

SECTION 1: PRODUCT IDENTIFICATION

Product Name: Durável TSO-W/C
Synonyms:
Product Number: 65-TSO-W/C
Company: Durável
Address: 1212-A Graphic Ct., Charlotte NC 28206
Business Phone: (704) 837-7991
Emergency Phone: Chemtrec US (800) 424-9300 CNN 874540
Date of Current Revision: November 1, 2022

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
Eye Damage, H318	Category 1
Specific Target Organ Toxicity (single exposure), 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
- 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

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Do not breathe dust
 Wash hands and exposed skin 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, boots, protective clothing, and face protection

Precautionary Statements – Response

IF exposed or concerned: Get medical advice/attention
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical attention.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor 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.

Precautionary Statements - Storage

Store in a secure location, accessible by authorized persons only.

Precautionary Statements – Disposal

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.

May for combustible dust concentrations in the air.

SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

This material is regulated as a mixture.

Substance

Chemical Name	CAS No.	EC #	Weight - %
Portland Cement Type 1	65997-15-1	ND	<32 *
Crystalline Silica Quartz	14808-60-7	ND	<62 *
Calcium Oxide	1305-78-8	ND	<4 *
Non-Hazardous / Trade Secret			<8 *

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

SECTION 4: FIRST-AID MEASURES**Description of First Aid Measures**

General Advice	Move out of the dangerous area. Consult a physician. Provide this Safety Data Sheet to the doctor in attendance.
Eye Contact	IF IN EYES: Rinse eyes cautiously with water for several minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. Chemical burns must be treated promptly by a physician.
Skin Contact	IF ON SKIN: (or hair) Get medical attention immediately. Heavy exposure to Portland cement dust, wet concrete, or associated water requires prompt attention. Quickly remove contaminated clothing, shoes, and leather goods such as watchbands and belts. Quickly and gently blot away excess Portland cement. Immediately wash thoroughly with lukewarm, gently flowing water and non-abrasive pH-neutral soap. Seek medical attention for rashes, burns, irritation, dermatitis, and prolonged unprotected exposures to wet cement, cement mixtures, or liquids from wet cement. Burns should be treated as caustic burns. Portland cement causes skin burns with little warning. Discomfort or pain cannot be relied upon to alert a person to a serious injury. You may not feel pain or the severity of the burn until hours after the exposure. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure.
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 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: Get medical attention immediately. Call a POISON CENTER or physician. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING unless directed to do so by medical personnel. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Have victim drink 2 to 8 ounces (60 to 240 mL) of water. Stop giving water if the exposed person feels sick as vomiting may be dangerous. If vomiting occurs, the head should be kept low

so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

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 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.

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. For additional information, see Safety Data Sheet.

SECTION 5: FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Water spray, alcohol resistant foam, dry chemical or CO2 appropriate for surrounding materials.

Special Hazards Arising From the Product

Burning produces noxious and toxic fumes. Oxides of carbon.

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.

Further Information

Use water spray to cool unopened containers.

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. Avoid dust generation. Eliminate all sources of ignition. Keep unnecessary and unprotected personnel away from spill. Do not touch or walk through spilled material. Put on appropriate protective equipment.

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 material can collect next to the skin and cause burns.

Prevent eye contact. Wear protective gloves, protective clothing, and eye protection or face protection. (See also Section 8.)

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.

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. Wet Portland cement can cause severe chemical burns; do not get inside clothing, boots, shoes, or gloves.

SECTION 8: EXPOSURE CONTROLS – PERSONAL PROTECTION

Control parameters

Component	Value / Source			
Portland Cement 65997-15-1	TLV	1 mg/m3 (respirable fraction), 8h	No data available	ACGIH
Portland Cement 65997-15-1	REL	5 mg/m3 (respirable fraction), 10h	10 mg/m3 (total dust), 10h	NIOSH
Portland Cement 65997-15-1	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

Crystalline Silica, quartz 14808-60-7	TWA	.025 mg/m ³ (respirable fraction), 8h	No data available	ACGIH TLV
Crystalline Silica, quartz 14808-60-7	TWA	10 mg/m ³ divided by %SiO ₂ + 2 (respirable fraction)	30 mg/m ³ divided by %SiO ₂ + 2 (total dust)	OSHA PEL
Calcium Oxide 1305-78-8	TWA	2 mg/m ³ , 8h	No data available	ACGIH TLV
Calcium Oxide 1305-78-8	TWA	2 mg/m ³ , 10h	No data available	NIOSH REL
Calcium Oxide 1305-78-8	TWA	5 mg/m ³ , 8h	No data available	OSHA PEL
Limestone 1317-65-3	TWA	5 mg/m ³ (respirable fraction), 10h	10 mg/m ³ (total dust), 10h	NIOSH REL
Limestone 1317-65-3	TWA	5 mg/m ³ (respirable fraction), 8h	15 mg/m ³ (total dust), 8h	OSHA PEL
Magnesium Oxide 1309-48-4	TWA	10 mg/m ³ (respirable fraction), 8h	No data available	ACGIH TLV
Magnesium Oxide 1309-48-4	TWA	No data available	15 mg/m ³ (total dust), 8h	OSHA PEL
Gypsum 13397-24-5	TWA	10 mg/m ³ (respirable fraction), 8h	No data available	ACGIH TLV
Gypsum 13397-24-5	TWA	5 mg/m ³ (respirable fraction), 8h	10 mg/m ³ (total dust), 8h	NIOSH REL
Gypsum 13397-24-5	TWA	5 mg/m ³ (respirable fraction), 8h	15 mg/m ³ (total dust), 8h	OSHA PEL
Kaolin 1332-58-7	PEL	15 mg/m ³ (inhalable dust)	5 mg/m ³ (respirable dust)	OSHA
Kaolin 1332-58-7	TWA	2 mg/m ³ (respirable dust)	No data available	ACGIH
Calcium Carbonate 1317-65-3	PEL	15 mg/m ³ (inhalable dust)	5 mg/m ³ (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.

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		

<u>Property</u>	<u>Values</u>	<u>Remarks/Method</u>
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	2.65	
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 cement concrete is highly alkaline and may react vigorously with strong acids, ammonium salts, and aluminum metal.

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.

Fluoride Compounds: cement dissolves in HF producing corrosive silicon tetrafluoride gas.

Reacts with Ammonium salts.

Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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. Long-term exposure to fine airborne crystalline silica dust may cause silicosis, a form of pulmonary fibrosis that can cause shortness of breath, cough, and reduced lung function.

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****US Federal Regulations**

This product is hazardous according to OSHA 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Crystalline Silica, quartz (impurity) (CAS 14808-60-7) Cancer

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazardous Categories: None

SARA 302 Extremely Hazardous Substance

Not listed

SARA 311/312 Hazardous Chemical

Immediate (acute) health hazard

Delayed (chronic) health hazard

SARA 313 (TRI Reporting)

Chromium, ion (Cr6+) CAS 8540-29-9 <0.1%

Lead (organic and inorganic) <0.1%

Nickel Compounds <0.1%

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

CAS No.	Chemical Name	Upper Limit wt. %
108-05-4	Vinyl Acetate	<0.003
75-07-0	Acetaldehyde	<0.002
141-78-6	Ethyl Acetate	<0.015
79-06-1	Acrylamide	<0.001
67-56-1	Methanol	<0.0025
50-00-0	Formaldehyde	<0.001

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated

Clean Water Act (CWA) Section 112(r) (40 CFR 68.130)

Not regulated

Clean Water Act (CWA) 307

Chromium, ion (Cr6+)

Safe Drinking Water Act (SWDA)

Not regulated

US State Regulations**US Massachusetts RTK – Substance List**

Portland Cement (CAS 65997-15-1)

Limestone (CAS 1317-65-3)

Kaolin (CAS 1332-58-7)

US New Jersey Worker and Community Right-To-Know Act

Portland Cement (CAS 65997-15-1)

Limestone (CAS 1317-65-3)

Kaolin (CAS 1332-58-7)

US Pennsylvania Worker and Community Right-To-Know Law

Portland Cement (CAS 65997-15-1)

Limestone (CAS 1317-65-3)

Kaolin (CAS 1332-58-7)

Gypsum (CAS 13397-24-5)

US California Proposition 65

WARNING: This product can expose you to chemicals including crystalline silica, dibromoacetonitrile, formaldehyde, which is/are known to the State of California to cause cancer, and methanol, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Acetaldehyde (CAS 75-07-0)

Acrylamide (CAS 79-06-1)

Titanium Dioxide (CAS 13463-67-7)

Crystalline Silica Quartz (CAS 14808-60-7)

Formaldehyde (CAS 50-00-0)

Methanol (CAS 67-56-1)

International Lists**Canadian Domestic Substances List (DSL)**

Portland cement is included on the DSL

Mexico Inventory (INSQ)

All components are listed or exempted

SECTION 16: OTHER INFORMATION

HMIS Health hazards 1 Flammability 0 Physical Hazards 0

NFPA Health hazards 1 Flammability 0 Physical hazards 0

Issue Date November 1, 2022

Revision Date Not applicable

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