SECTION 1: PRODUCT IDENTIFICATION

Product Name:	Durável TRO-DG/LG/W
Synonyms:	
Product Number:	65-TRO-DG/LG/W
Company:	Durável
Address:	225 Olympic St., Charlotte NC 28273
Business Phone:	(704) 837-7991
Emergency Phone:	Chemtrec US (800) 424-9300 CNN 1014580
Date of Current Revision:	July 22, 2024

SECTION 2: HAZARD IDENTIFICATION

Classification

OSHA Regulatory Status
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin Corrosion, H314	Category 1
Skin Sensitization, H317	Category 1
Serious Eye Damage/Eye Irritation, H318	Category 1
Specific Target Organ Toxicity (single exposure), Respiratory track irritation H335	Category 3
Carcinogenicity (inhalation), H350	Category 1A
Specific Target Organ Toxicity (repeated exposure, inhalation), H372	Category 1

EMERGENCY OVERVIEW: This product is a dry powdered mixture.

DANGER

Hazard Statements
Causes severe skin burns and eye damage
May cause an allergic skin reaction
Causes serious eye damage
May cause respiratory irritation
May cause cancer by inhalation
Causes damage to lungs through prolonged or repeated exposure by inhalation

Appearance: Powder **Physical State**: Dry **Odor**: Mild

Precautionary Statements – Prevention

P203: Obtain, read and follow all safety instructions before use.
P260: Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
P264: Wash hands and exposed skin thoroughly after handling.
P264+P265: Wash hands thoroughly after handling. Do not touch eyes.
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/ eye protection/ face protection.

Precautionary Statements – Response

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352: IF ON SKIN: wash with plenty of water and soap.
P302+P361+P354: IF ON SKIN: Take off Immediately all contaminated clothing. Immediately rinse with water for several minutes.
P333+P317: If skin irritation or rash occurs: Get medical help.
P362+P364: Take off immediately all contaminated clothing and wash it before reuse.
P363: Wash contaminated clothing before reuse.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P316: Get emergency medical help immediately.
P319: Get medical help if you feel unwell.
P305+P354+P338: IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P317: Get emergency medical help.

Precautionary Statements - Storage

P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.

Precautionary Statements – Disposal

P501: Recycle and/or dispose of contents and containers in accordance with local, regional, national, and international regulations.

Other Hazards Which Do Not Result In Classifications Or Are Not Covered By The GHS

California Proposition 65: WARNING. This product can expose you to chemicals including crystalline silica, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

This material is regulated as a mixture.

Substance

Chemical Name	CAS No.	EC #	Weight - %
Portland Limestone Cement Type IL	65997-15-1	ND	30-40 *
Crystalline Silica Quartz	14808-60-7	ND	60-70 *
Calcium Oxide	1305-78-8	ND	1-10 *
Non-Hazardous / Trade Secret			1-10 *

*The exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4: FIRST-AID MEASURES

Description of First Aid Measures

Eye Contact IF IN EYES: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.

Skin Contact IF ON SKIN: (or hair) Take off immediately all contaminated clothing, shoes and leather goods such as watchbands and belts. Rinse skin with water or shower. Seek medical attention for rashes, burns, irritation, dermatitis and prolonged unprotected exposures to wet cement, cement mixtures or liquids from wet cement. Chemical burns must be treated promptly by a physician.

Inhalation IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical help if coughing or other symptoms persist. Inhalation of large amounts of Portland limestone cement requires immediate medical attention. Call a POISON CENTER or doctor. If the individual is not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Ingestion IF SWALLOWED: Immediately call a POISON CENTER or doctor for treatment advice. Rinse mouth. Do not induce vomiting unless directed to do so by the poison center or doctor. If vomiting occurs naturally, lay person on their side, in the recovery position.

Most important symptoms and effects, both acute and delayed

Inhalation Airborne dusts are severely irritating to the upper respiratory tract. Symptoms of exposure may include coughing, sneezing, and shortness of breath. Long-term inhalation exposure to dusts containing respirable size crystalline silica can cause silicosis and lung cancer.

Eye Contact Severely irritating in contact with eyes. Causes eye damage which may be permanent and may cause blindness. Solid particles react with moisture in the eye to form clumps of moist compound which may be difficult to remove.

Skin Contact Portland limestone cement dust, when combined with water or sweat on the skin, can cause caustic burns, sometimes referred to as cement burns. Cement burns may result in blisters, dead or hardened skin, or black or green skin. In severe cases, these burns may extend to the bone and cause disfiguring scars or disability. Workers cannot rely on pain or discomfort to alert them to cement burns because cement burns may not cause immediate pain or discomfort. By the time the worker becomes aware of a cement burn, much damage has already been done. Cement burns can get worse after skin contact with cement has ended. Any person experiencing a cement burn is advised to see a health care professional immediately. May cause an allergic skin reaction from trace amounts of sensitizing metals in cement. Symptoms of an allergy range from mild rashes to severe skin ulcers.

Ingestion Severely irritating to the mouth, throat, and gastro-intestinal system if swallowed. Symptoms may include severe pain and burning of the mouth, throat, esophagus, and gastro-intestinal tract with nausea, vomiting, and diarrhea. If aspiration into the lungs occurs during vomiting, severe lung damage may result.

Indication of any immediate medical attention and special treatment needed

Corrosive material: Emergency medical attention is needed if inhaled, in contact with eyes or if swallowed. Workers exposed to cementitious materials who experience skin problems, including seemingly minor ones, are advised to get immediate medical attention. In cement-related dermatitis, early diagnosis and treatment can help prevent chronic skin problems.

Over-Exposure Signs/Symptoms

Inhalation Respiratory tract irritation and coughing.

Eye Contact Pain, watering, and redness.

Skin Contact Pain or irritation, redness and blistering may occur, skin burns, ulceration, and necrosis may occur.

Ingestion Stomach pains.

Potential Chronic Health Effects

Long-term exposure to high concentrations of crystalline silica quartz may cause cancer. Long-term exposure to high concentrations of dust containing iron oxide can cause a benign condition termed "pulmonary siderosis." This condition is not associated with any physical impairment of lung function. Workers exposed to cementitious materials who experience skin problems, including seemingly minor ones, are advised to get immediate medical attention. In cement-related dermatitis, early diagnosis and treatment can help prevent chronic skin problems.

Note to Physicians Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing media appropriate to the surrounding fire conditions.

Special Hazards Arising From the Product
Unsuitable extinguishing media: Use caution when using water. Water jet may scatter the dry powder. Do not get water inside closed containers; contact with water will generate heat and form a corrosive liquid. Use caution when using CO2; it may scatter the dry powder.

Unusual Fire and Explosion Hazard
Dust may form explosive mixture with air. Electrostatic charging is possible.

Advice for Firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Wear protective work gloves, clothing, boots and eye protection. Stop further release if safe to do so. Do not touch spilled material. Do not breathe any dusts.

Environmental Precautions

Environmental precautions Prevent releases into the environment. Avoid dispersal of spilled material and runoff from contact with soil, waterways, drains, and sewers.

Methods and material for containment and cleaning up

Avoid dust generation and prevent wind dispersal. Do not dry sweep dust or blow with compressed air. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labelled waste container. Small spills may be picked up with a damp mop. Wet product may be scraped up and placed in appropriate disposal containers. Allow wet product to dry before disposal. Do not flush down drains.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

People working with this product should be properly trained regarding its hazards and its safe use. Wash hands and exposed skin thoroughly after handling. Wash with plenty of water and pH neutral soap; do not use waterless hand cleaners such as alcohol-based gels. Clean nail beds and creases between fingers. Avoid wearing watches and rings at work; wet cement can collect next to the skin and cause burns. Contaminated work clothing should not be allowed out of the workplace.

Prevent eye contact. Wear protective gloves, protective clothing, and eye protection or face protection.

Do not eat, drink, or smoke where this material is handled, stored, and processed. Remove contaminated clothing and protective equipment before entering eating areas. Follow good practices for safe glove removal. For hardened, set cement: Use wet cutting methods when possible to avoid generation of breathable dusts.

Conditions for safe storage, including any incompatibilities

Store in a secure location, accessible by authorized persons only. Protect from contact with water, moisture, and humidity. Keep out of reach of children. Store away from food and animal feed. Keep away from incompatible substances such as strong acids.

SECTION 8: EXPOSURE CONTROLS – PERSONAL PROTECTION

Control parameters

Component	**Value / Source**			
Portland Limestone Cement 65997-15-1	TLV	1 mg/m3 (respirable fraction), 8h	No data available	ACGIH
	REL	5 mg/m3 (respirable fraction), 10h	10 mg/m3 (total dust), 10h	NIOSH
	TWA	5 mg/m3 (respirable fraction), 8h	15 mg/m3 (total dust), 8h	OSHA PEL
Crystalline Silica, quartz 14808-60-7	TWA	.05 mg/m3 (respirable fraction), 10h	No data available	NIOSH REL
	TWA	.025 mg/m3 (respirable fraction), 8h	No data available	ACGIH TLV

	IDLH	50 mg/m3	No data available	US IDLH
	TWA	10 mg/m3 divided by %SiO2 + 2 (respirable fraction)	30 mg/m3 divided by %SiO2 + 2 (total dust)	OSHA PEL
Calcium Oxide 1305-78-8	TWA	2 mg/m3, 8h	No data available	ACGIH TLV
	TWA	2 mg/m3, 10h	No data available	NIOSH REL
	TWA	5 mg/m3, 8h	No data available	OSHA PEL
Limestone 1317-65-3	TWA	5 mg/m3 (respirable fraction), 10h	10 mg/m3 (total dust), 10h	NIOSH REL
	TWA	5 mg/m3 (respirable fraction), 8h	15 mg/m3 (total dust), 8h	OSHA PEL
Gypsum 13397-24-5	TWA	10 mg/m3 (respirable fraction), 8h	No data available	ACGIH TLV
	TWA	5 mg/m3 (respirable fraction), 8h	10 mg/m3 (total dust), 8h	NIOSH REL
	TWA	5 mg/m3 (respirable fraction), 8h	15 mg/m3 (total dust), 8h	OSHA PEL
Calcium Carbonate 1317-65-3	PEL	15 mg/m3 (inhalable dust)	5 mg/m3 (respirable dust)	OSHA

Exposure Controls

Handle in accordance with good industrial hygiene and safety practice. Ensure regular cleaning of equipment, work area, and clothing. If airborne dusts are generated, monitor concentrations in air and provide local exhaust ventilation when any exposure guideline is exceeded. If engineering controls and work practices are not effective in controlling exposure to this material or if adverse health symptoms are experienced, wear suitable personal protection equipment including approved respiratory protection.

Individual Protection Measures

Eye/Face Protection: Wear safety glasses, chemical safety goggles, or full-face protection.

Skin Protection

Wear waterproof, snug-fitting, alkali-resistant gloves, boots, knee, and elbow pads. Wear protective clothing with long sleeves and long pants. Protective clothing can be taped inside gloves and boots. Take off contaminated clothing and wash it before re-use. Contaminated work clothing should not be allowed out of the workplace.

Respiratory Protection

When dust concentrations in air exceed the occupational exposure guideline, wear an approved air-purifying respirator with an appropriate cartridge. Consult safety supplier for respirator specifications.

Other Protection

Handle in accordance with good industrial hygiene and safety practice. Clean water should always be readily available for skin and (emergency) eye washing. Every attempt should be made to avoid skin and eye contact with cement. Do not get powder inside boots, shoes, or gloves. Do not allow wet, saturated clothing to remain against the skin. Promptly remove clothing and shoes that are wet with cement mixtures. Wash clothing and shoes thoroughly before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Powder	**Odor**	No distinct odor
Appearance	Powder	**Odor Threshold**	No data available
Color	Varies by selection		

Property	**Values**	**Remarks/Method**
pH In water	>11.5	
Melting point/freezing point	Not Available	
Boiling point/Boiling range	Not Available	
Flash point	Not Available	
Evaporation rate	Not Available	
Flammability (solid, gas)	Not Relevant	
Flammability Limit in Air		
Upper flammability limit:	Not Available	
Lower flammability limit:	Not Available	
Vapor pressure (mm Hg)	Not Applicable	
Vapor density (air = 1)	Not Applicable	
Relative density	2.3 to 3.1	
Water solubility	0.1 – 1%	
Solubility in other solvents	Not Available	
Partition coefficient	Not Available	
Autoignition temperature	Not Available	
Decomposition temperature	Not Available	
Kinematic viscosity	Not Available	
Dynamic viscosity	Not Available	
Explosive properties	Not Available	
Oxidizing properties	Not Available	

Other Information

Softening point	Not Relevant
Molecular weight	Not Available
VOC Content (%)	<10 g/L
Density	Not Available
Bulk Density	Not Available

SECTION 10: STABILITY AND REACTIVITY

Reactivity
Reacts slowly with water forming hydrated compounds, releasing heat and a strongly alkaline solution.

Chemical stability
Stable at normal ambient and anticipated storage and handling conditions of temperature and pressure.

Possibility of Hazardous Reactions
Portland limestone cement is highly alkaline and may react vigorously with strong acids, ammonium salts, and aluminum metals.

Conditions to avoid
No specific data.

Incompatible materials
Strong acids – incompatible with strong acids; may react vigorously.
Water – reaction generates heat.
Aluminum – aluminum powder and other alkali earth elements will react in the presence of water liberating extremely flammable hydrogen gas. Calcium oxide is corrosive to aluminum metal.
Flouride compounds – cement dissolves in HF producing corrosive silicon tetrafluoride gas.
Reacts with ammonium salts.

Hazardous Decomposition Products
In contact with water and moisture, generates corrosive calcium hydroxide.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure
Skin contact; Eye contact; Inhalation of dust.

Acute Toxicity

Inhalation	Data not available for the mixture. Component substances are not classified in any category of acute toxicity hazard. Dusts are severely irritating to the respiratory tract.
Ingestion	Data not available for the mixture. Component substances are not classified in any category of acute toxicity hazard. Severely irritating or corrosive to mouth, throat, and gastro-intestinal tract.
Skin	Data not available for the mixture. Component substances are not classified in any category of acute toxicity hazard.

Skin Corrosion / Irritation

Human experience has shown Portland cement can cause caustic burns when in prolonged contact with the skin.

Serious Eye Damage / Irritation

Information for Portland Cement and Calcium oxide: Causes serious eye damage and possible blindness. Damage may be permanent if treatment is not immediate.

STOT (Specific Target Organ Toxicity)

Single Exposure Breathing dusts causes respiratory irritation. Inflammation of the respiratory passages, ulceration, and perforation of the nasal septum and pneumonia has been attributed to the inhalation of cement dust containing calcium oxide.

Repeated Exposure Prolonged and repeated breathing of dust may cause injury to the lungs. The extent and severity of lung injury correlates with the length of exposure and dust concentration.
Contains crystalline silica. Repeated or prolonged exposure to respirable crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss. Acute silicosis can be fatal.

Aspiration Hazard

Corrosive material. If aspiration into the lungs occurs during vomiting, severe lung damage may result. Does not meet criteria for classification for aspiration hazard class.

Sensitization – Respiratory and/or Skin

Product may contain trace concentrations of Chromium VI compounds that can cause an allergic skin reaction, allergic contact dermatitis, or ACD. Once sensitized, brief skin contact with very small amounts of Chromium VI may result in inflammation, rash, itching, or severe skin ulcers. ACD is long-lasting and employees can remain sensitized for Chromium VI for many years. Not known to be a respiratory sensitizer.

Carcinogenicity

Portland cement is not classifiable as a human carcinogen according to ACGIH® categories. Crystalline silica is considered a hazard by inhalation. IARC has classified crystalline silica as a Group 1 substance, carcinogenic to humans. This classification is based on the findings of laboratory animal studies (inhalation and implantation) and epidemiology studies that were considered sufficient for carcinogenicity.

Reproductive Toxicity

Data not available.

Germ Cell Mutagenicity

Data not available.

Interactive Effects

Data not available.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Avoid release to the environment. Mixing with water forms an alkaline solution. May be harmful to wildlife and aquatic life.

Persistence and Degradability

Not readily bio-degradable

Bio Accumulative Potential

Not applicable

Mobility in Soil

Data not available

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal

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

SECTION 14: TRANSPORTATION INFORMATION

DOT	Not regulated
ADR/RID	Not regulated
IATA	Not regulated
IMDG	Not regulated

SECTION 15: REGULATORY INFORMATION

CANADA

NSNR Status

All ingredients are listed on the DSL or are not required to be listed.

Domestic Substances List (DSL) Inventory (Quartz)

WHMIS Classification: Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

USA

TSCA Status
All ingredients are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

SARA Section 311/312 Hazard Classes (Silica Sand)
Immediate (acute) health hazard
Delayed (chronic) health hazard

International Agency for Research on Cancer (IARC) (Quartz)
Listed

National Toxicology Program (NTP) (Quartz)
Listed as a carcinogen

California Proposition 65
WARNING. This product can expose you to chemicals including crystalline silica, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Other US State Regulations (Quartz)
U.S. - Hawaii - Occupational Exposure Limits - TWAs
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)
U.S. - Idaho - Occupational Exposure Limits - Mineral Dusts
U.S. - Illinois - Toxic Air Contaminant Carcinogens
U.S. - Maine - Chemicals of High Concern
U.S. - Massachusetts - Right To Know List
U.S. - Michigan - Occupational Exposure Limits - TWAs
U.S. - Minnesota - Chemicals of High Concern
U.S. - Minnesota - Hazardous Substance List
U.S. - Minnesota - Permissible Exposure Limits - TWAs
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - New Jersey - Special Health Hazards Substances List
U.S. - Oregon - Permissible Exposure Limits - Mineral Dusts
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Tennessee - Occupational Exposure Limits - TWAs
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term
U.S. - Vermont - Permissible Exposure Limits - TWAs
U.S. - Washington - Permissible Exposure Limits - STELs
U.S. - Washington - Permissible Exposure Limits - TWAs

SECTION 16: OTHER INFORMATION

Issue Date	May 15, 2023
Revision Date	July 22, 2024
Revision Note	None

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Durável assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, Durável assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety precautions are followed.

END OF SAFETY DATA SHEET