



TCS Cement / Item#3801-01

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Thursday, May 14, 2015 / Rules and Regulations

Revision date: 005/14/15

Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : TCS Cement
Product form : Mixture
Other means of identification : Cement

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Bonding agent used in dental laboratory

1.3. Details of the supplier of the safety data sheet

Thermoplastic Comfort Systems, Inc
2619 Lime Ave.
Signal Hill, CA 90755
(562)-426-2970

1.4. Emergency telephone number

No additional information available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. Label elements

GHS-US labelling

No labelling applicable

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	CAS#	OSHA PEL	ACGIH
Ethyl Alcohol	64-17-5	1000ppm	1000 ppm
Isopropyl Alcohol	67-63-0	400 ppm	200 ppm
Methyl Isobutyl Ketone	108-10-1	100 ppm	50 ppm

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.

First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a comfortable position for breathing. Seek medical attention if cough or other symptoms develop.

First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with soap and water.

First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

First-aid measures after ingestion : IF SWALLOWED: rinse mouth thoroughly. If the person is conscious and able to swallow have them drink water to dilute. Do not induce vomiting without advice from poison control center or medical professional. Seek medical attention if feeling unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/injuries after inhalation : Chronic exposures may result in irritation to mucous membranes, headaches, drowsiness, and/or liver damage.

Symptoms/injuries after skin contact : None expected

TCS Cement

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Thursday, May 14, 2015 / Rules and Regulations

Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating.

Symptoms/injuries after ingestion : May cause gastrointestinal irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemicals, alcohol resistant foam, or carbon dioxide. Water may be ineffective, but water applied as a spray can absorb some of the fires heat and should be used to keep fire-exposed containers cool.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Vapors may form explosive mixture with air.

Explosion hazard : Vapors may form explosive mixture with air.

Reactivity : No dangerous reactions known under normal conditions of use.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or foam for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment. Prevent human exposure to fire, fumes, smoke and products of combustion.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : No specific emergency measures are required other than good laboratory hygiene and safety practices.

6.1.1. For non-emergency personnel

Protective equipment : Wear Protective equipment as described in Section 8.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Keep unnecessary people away. Remove all sources of ignition. Dike and contain spill with inert material (sand, earth, etc.) and transfer liquid to containers for recovery or disposal. Keep spill out of sewer and open bodies of water. Floors may be slippery: care should be exercised to avoid falls. Avoid runoff into storm sewers and ditches that lead to waterways

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Wear recommended personal protective equipment. Provide appropriate exhaust ventilation at places of dust forming. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Keep away from heat, spark and flame. Keep operating temperatures below ignition temperatures at all times. Use with adequate ventilation. Avoid contact with eyes, skin and clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool and well-ventilated place away from heat, sparks and flame. Avoid extreme temperatures

Keep containers tightly closed and upright when not in use. Protect against physical damage.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No data available

TCS Cement

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Thursday, May 14, 2015 / Rules and Regulations

8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Ensure adequate ventilation, especially in confined areas

Personal protective equipment : Gloves. Protective goggles.



Hand protection : Use gloves when prolonged or repeated contact could occur.

Eye protection : Use eye protection suitable to the environment. Avoid direct contact with eyes.

Skin and body protection : Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

Respiratory protection : Use NIOSH-approved dust/particulate respirator. Where dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Cloudy Beige
Color	: Beige
Odor	: Alcohol Type Odor
Odor Threshold	: No data available
pH	: 4.5 – 5.5
Relative evaporation rate (butylacetate=1)	: Slower than Butyl Acetate
Melting point	: Not applicable
Freezing point	: Not applicable
Boiling point	: 173 deg F based on pure ethyl alcohol
Flash point	: No data available
Auto-ignition temperature	: 685 deg F
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 40mm / Hg*
Relative vapour density at 20 °C	: Heavier than air
Relative density	: No data available
Solubility	: Water: Insoluable
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: Not applicable
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under use and storage conditions as recommended in section 7.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Extreme temperatures

10.5. Incompatible materials

None known.

TCS Cement

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Thursday, May 14, 2015 / Rules and Regulations

10.6. Hazardous decomposition products

Carbon monoxide during incomplete combustion

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: Not classified
Symptoms/injuries after eye contact	: Direct contact with the eyes is likely to be irritating.
Symptoms/injuries after ingestion	: May cause gastrointestinal irritation.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : RCRA Hazardous Waste: This material, when discarded or disposed of, could be a hazardous waste according to federal regulations (40 CFR 261) due to the characteristics of ignitability (D001). The transportation, storage, treatment, and disposal of this waste must be conducted in compliance with 40 CFR 262,263,264,268 and 270. Disposal can only occur in properly permitted facilities. Check state and local regulations for any additional requirements as these may be more restrictive than federal laws and regulations. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate, or otherwise inappropriate.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

SECTION 14: Transport information

Regulated by the US DOT: Yes
DOT Proper Shipping Name: Paint
UN/NA Number: UN 1263

CERCLA:

The Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification to the National Center for releases of quantities of Hazardous Substances equal or greater than the reportable quantities (RQs) in 40 CFR 302.4 (for CERCLA 102).

Components present in this product at a level which could require reporting under the statute are:

<u>Chemical Name</u>	<u>CAS#</u>	<u>Maximum Concentration (Wt. %)</u>
None	N/A	N/A

TCS Cement

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Thursday, May 14, 2015 / Rules and Regulations

SARA Title III, section 311/312:

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302,604,311 and 312)

Components present in this product at a level which could require reporting under the statute are:

<u>Chemical Name</u>	<u>CAS#</u>	<u>Maximum Concentration (Wt. %)</u>
None	N/A	N/A

SARA Title III, section 313:

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313).

Components present in this product at a level which could require reporting under the statute are:

<u>Chemical Name</u>	<u>CAS#</u>	<u>Maximum Concentration (Wt. %)</u>
Methy1 Isobutyl	108-10-1	1%

TSCA:

The components of this mixture are listed in the Toxic Substance Control Act Inventory of Chemical Substances.

This Product contains the following chemicals which export notification under section 12(b) of the TSCA regulation.

<u>Chemical Name</u>	<u>CAS#</u>	<u>TSCA Section</u>
Isopropanol	67-63-0	Sec 4
Methy1 isobutyl ketone	108-10-1	Sec 4

SECTION 15: Regulatory information

15.1. US Federal regulations

TCS Cement

All chemical substances in this product are listed in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory

SARA Section 311/312 Hazard Classes	None
-------------------------------------	------

15.2. International regulations

No additional information available.

15.3. US State regulations

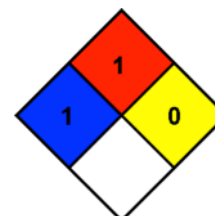
California Proposition 65

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

SECTION 16: Other information

Indication of changes : Revision 1.0: New SDS Created.
Revision date : 005/14/15
Other information : Author: MSP.

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard : 1 - Materials that will not burn.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 1
Flammability : 1
Physical : 0
Personal Protection :

TCS Cement

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Thursday, May 14, 2015 / Rules and Regulations

All information, recommendations and suggestions appearing herein concerning this product are based upon data obtained from the manufacturer and/or recognized technical sources; however, Thermoplastic Comfort System, Inc. makes no warranty, representation or guarantee as to the accuracy, sufficiency, or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his/her own use, handling and disposal of the product. Since actual use by others is beyond our control, no warranty, expressed or implied, is made by Thermoplastic Comfort System, Inc. as to the effects of such use. Thermoplastic Comfort System, Inc. does not assume any liability arising out of use by others of the product referred to herein. The data in this Material Safety Data Sheet relate only to the specific material designated herein and does not relate to use in combination with any other material.