccumulation)

Methacrylic acid (79-41-4)	
Log Pow	0.93

Mobility in Soil : Not available.

Other Adverse Effects

Other information : Avoid release to the environment.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Recommendations : Dispose of contents/container in accordance with local, regional, national, territorial, provincial and international regulations.

Additional Information : Container may remain hazardous when empty. Continue to observe all precautions.

Ecology-Waste Materials : Avoid release to the environment.

14. TRANSPORT INFORMATION

No special labeling or transportation placarding is required.

15. REGULATORY INFORMATION

Health Hazard : Specific target organ toxicity (single or repeated exposure)

: Carcinogenicity
: Respiratory or skin sensitization
: Serious eye damage or eye irritation
: Skin corrosion or irritation

16. OTHER INFORMATION

This information is furnished without warranty, representation, inducement or license of any kind; except that it is accurate to the best of our knowledge, or obtained from sources believed by us to be accurate.