



According to OSHA Communication Standard, 29 CFR 1910.1200

### **DOT Repair Mix**

## SECTION 1: Identification

Product identifier

Product name: DOT Repair Mix

Product code: 171010055, 171012000, 171013000, 171013300, 171040055

Recommended use of the product and restriction on use

Relevant identified uses: Use for cement applications Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer: United States

CTS Cement Manufacturing Corporation

12442 Knott St.

Garden Grove, CA 92841

800-929-3030

info@ctscement.com

## **Emergency telephone number:**

**United States** 

INFOTRAC 1-800-535-5053

International

INFOTRAC 1-352-323-3500

## SECTION 2: Hazard(s) identification

### GHS classification:

Skin irritation, category 2

Serious eye damage, category 1

Specific target organ toxicity - single exposure, category 3, respiratory irritation

Carcinogenicity, category 1A

Specific target organ toxicity - repeated exposure, category 2

## Label elements

Hazard

## Pictograms:







Signal word: Danger

# Hazard statements:

H315 Causes skin irritation.





### According to OSHA Communication Standard, 29 CFR 1910.1200

## **DOT Repair Mix**

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H350 May cause cancer.

H373 May cause damage to lungs through prolonged or repeated exposure by 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/fume/gas/mist/vapors/spray.

P264 Wash hands/eyes/mouth/skin/clothing thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P233 Keep container tightly closed.

P281 Use personal protective equipment as required.

P321 Specific treatment (see supplemental first aid instructions on this label).

P362 Take off contaminated clothing and wash before reuse

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P308+P313 If exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazards not otherwise classified: None.

#### SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 12004-14-7	Aluminum calcium oxide sulfate	10-30
CAS number: 10034-77-2	Dicalcium silicate	10-40
CAS number: 7778-18-9	Calcium sulfate	1-15
CAS number: 14808-60-7	Silica, crystalline quartz	0-0.1
CAS number: 50-00-0	Formaldehyde	<0.01

### Additional Information:





According to OSHA Communication Standard, 29 CFR 1910.1200

## **DOT Repair Mix**

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200).

\*Cement is primarily comprised of calcium compounds with oxides of aluminum, iron, sulfur, and silica. Trace amounts of naturally occurring, potentially harmful chemicals might be detected during chemical analysis. Trace constituents may include, but are not limited to, magnesium, potassium, sodium oxides, and hexavalent chromium.

### SECTION 4: First aid measures

### Description of first aid measures

#### General notes:

Not determined or not applicable.

#### After inhalation:

Loosen clothing as necessary and position individual in a comfortable position. Maintain an unobstructed airway. Get medical advice/attention if you feel unwell. Take precautions to ensure your own safety. Remove source of exposure or move person to fresh air. Get medical advice if you feel unwell or concerned.

#### After skin contact:

Rinse affected area with soap and water. If symptoms develop or persist, seek medical attention. Take off all contaminated clothing. Gently blot or brush away excess product. Wash with plenty of lukewarm, gently flowing water. Get medical advice if skin irritation occurs or you feel unwell.

## After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes. If symptoms develop or persist, seek medical attention. Avoid direct contact and wear chemical protective gloves, if necessary. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do so. Continue rinsing until medical aid is available. Immediately call a POISON CONTROL CENTER or seek medical attention.

### After swallowing:

Rinse mouth thoroughly. Seek medical attention if irritation, discomfort, or vomiting persists.

### Most important symptoms and effects, both acute and delayed

## Acute symptoms and effects:

Not determined or not applicable.

### Delayed symptoms and effects:

Not determined or not applicable.

#### Immediate medical attention and special

### treatment Specific treatment:

Not determined or not applicable.

# Notes for the doctor:

Not determined or not applicable.

### SECTION 5: Firefighting measures

## Extinguishing media

Suitable extinguishing media:





According to OSHA Communication Standard, 29 CFR 1910.1200

### **DOT Repair Mix**

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

### Unsuitable extinguishing media:

Not determined or not applicable.

## Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors.

### Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit.

## Special precautions:

Carbon monoxide and carbon dioxide may form upon combustion. Heating causes a rise in pressure, risk of bursting and combustion.

### SECTION 6: Accidental release measures

## Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure air handling systems are operational. Wear protective eyewear, gloves, and clothing.

### **Environmental precautions:**

Should not be released into the environment. Prevent from reaching drains, sewer or waterway.

### Methods and material for containment and cleaning up:

Wear protective eyewear, gloves and clothing. Sweep or scoop up solid material while minimizing dust generation. Dispose of contents / container in accordance with local regulations.

#### Reference to other sections:

Not determined or not applicable.

### SECTION 7: Handling and storage

## Precautions for safe handling:

Use only with adequate ventilation. Avoid breathing dust. Do not eat, drink, smoke or use personal products when handling chemical substances.

### Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed. Keep container dry. Store locked up. Store in a cool, well-ventilated area.

### SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

## Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Silica, crystalline quartz (Respirable)	14808-60-7	ACGIH TLV TWA 0.025 mg/m <sup>3</sup>
			(Respirable fraction)
	Total Silica, crystalline quartz	14808-60-7	TWA 0.025000 mg/m³ USA. ACGIH
	Formaldehyde	50-00-	ACGIH TLV 0.3 ppm (ceiling)
United States (OSHA)	Silica, crystalline quartz (Respirable)	14808-60-7	OSHA 8-hour TWA PEL: 0.025 mg/m³ (Respirable fraction, action level)
	Silica, crystalline quartz (Respirable)	14808-60-7	OSHA 8-hour TWA PEL: 0.05





According to OSHA Communication Standard, 29 CFR 1910.1200

### **DOT Repair Mix**

		mg/m³ (Respirable fraction, exposure limit level)
Total Silica, crystalline quartz	14808-60-7	TWA 30.000000 mg/m³ / %SiO2+2 USA. OSHA
Total Silica, crystalline quartz	14808-60-7	TWA 0.050000 mg/m <sup>3</sup> USA. NIOSH
Formaldehyde	50-00-0	OSHA PEL TWA 0.75 mg/m3
Formaldehyde	50-00-0	OSHA STEL 2 ppm

Country (Legal Basis)	Substance	Identifier	Permissible concentration
NIOSH	Silica, crystalline quartz (Respirable)	14808-60-7	NIOSH TWA 0.05 mg/m <sup>3</sup>
	Formaldehyde	50-00-0	NIOSH REL TWA 0.016 ppm
	Formaldehyde	50-00-0	NIOSH REL C 0.1 ppm

#### Biological limit values:

No biological exposure limits noted for the ingredient(s).

### Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. Biological monitoring may also be appropriate for some substances.

## Appropriate engineering controls:

Emergency eyewash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

### Personal protection equipment

## Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

## Skin and body protection:

Select glove material impermeable and resistant to the substance. Wear appropriate clothing to prevent any possibility of skin contact.

## Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

## General hygienic measures:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of work. Wash contaminated clothing before reuse.

## SECTION 9: Physical and chemical properties



According to OSHA Communication Standard, 29 CFR 1910.1200

# **DOT Repair Mix**

## Information on basic physical and chemical properties

Appearance	Solid; tan powder
Odor	Low
Odor threshold	Not available
рН	11 - 12 when wet
Melting point/freezing point	Not available
Initial boiling point/range	Not applicable
Flash point (closed cup)	Not available
Evaporation rate	Not applicable
Flammability (solid, gas)	Not available
Upper flammability/explosive limit	Not available
Lower flammability/explosive limit	Not available
Vapor pressure	Not applicable
Vapor density	Not applicable
Density	Not available
Relative density	2.96 – 2.98 at 20°C
Solubilities	Partially soluble
Partition coefficient (n-octanol/water)	Not available
Auto/Self-ignition temperature	Not available
Decomposition temperature	2460°F (1350°C)
Dynamic viscosity	Not applicable
Kinematic viscosity	Not applicable
Explosive properties	Not available
Oxidizing properties	Not available

#### Other information

Bulk density	60 lb/ft <sup>3</sup>
VOC (Weight %)	0 g/l when mixed with water

# SECTION 10: Stability and reactivity

## Reactivity:

Does not react under normal conditions of use and storage.

# Chemical stability:

Stable under normal conditions of use and storage.

## Possibility of hazardous reactions:

None under normal conditions of use and storage.

### Conditions to avoid:

None known.

# Incompatible materials:





According to OSHA Communication Standard, 29 CFR 1910.1200

## **DOT Repair Mix**

None known.

### Hazardous decomposition products:

None known.

# SECTION 11: Toxicological information

## Information on toxicological effects:

## **Acute toxicity**

Assessment: Based on available data, the classification criteria are not met.

Product data: No data is available.

Substance data:

Name	Route	Result
Formaldehyde	Oral	LD50 Rat: 100 mg/kg
	Dermal	LD50 Rabbit: 270 mg/kg

#### Skin corrosion/irritation

Assessment: Causes skin irritation.

Product data: No data is available.

Substance data:

Name	Result	
Dicalcium silicate	Causes skin irritation.	
Formaldehyde	Causes severe skin burns and eye damage.	

## Serious eye damage/irritation

**Assessment:** Causes serious eye damage. **Product data:** No data is available.

Substance data:

Name	Result
Dicalcium silicate	Causes serious eye damage.

### Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data: No data is available.

Substance data:

Name	Result
Formaldehyde	May cause an allergic skin reaction.

## Carcinogenicity

**Assessment:** May cause cancer.

Product data: No data is available.

Substance data:

Name Species	Result
--------------	--------





## According to OSHA Communication Standard, 29 CFR 1910.1200

## **DOT Repair Mix**

Silica, crystalline quartz (Respirable)	Not applicable	Component may cause cancer.
Total Silica, crystalline quartz		1 - Group 1: Carcinogenic to humans (Quartz)
Formaldehyde		May cause cancer.

## International Agency for Research on Cancer (IARC):

Name	Classification
Silica, crystalline quartz (Respirable)	Group 1 - Carcinogenic to humans
Formaldehyde	Group 1 - Carcinogenic to humans

# National Toxicology Program (NTP):

Name	Classification
Silica, crystalline quartz (Respirable)	Known to be human carcinogens
Formaldehyde	Known to be human carcinogens

### Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data is available.

Substance data:

Name	Result
Formaldehyde	Suspected of causing genetic defects

## Reproductive toxicity

**Assessment:** Based on available data, the classification criteria are not met.

Product data: No data is available.
Substance data: No data is available.
Specific target organ toxicity (single exposure)
Assessment: May cause respiratory irritation

Product data: No data is available.

Substance data:

Name	Result
Dicalcium silicate and Calcium	May cause respiratory irritation.
Sulfate	

## **Aspiration toxicity**

Assessment: Based on available data, the classification criteria are not met.

Product data: No data is available.





According to OSHA Communication Standard, 29 CFR 1910.1200

## **DOT Repair Mix**

Substance data: No data is available.

### Information on likely routes of exposure:

No data is available.

## Symptoms related to the physical, chemical and toxicological characteristics:

No data is available.

Other information:

No data is available.

## SECTION 12: Ecological information

### Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

### Chronic (long-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available. Substance data: No data available.

## Persistence and degradability

Product data: No data available.

Substance data:

Name	Result
Formaldehyde	Readily biodegradable in water.

### Bioaccumulative potential

Product data: No data available.

Substance data:

Name	Result
Formaldehyde	BCF (aquatic species): 0.396 dimensionless

## Mobility in soil

Product data: No data available.

Substance data:

Name	Result
Formaldehyde	Mobile (Calculated log Koc: 1.202)

Other adverse effects: No data available.

## SECTION 13: Disposal considerations

Disposal methods:



According to OSHA Communication Standard, 29 CFR 1910.1200

## **DOT Repair Mix**

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities.

## SECTION 14: Transport information

## United States Transportation of dangerous goods (49 CFR DOT)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

## International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

## International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

# SECTION 15: Regulatory information

## United States regulations Inventory listing (TSCA):

12004-14-7	Aluminum calcium oxide sulfate	Listed
10034-77-2	Dicalcium silicate	Listed
7778-18-9	Calcium sulfate	Listed
14808-60-7	Silica, crystalline quartz	Listed
50-00-0	Formaldehyde	Listed

Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.

**Export notification under TSCA Section 12(b):** None of the ingredients are listed.





## According to OSHA Communication Standard, 29 CFR 1910.1200

## **DOT Repair Mix**

SARA Section 302 extremely hazardous substances: None of the ingredients are listed.

SARA Section 313 toxic chemicals: None of the ingredients are listed.

**CERCLA:** None of the ingredients are listed.

**RCRA:** None of the ingredients are listed.

Section 112(r) of the Clean Air Act (CAA): None of the ingredients are listed.

### Massachusetts Right to Know:

14808-60-7	Silica, crystalline quartz (Respirable)	Listed
50-00-0	Formaldehyde	Listed

# New Jersey Right to Know:

14808-60-7	Silica, crystalline quartz (Respirable)	Listed
50-00-0	Formaldehyde	Listed

## New York Right to Know:

14808-60-7	Silica, crystalline quartz (Respirable)	Listed
50-00-0	Formaldehyde	Listed

## Pennsylvania Right to Know:

14808-60-7	Silica, crystalline quartz (Respirable)	Listed
50-00-0	Formaldehyde	Listed

### California Proposition 65:

▲ WARNING: Cancer and Reproductive Harm – www.P65Warning.ca.gov.

## SECTION 16: Other information

### Abbreviations and Acronyms:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Road Transport

AU: Australia CA: Canada

CAS: Chemical Abstracts Service

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

CN: China

CPR: Controlled Products Regulations DFG: Deutsche Forschungsgemeinschaft DOT: Department of Transportation





## According to OSHA Communication Standard, 29 CFR 1910.1200

### **DOT Repair Mix**

DSL: Domestic Substances List EEC: European Economic Community ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances

EPA: Environmental Protection Agency

EU: European Association

IARC: International Agency for Reach on Cancer IMDG: International maritime dangerous goods code

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

JP: Japan

COD: Chemical Oxygen Demand

BOD5: 5-day biochemical oxygen demand

BCF: Bioconcentration factor LD50: Lethal Dose 50

CL50: Lethal Concentration 50 EC50: Effective concentration 50

Log-POW: Octanol-water partition coefficient Koc: Partition coefficient of organic carbon Know: Octanol/water partition coefficient

KR: Korea

LEL: Lower Explosive Limit UEL: Upper Explosive Limit

NIOSH: National Institute for Occupational Safety and Health Administration

PH: Philippines

RCRA: Resource Conservation and Recovery Act OSHA: Occupational Safety and Health Administration

RID: European Rail Transport

SARA: Superfund Amendments and Reauthorization Act

STEL: Short Term Exposure Limit TDG: Transportation of Dangerous Goods TSCA: Toxic Substances Control Act TWA: Time Weighted Average

**US: United States** 

#### Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal 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, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

**NFPA:** 3-0-0 **HMIS:** 3\*-0-0

Initial preparation date: 11/01/18

Version #: 3

Revision Date: 04/11/22

**End of Safety Data Sheet**