Material Safety Data Sheet



Chemask - CM8, CM1

1. Product and company identification

Product name	: Chemask - CM8, CM1
Supplier	: Chemtronics 8125 Cobb Center Drive Kennesaw, GA 30152
	Tel. 770-424-4888 or toll free 800-645-5244
Synonym	: Cleaning solutions.
Trade name	: Chemask®
Material uses	: Industrial applications
Manufacturer	: Chemtronics 8125 Cobb Center Drive Kennesaw, GA 30152
	Tel. 770-424-4888 or toll free 800-645-5244
Code	: CM8, CM1, CM8E
MSDS #	: 0704
Validation date	: 5/1/2014.
Print date	: 5/1/2014.
In case of emergency	: Chemtrec - 1-800-424-9300 or collect 703-527-3887 24/7
Product type	: Liquid.

2. Hazards identification

Emergency overview		
Physical state	Liquid.	
Color	Pale pink color.	
Odor	Ammoniacal. [Slight]	
Signal word	DANGER!	
Hazard statements	CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGAN NERVOUS SYSTEM, GASTROINTESTINAL TRACT, RESPIRATORY TRACT, SKI CENTRAL NERVOUS SYSTEM, EYE, LENS OR CORNEA.	
Precautionary measures	Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Do not breathe vapor or mist. Do not eat, drink or smoke when using this product. Avoid contact with eyes, skin and clothing. Use personal protective equipment as required. Wash thoroughly after handling.	
OSHA/HCS status	This material is considered hazardous by the OSHA Hazard Communication Standa (29 CFR 1910.1200).	rd
Potential acute health effects		
Inhalation	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. Harmful by inhalation. At very high concentrations, can displace the normal air and cause suffocation from lack of oxygen. May cause sensitization by inhalation and skin contact. MAY CAUSE RESPIRATORY TRACT A SKIN IRRITATION.	an
Ingestion	Harmful if swallowed. Irritating to mouth, throat and stomach. Latex may solidify in intestinal tract.	

2. Hazards identification

Skin	 Moderately irritating to the skin. May cause allergic skin reactions with repeated exposure. MAY CAUSE ALLERGIC SKIN REACTION. MAY CAUSE ALLERGIC RESPIRATORY REACTION.
Eyes	: Moderately irritating to eyes.
Potential chronic health e	ffects
Chronic effects	: Contains material that may cause target organ damage, based on animal data.
Carcinogenicity	 Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.
Target organs	: Contains material which causes damage to the following organs: the nervous system. Contains material which may cause damage to the following organs: gastrointestinal

tract, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Over-exposure signs/symptoms

Inhalation	: Adverse symptoms may include the following: drowsiness/fatigue headache respiratory tract irritation
Ingestion	: Adverse symptoms may include the following: stomach pains
Skin	: Adverse symptoms may include the following: irritation redness
Eyes	: Adverse symptoms may include the following: pain irritation watering redness
Medical conditions aggravated by over- exposure	 Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

3. Composition/information on ingredients

Name	CAS number	%
methanol	67-56-1	1 - 3.8
titanium dioxide	13463-67-7	0.1 - 1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

Eye contact	: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
Skin contact	: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

4. First aid measures

Inhalation	: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Ingestion	: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
Notes to physician	 In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

5. Fire-fighting measures

Flammability of the product	: In a fire or if heated, a pressure increase will occur and the container may burst.
Extinguishing media	
Suitable	: Use an extinguishing agent suitable for the surrounding fire.
Not suitable	: None known.
Special exposure hazards	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides metal oxide/oxides
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

equipment for fire-fightersapparatus (SCBA)6. Accidental release measures

Personal precautions	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
Environmental precautions	-	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods for cleaning up		
Small spill	:	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Handling	: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Storage	: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Ingredient	Exposure limits
methanol	ACGIH TLV (United States, 6/2013). Absorbed through skin. STEL: 328 mg/m ³ 15 minutes. STEL: 250 ppm 15 minutes. TWA: 262 mg/m ³ 8 hours. TWA: 200 ppm 8 hours. NIOSH REL (United States, 4/2013). Absorbed through skin. STEL: 325 mg/m ³ 15 minutes. STEL: 250 ppm 15 minutes. TWA: 260 mg/m ³ 10 hours. TWA: 200 ppm 10 hours. TWA: 200 ppm 10 hours. TWA: 200 ppm 8 hours. TWA: 200 ppm 8 hours. TWA: 200 ppm 8 hours. STEL: 325 mg/m ³ 15 minutes. STEL: 250 ppm 15 minutes. TWA: 260 mg/m ³ 8 hours. TWA: 260 mg/m ³ 8 hours. TWA: 200 ppm 8 hours. TWA: 200 ppm 15 minutes. STEL: 325 mg/m ³ 15 minutes. STEL: 325 mg/m ³ 15 minutes. STEL: 250 ppm 15 minutes. TWA: 260 mg/m ³ 8 hours. TWA: 260 mg/m ³ 8 hours. TWA: 200 ppm 8 hours.
titanium dioxide	OSHA PEL (United States, 2/2013). TWA: 15 mg/m ³ 8 hours. Form: Total dust OSHA PEL 1989 (United States, 3/1989). TWA: 10 mg/m ³ 8 hours. Form: Total dust ACGIH TLV (United States, 6/2013). TWA: 10 mg/m ³ 8 hours.
procedures atmostration atmost Atmostration atmostration	s product contains ingredients with exposure limits, personal, workplace osphere or biological monitoring may be required to determine the effectiveness of ventilation or other control measures and/or the necessity to use respiratory ective equipment. Reference should be made to appropriate monitoring standards. erence to national guidance documents for methods for the determination of urdous substances will also be required.
local	er operations generate dust, fumes, gas, vapor or mist, use process enclosures, exhaust ventilation or other engineering controls to keep worker exposure to orne contaminants below any recommended or statutory limits.

8. Exposure controls/personal protection

Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Personal protection	
Respiratory	: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hands	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Eyes	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

Physical state	: Liquid.
Flash point	: [Product does not sustain combustion.]
Color	: Pale pink color.
Odor	: Ammoniacal. [Slight]
Boiling/condensation point	: 38°C (100.4°F)
Vapor pressure	: 101.3 kPa (760 mm Hg) [room temperature]
Vapor density	: <1 [Air = 1]
Volatility	: 5% (w/w)
Evaporation rate	: >1 (butyl acetate = 1)
Viscosity	: Dynamic (room temperature): 15000 mPa·s (15000 cP)

10. Stability and reactivity

Chemical stability	: The product is stable.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.

11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Result Species Dose			e	Exposu	re	
methanol	LC50 Inhalation Gas. LC50 Inhalation Gas. LD50 Dermal LD50 Oral		Rat Rat Rabbit Rat	6400 1580	145000 ppm 64000 ppm 15800 mg/kg 5600 mg/kg			
Conclusion/Summary	: Not ava	ailable.						
Chronic toxicity								
Conclusion/Summary	: Not av	ailable.						
Irritation/Corrosion						1		
Product/ingredient name	Result			Species	Score	Exposure	Obser	vation
methanol	Eyes - N	1oderate	irritant	Rabbit	-	24 hours 100	-	
	Eves - M	loderate	irritant	Rabbit	_	milligrams 40 milligrams	_	
		oderate		Rabbit	-	24 hours 20	-	
titopium diovido		المانية مع	1			milligrams		
titanium dioxide	SKIN - IVI	ild irritar	IL	Human	-	72 hours 300 Micrograms	-	
						Intermittent		
Conclusion/Summary	: Not av	ailable.				1		
<u>Sensitizer</u>								
Conclusion/Summary	: Not av	ailable.						
Carcinogenicity								
Conclusion/Summary	: Not av	ailable.						
Classification								
Product/ingredient name	OSHA	IARC	NTP			ACGI	H EPA	NIOSH
methanol	None.	-	-			-	-	-
titanium dioxide	-	2B	-			A4	-	+
<u>Mutagenicity</u>								
Conclusion/Summary	: Not ava	ailable.						
<u>Teratogenicity</u>								
Conclusion/Summary	: Not av	ailable.						
Reproductive toxicity								
Conclusion/Summary	: Not av	ailable.						

12. Ecological information

Ecotoxicity : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name Result **Species** Exposure methanol Acute EC50 16.912 mg/l Marine water Algae - Ulva pertusa 96 hours 48 hours Acute EC50 10000000 µg/l Fresh water Daphnia - Daphnia magna Acute LC50 2500000 µg/l Marine water Crustaceans - Crangon crangon -48 hours Adult Acute LC50 100 mg/l Fresh water Fish - Pimephales promelas -96 hours Juvenile (Fledgling, Hatchling, Weanling) Algae - Ulva pertusa 96 hours Chronic NOEC 9.96 mg/l Marine water titanium dioxide Acute EC50 5.83 mg/l Fresh water Algae - Pseudokirchneriella 72 hours 5/1/2014. 0704

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12. Ecological information

		subcapitata - Exponential growth phase	
	Acute LC50 3 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 5.5 ppm Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 1000 mg/l Fresh water Chronic NOEC 0.984 mg/l Fresh water	Fish - Pimephales promelas Algae - Pseudokirchneriella	96 hours 72 hours
	Chionic NOEC 0.964 mg/r Fresh water	subcapitata - Exponential growth	72 110015
Conclusion/Summary	: Not available.		
Persistence/degradability			
Conclusion/Summary	: Not available.		
Other adverse effects	: No known significant effects or critical I	hazards.	

13. Disposal considerations

Waste disposal	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
United States - RCRA Tox	ic hazardous waste "II" List

United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS #		Reference number
Methanol (I); Methyl alcohol (I)	67-56-1	Listed	U154

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	Not regulated.	Cleaning Compound	-	-		-
TDG Classification	Not regulated.	Cleaning Compound	-	-		-
Mexico Classification	Not regulated.	Cleaning Compound	-	-		-
ADR/RID Class	Not regulated.	Cleaning Compound	-	-		Not regulated.
IMDG Class	Not regulated.	Cleaning Compound	-	-		Not regulated.

Chemask - CM8, CM1 14. Transport information IATA-DGR Class Not **Cleaning Compound** Not regulated. regulated. PG* : Packing group 15. Regulatory information **HCS Classification** Irritating material 2 Carcinogen Target organ effects **U.S. Federal regulations** : TSCA 8(a) CDR Exempt/Partial exemption: Not determined United States inventory (TSCA 8b): All components are listed or exempted. Clean Water Act (CWA) 307: zinc bis(dibutyldithiocarbamate) Clean Water Act (CWA) 311: ammonia Clean Air Act Section 112 : Listed (b) Hazardous Air **Pollutants (HAPs)** Clean Air Act Section 602 : Not listed **Class I Substances** Clean Air Act Section 602 : Not listed **Class II Substances DEA List I Chemicals** : Not listed (Precursor Chemicals) **DEA List II Chemicals** : Not listed (Essential Chemicals) SARA 302/304 **Composition/information on ingredients** No products were found. **SARA 304 RQ** : Not applicable. SARA 311/312 Classification : Immediate (acute) health hazard Delayed (chronic) health hazard **Composition/information on ingredients .**.. Τ, ____ _

lame	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
nethanol	1 - 3.8	Yes.	No.	No.	Yes.	Yes.
tanium dioxide	0.1 - 1	No.	No.	No.	No.	Yes.

<u>SARA 313</u>

	Product name	CAS number	%
Form R - Reporting requirements	zinc bis(dibutyldithiocarbamate) methanol	136-23-2 67-56-1	1 - 5 1 - 3.8
Supplier notification	zinc bis(dibutyldithiocarbamate) methanol	136-23-2 67-56-1	1 - 5 1 - 3.8

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations

Massachusetts

: The following components are listed: METHANOL

15. Regulatory information

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New York	: The following components are listed: Methanol
New Jersey	 The following components are listed: ZINC compounds; METHYL ALCOHOL; METHANOL; TITANIUM DIOXIDE; TITANIUM OXIDE (TiO2)
Pennsylvania	 The following components are listed: ZINC COMPOUNDS; METHANOL; TITANIUM OXIDE (TIO2)

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name		Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
methanol		No.	Yes.	No.	23000 μg/day (ingestion) 47000 μg/day (inhalation)
Canada inventory ternational regulations	: At least o	one compone	ent is not listed in DS	L but all such compone	nts are listed in NDSL
	Japan in Korea in Malaysia New Zea Philippir	ventory: All ventory: All Inventory (land Inventor nes inventor	components are liste components are liste EHS Register): Not ory of Chemicals (N	ed or exempted. determined. IZIOC) : All components onents are listed or exe	are listed or exempted
Chemical Weapons Convention List Schedule Chemicals	: Not listed	1	-		
Chemical Weapons Convention List Schedule I Chemicals	: Not listed	1			
Chemical Weapons Convention List Schedule	: Not listed	I			

16. Other information

: CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: NERVOUS SYSTEM, GASTROINTESTINAL TRACT, RESPIRATORY TRACT, SKIN, CENTRAL NERVOUS SYSTEM, EYE, LENS OR CORNEA.

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Hazardous Material Information System (U.S.A.)	:			
		Health	1	
		Flammability	0	

Physical hazards

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

16. Other information

The customer is responsible for determining the PPE code for this material.

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National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

: 5/1/2014.
: 5/1/2014.
: 6/12/2013.
: 1.01
: Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.