



According to OSHA Communication Standard, 29 CFR 1910.1200

Rapid Set Flexible Construction Adhesive and Sealant

SECTION 1: Identification

Product identifier

Product name: Flexible Construction Adhesive and Sealant

Product code: 196231010

Recommended use of the product and restriction on use

Relevant identified uses: Use for sealant and adhesive 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:

Acute Toxicity - Oral - Category 4

Serious Eye Damage/Eye Irritation - Category 2A

Carcinogenicity - Category 1A

Reproductive Toxicity - Category 1B

Specific Target Organ Toxicity - Single Exposure - Category 1 (central nervous system)

Specific Target Organ Toxicity - Repeated Exposure - Category 1 (respiratory system)

Specific Target Organ Toxicity - Repeated Exposure - Category 2 (bladder)

Label elements

Hazard

Pictograms:



Signal word: Danger



According to OSHA Communication Standard, 29 CFR 1910.1200

Rapid Set Flexible Construction Adhesive and Sealant

Hazard statements:

- H302 Harmful if swallowed.
- H319 Causes serious eye irritation.
- H350 May cause cancer.
- H360 May damage fertility or the unborn child.
- H370 Causes damage to organs.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements:

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P280 Wear eye protection/face protection.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P264 Wash hands thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P307+P311 If exposed: Call a POISON CENTER or doctor/physician.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P301+P330 IF SWALLOWED: Rinse mouth.
- P314 Get medical advice/attention if you feel unwell.
- P301+P312+P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
- P321 Specific treatment (see product Safety Data Sheet).
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazards not otherwise classified:

Oral 71.91% of the mixture consists of ingredients of uknown acute toxicity.

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 1317-65-3	Calcium carbonate	10-25
CAS number: 471-34-1	Carbonic acid, calcium salt (1:1)	15-40
CAS number: 13463-67-7	Titanium dioxide	1-5
CAS number: 2768-02-7	Organosilane	1-5
CAS number: 818-08-6	Dibutyltin oxide	0.1-1





According to OSHA Communication Standard, 29 CFR 1910.1200

Rapid Set Flexible Construction Adhesive and Sealant

CAS number: 28553-12-0	Diisononyl phtahalate	15-35
CAS number: 1333-86-4	Carbon black	0.01-1

Additional Information:

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).

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell.

After skin contact:

IF ON SKIN Wash with plenty of soap and water If skin irritation or rash occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse.

After eye contact:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

After swallowing:

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Harmful if swallowed. Causes serious eye irritation.

Delayed symptoms and effects:

May cause cancer. May damage fertility or the unborn child. Causes damage to organs. Causes damage to organs through prolonged or repeated exposure.

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:

Use carbon dioxide, regular dry chemical, regular foam or water.





According to OSHA Communication Standard, 29 CFR 1910.1200

Rapid Set Flexible Construction Adhesive and Sealant

Unsuitable extinguishing media:

Do not use high-pressure water streams.

Specific hazards during fire-fighting:

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Special protective equipment for firefighters:

Heating may cause an explosion. Containers may rupture or explode. Keep away from sources of ignition. No smoking. Move material from fire area if it can be done without risk Avoid inhalation of vapors or combustion by-products. Dike for later disposal. Stay upwind and keep out of low areas. A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Special precautions:

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear personal protective clothing and equipment, see Section 8.

Environmental precautions:

Do not flush into sanitary sewer systems, drains or surface water. Avoid release to the environment.

Methods and material for containment and cleaning up:

Keep unnecessary people away, isolate hazard area, and deny entry. In case of spillage, stop the flow of material and block any potential routes to water systems. Only personnel trained for the hazards of this material should perform clean up and disposal.

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Do not handle until all safety precautions have been read and understood. Keep away from all ignition sources. Avoid contact with eyes and skin. Do not eat, drink or smoke when using this product. Always wear recommended personal protective equipment. Wear personal protective clothing and equipment, see Section 8. Take precautionary measures against static discharge.

Conditions for safe storage, including any incompatibilities:

Store locked up. Store in a cool dry place. Store in a well-ventilated area. Keep separated from incompatible substances. Keep container tightly closed. Empty containers may contain product residue. Store and handle in accordance with all current regulations and standards. Avoid contact with temperatures above 120 C. Incompatible materials include strong oxidizers and acids.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Calcium carbonate	1317-65-3
NIOSH:	10 mg/m3 TWA total dust ; 5 mg/m3 TWA respirable dust





According to OSHA Communication Standard, 29 CFR 1910.1200

Rapid Set Flexible Construction Adhesive and Sealant

OSHA (US):	15 mg/m3 TWA total dust ; 5 mg/m3 TWA respirable fraction	
Mexico:	10 mg/m3 TWA VLE-PPT	
	20 mg/m3 STEL [PPT-CT]	
Carbonic acid, calcium salt (1:1)	471-34-1	
NIOSH:	10 mg/m3 TWA total dust ; 5 mg/m3 TWA respirable dust	
Titanium dioxide	13463-67-7	
ACGIH:	10 mg/m3 TWA	
NIOSH:	2.4 mg/m3 TWA (CIB 63) fine ; 0.3 mg/m3 TWA (CIB 63) ultrafine, including engineered nanoscale	
	5000 mg/m3 IDLH	
OSHA (US):	15 mg/m3 TWA total dust	
Mexico:	10 mg/m3 TWA VLE-PPT as Ti	
	20 mg/m3 STEL [PPT-CT] as Ti	
Carbon black	1333-86-4	
ACGIH:	3 mg/m3 TWA inhalable particulate matter	
NIOSH:	3.5 mg/m3 TWA; 0.1 mg/m3 TWA (Carbon black in presence of Polycyclic aromatic hydrocarbons) as PAH	
	1750 mg/m3 IDLH	
OSHA (US):	3.5 mg/m3 TWA	
Mexico:	3.5 mg/m3 TWA VLE-PPT	
	7 mg/m3 STEL [PPT-CT]	

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

There are no biological limit values for any of this product's components.

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.



According to OSHA Communication Standard, 29 CFR 1910.1200

Rapid Set Flexible Construction Adhesive and Sealant

Appropriate engineering controls:

Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Provide local exhaust or process enclosure ventilation system.

Personal protection equipment

Eye and face protection:

Wear splash-resistant safety goggles with a faceshield.

Skin and body protection:

Wear appropriate chemical resistant gloves. Wear appropriate chemical resistant clothing.

Respiratory protection:

Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

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

Information on basic physical and chemical properties

Appearance	Paste; Products comes in gray, light gray, sandstone, white
Odor	Mild
Odor threshold	Not available
рН	Not available
Melting point/freezing point	Not available
Initial boiling point/range	Not applicable
Flash point (closed cup)	93.3 °C (>200 °F)
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
Specific Gravity	1.3 – 1.7
Solubilities	Slightly soluble
Partition coefficient (n-octanol/water)	Not available
Auto/Self-ignition temperature	Not available
Decomposition temperature	Not available
Dynamic viscosity	Not applicable
Kinematic viscosity	Not applicable
Explosive properties	Not available
Oxidizing properties	Not available





According to OSHA Communication Standard, 29 CFR 1910.1200

Rapid Set Flexible Construction Adhesive and Sealant

Other information

Bulk density	Not available
VOC (Weight %)	8 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 at normal temperatures and pressure.

Possibility of hazardous reactions:

Will not polymerize.

Conditions to avoid:

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials. Avoid contact with temperatures above 120 C.

Incompatible materials:

Strong acids. Strong oxidizer.

Hazardous decomposition products:

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

SECTION 11: Toxicological information

Information on toxicological effects:

Inhalation

May be harmful if inhaled.

Skin Contact

May cause skin irritation.

Eye Contact

Causes serious eye irritation.

Ingestion

Harmful if swallowed.

Acute and Chronic Toxicity

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are

published:

Carbonic acid, calcium salt (1:1) (471-34-1)

Oral LD50 Rat 6450 mg/kg

Titanium dioxide (13463-67-7)





According to OSHA Communication Standard, 29 CFR 1910.1200

Rapid Set Flexible Construction Adhesive and Sealant

Oral LD50 Rat >10000 mg/kg

Organosilane (2768-02-7)

Oral LD50 Rat 7340 µL/kg

Dibutyltin oxide (818-08-6)

Oral LD50 Rat 44.9 mg/kg

Diisononyl phthalate (28553-12-0)

Oral LD50 Rat >9750 mg/kg

Inhalation LC50 Rat >4.4 mg/L 4 h (no deaths occurred)

Carbon black (1333-86-4)

Oral LD50 Rat >15400 mg/kg

Product Toxicity Data Acute Toxicity Estimate

Oral 1261.241 mg/kg

Immediate Effects

Harmful if swallowed. Causes serious eye irritation.

Delayed Effects

May cause cancer. May damage fertility or the unborn child. Causes damage to organs. Causes damage to organs through prolonged or repeated exposure.

Irritation/Corrosivity Data

Causes serious eye irritation.

Respiratory Sensitization

No information on significant adverse effects.

Dermal Sensitization

No information on significant adverse effects.

Component Carcinogenicity

	omponent caremogeriality	
Titanium dioxide	13463-67-7	
ACGIH:	A4 - Not Classifiable as a Human Carcinogen	
IARC:	Monograph 93 [2010] ; Monograph 47 [1989] (Group 2B (possibly carcinogenic to humans))	
DFG:	Category 3A (could be carcinogenic for man; inhalable fraction with the exception of ultra small particles)	
OSHA:	Present	
NIOSH:	Potential occupational carcinogen	





According to OSHA Communication Standard, 29 CFR 1910.1200

Rapid Set Flexible Construction Adhesive and Sealant

Carbon black	1333-86-4
ACGIH:	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
IARC:	Monograph 93 [2010]; Monograph 65 [1996] (Group 2B (possibly carcinogenic to humans))
DFG:	Category 3B (could be carcinogenic for man; inhalable fraction)
OSHA:	Present
NIOSH:	Potential occupational carcinogen

Results of a DuPont epidemiology study showed that employees who had been exposed to titanium dioxide pigments were at no greater risk of developing lung cancer than were employees who had not been exposed to titanium dioxide pigments. No pulmonary fibrosis was found in any of the employees and no associations were observed between titanium dioxide pigment exposure and chronic respiratory disease or lung abnormalities. Based on the results of this study, DuPont concluded that titanium dioxide pigment will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.

Germ Cell Mutagenicity

No information on significant adverse effects.

Tumorigenic Data

No information on significant adverse effects.

Reproductive Toxicity

May damage fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure

Central nervous system.

Specific Target Organ Toxicity - Repeated Exposure

Respiratory system. Bladder.

Aspiration hazard

No information on significant adverse effects.

Medical Conditions Aggravated by Exposure

No data available.

SECTION 12: Ecological information

Ecotoxicity

May cause long lasting harmful effects to aquatic life.

Component Analysis - Aquatic Toxicity





According to OSHA Communication Standard, 29 CFR 1910.1200

Rapid Set Flexible Construction Adhesive and Sealant

Diisononyl phthalate	28553-12-0
Fish:	LC50 96 h Brachydanio rerio >100 mg/L [semi-static]; LC50 96 h Lepomis macrochirus >0.14 mg/L [flow-through]; LC50 96 h Lepomis macrochirus >0.17 mg/L [static]; LC50 96 h Pimephales promelas >0.19 mg/L [flow-through]; LC50 96 h Pimephales promelas >0.14 mg/L [static]
Algae:	EC50 72 h Desmodesmus subspicatus >500 mg/L IUCLID ; EC50 96 h Pseudokirchneriella subcapitata >1.8 mg/L [static] EPA
Invertebrate:	EC50 48 h Daphnia magna >500 mg/L IUCLID ; EC50 48 h Daphnia magna >0.06 mg/L [Static] EPA

SECTION 13: Disposal considerations

Disposal methods:

Dispose in accordance with all applicable federal, state/regional, and local laws and regulations.

Component Waste Numbers

The US EPA has not published waste numbers for this product's components.

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





According to OSHA Communication Standard, 29 CFR 1910.1200

Rapid Set Flexible Construction Adhesive and Sealant

UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Bulk Chemical Code

This material contains one or more of the following chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

Titanium dioxide	13463-67-7
IBC Code:	Category Z (slurry)

SECTION 15: Regulatory information

U.S. Federal Regulations

None of this product's components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories

Carcinogenicity; Acute toxicity; Reproductive Toxicity; Serious Eye Damage/Eye Irritation; Specific Target Organ Toxicity

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Calcium carbonate	1317-65-3	No	Yes	Yes	Yes	Yes
Titanium dioxide	13463-67-7	No	Yes	Yes	Yes	Yes
Carbon black	1333-86-4	Yes	Yes	Yes	Yes	Yes

Titanium dioxide	13463-67-7
Carc:	carcinogen, 9/2/2011 (airborne, unbound particles of respirable size)
Diisononyl phthalate	28553-12-0
Carc:	carcinogen, 12/20/2013
Carbon black	1333-86-4





According to OSHA Communication Standard, 29 CFR 1910.1200

Rapid Set Flexible Construction Adhesive and Sealant

Carc:	carcinogen, 2/21/2003 (airborne, unbound particles of respirable size)

Canada Regulations

Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL.

Dibutyltin oxide	818-08-6
	1%

Carbon black	1333-86-4
	1%

Component Analysis - Inventory

Calcium carbonate (1317-65-3)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2		CN	NZ	MX	TW	VN (Draft)
Yes	NSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

Carbonic acid, calcium salt (1:1) (471-34-1)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex	KR KECI - Annex 2		CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

Titanium dioxide (13463-67-7)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1			CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes





According to OSHA Communication Standard, 29 CFR 1910.1200

Rapid Set Flexible Construction Adhesive and Sealant

Organosilane (2768-02-7)

US	CA	EU	AU	PH	JP - ENCS	-		KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes

Dibutyltin oxide (818-08-6)

US	CA	EU	AU	PH	JP - ENCS	_			KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes

Diisononyl phthalate (28553-12-0)

US	СА	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1			CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

Carbon black (1333-86-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex		KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

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





According to OSHA Communication Standard, 29 CFR 1910.1200

Rapid Set Flexible Construction Adhesive and Sealant

CN: China

CPR: Controlled Products Regulations DFG: Deutsche Forschungsgemeinschaft DOT: Department of Transportation 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: 2-1-0

Initial preparation date: 06/27/18

Version #: 2

Revision Date: 06/29/22

End of Safety Data Sheet