

## SAFETY DATA SHEET

Conforms to the requirements of the United States Hazard Communication regulation 29 CFR 1910.1200

### 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Trade name: **Tamen TM-16**

INCI name: **Cetrimonium chloride (Cetac-30%)**

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

Uses of the Substance/Mixture: Antistatic agent, conditioning agent, (for further information refer to the product technical datasheet)

#### 1.3 Details of the supplier of the safety data sheet

Company: Gray Beard Solutions  
1931G Rohlwing Road  
Rolling Meadows, IL 60008

Prepared by: SDS Coordinator

Date prepared: 11/7/2022

Supersedes: 9/8/2022

Revision: Review and update

#### 1.4 Emergency telephone

Emergency telephone number: 800-837-0499

### 2. Hazards identification

#### 2.1 Emergency overview

Appearance: Clear light amber liquid with a mild odor

Warning statements: Warning. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Toxic to aquatic life.

#### GHS classification in accordance with United States Hazard Communication regulation 29 CFR 1910.1200

Acute toxicity, oral: Category 4  
Skin corrosion/irritation: Category 2  
Eye damage/irritation: Category 2A  
Hazardous to the aquatic environment, acute: Category 1

#### 2.2 GHS label elements, including precautionary statements

Hazardous products: CAS#112-02-7 1-Hexadecanaminium, N ,N ,N -trimethyl-, chloride



Hazard pictograms/symbols

Signal Word: **WARNING**

Hazard Statements: H302: Harmful if swallowed  
H315: Causes skin irritation  
H319: Causes serious eye irritation  
H401: Toxic to aquatic life

Precautionary Statements: **Prevention**

P264: Wash hands thoroughly after handling  
P270: Do not eat, drink or smoke when using this product  
P273: Avoid release to the environment  
P280: Wear eye protection/face protection/protective gloves

**Response**

P301+P330+P312: IF SWALLOWED: Rinse mouth. Call a POISON CENTER/Doctor if you feel unwell  
P302+P352+P332+P313: IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical 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.  
P337+P310: If eye irritation persists: Get medical advice/attention  
P363: Wash contaminated clothing before reuse

**Storage/Disposal**

P501: Dispose of contents/container to an approved waste disposal plant

#### 2.3 Other hazards

No information available

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**3. Composition/information on ingredients**

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**3.1 Information on components and impurities**

Chemical name	CAS number(s)	GHS Classification	Concentration, %
1-Hexadecanaminium, N,N,N-trimethyl-, chloride (1:1)	112-02-7	Acute toxicity, oral: Category 4; Skin corrosion/irritation: Category 2; Eye damage/irritation: Category 2A, Hazardous to the aquatic environment, acute: Category 1 H302, H315, H319, H401	28-32
Water	7732-18-5	Not classified	68-72

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**4. First aid measures**

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**4.1 Description of first-aid measures**

General advice: Show this material safety data sheet to medical personnel. Do not leave affected person unattended. Isolate exposed apparel for laundry before re-use.

If inhaled: Remove from area to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

Skin contact: Wash affected areas with plenty of water. Seek medical attention if irritation develops or persists.

Eye contact: Rinse eyes with water. Remove any contact lenses, and continue flushing eyes with running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water. Seek medical attention if irritation develops or persists.

Ingestion: Do not give anything by mouth to an unconscious or convulsing person. Rinse mouth with water. Prevent aspiration of vomit.

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

Risks: Prolonged or repeated skin contact may aggravate existing skin conditions. Inhalation of mists may aggravate existing chronic respiratory conditions such as asthma, emphysema or bronchitis.

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

Note to physician: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Treat symptomatically.

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**5. Firefighting measures**

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**Flash Point and Method:** No flash <212°F (100°C) SetaFlash Closed Cup

Flammability class: This product is not combustible  
Autoignition temperature: No information available  
Flammability/Explosive limit: No information available

**5.1 Extinguishing media**

Suitable extinguishing media: Water spray, foam, multi-purpose powders, carbon dioxide (CO2)  
Use media suitable for the material that is burning.

Unsuitable extinguishing media: High volume water jet (frothing possible)

**5.2 Special hazards arising from the substance or mixture**

Special hazards during fire fighting: Container may rupture on heating. Harmful or toxic vapors may be released.

On combustion or on thermal decomposition: On combustion release of carbon oxides

**5.3 Advice for firefighters**

Special protective equipment for firefighters: As in any fire, wear NIOSH/MSHA approved, pressure-demand self-contained breathing apparatus and full protective gear.

Specific firefighting methods: Move containers from area if it can be done without risk. Cool fire-exposed containers with water from side. Contain the extinguishing fluids by diking

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**6. Accidental release measures**

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**6.1 Personal precautions, protective equipment and emergency procedures**

Spill area may be slippery. Wear appropriate protective equipment (See Section 8).

**6.2 Environmental precautions**

Do not flush into surface water or sanitary sewer system

**6.3 Methods and material for containment and cleaning up**

Recovery: Stop leak if safe to do so. Absorb spills with vermiculite, fuller's earth, or sand. Shovel up and place in a non-metal waste container for disposal. Dike large spills with soil or sandbags to contain it and prevent its spread. Keep in suitable, properly labeled, closed containers for disposal.

Decontamination/cleaning: Wash non-recoverable remainder with large amounts of water. Clean contaminated surfaces thoroughly. Recover the cleaning water for subsequent disposal.

Disposal: Dispose of in accordance with local regulations.

Additional advice: Spill area may be slippery.

**6.4 Reference to other sections**  
No information available

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**7. Handling and Storage**

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**7.1 Precautions for safe handling**

Technical measures: Does not require any specific or particular measures  
 Advice on safe handling and usage: Do not get this material in contact with eyes. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate protective equipment including long chemical resistant gloves, chemical splash goggles and protective footwear. For continued or severe exposure, wear a face shield over goggles. Wash affected areas after use. Do not taste or swallow. Avoid breathing vapors or mists. Handle in accordance with good industrial hygiene and safety practice. Use only with adequate ventilation. Avoid release to the environment. Product residue may remain on/in empty containers. All precautions for handling the product must be used in handling the empty container and residue. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.

**7.2 Conditions for safe storage, including any incompatibilities**

Technical measures for storage: Does not require any specific or particular measures  
**Storage conditions**  
 Recommended: Keep container tightly closed. Keep away from heat, and sunlight. Storage temperature range: 5-30°C. If material freezes, gently thaw prior to use. Mild agitation may be required.  
 Incompatible products: Hazardous reactions may occur on contact with certain chemicals. Refer to the list of incompatible materials section 10: "Stability-Reactivity"

**7.3 Specific end use(s)**  
No information available

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**8. Exposure controls/personal protection**

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Introductory remarks:  
 These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal considerations.  
 Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers

**8.1 Control parameters**  
Components with workplace control parameters

Components	Value type	Value	Basis
Contains no substances with occupational exposure limit values			

**8.2 Exposure controls**  
**Control measures**

Engineering measures: In applications where the product will be exposed to elevated temperatures, use local ventilation to remove potential decomposition products.

**Personal protective equipment**

Respiratory protection: In operations where mists are generated, wear a NIOSH/MSHA approved respirator that has been selected by a technically qualified person for the specific work conditions.

Hand protection: Wear natural rubber gloves. Observe instructions regarding permeability and breakthrough time provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion and contact time.

Eye protection: Wear safety glasses with side shields or goggles. Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

Skin and body protection: Wear footwear protecting against chemicals, and impervious clothing. Choose body protection according to the amount and concentration of the substances in the workplace.

Hygiene measures: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:  
 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.  
 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.  
 3) Wash exposed skin promptly to remove accidental splashes or contact with material

Protective measures: Ensure that eyewash stations and safety showers are close to the workstation location, and that emergency equipment is immediately accessible with instructions for use. The protective equipment must be selected in accordance with current local standards and in following proper use instructions from the supplier of the protective equipment. Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards, and/or risks that may occur during use.

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## 9. Physical and chemical properties

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Physical and chemical properties listed represent typical properties and should not be considered product specifications. Refer to product Certificate of Analysis for Product Specifications or contact Gray Beard Solutions for additional information.

### 9.1 Information on basic physical and chemical properties

Appearance:	Clear light amber liquid
Odor:	Mild characteristic soapy
Odor Threshold:	No data available
pH:	3-5 (5% aqueous solution)
Freezing point:	No information available
Melting point/range:	No information available
Boiling point/boiling range:	No information available
Flash point:	Does not flash <200°F (closed cup)
Evaporation rate:	No information available
Flammability (solid, gas):	No information available
Flammability/Explosive limit:	No information available
Auto-ignition temperature:	No information available
Vapor pressure:	No information available
Vapor density:	No information available
Density:	0.95 g/ml (20°C)
Solubility:	Water solubility: soluble
Solubility in other solvents:	Alcohols: soluble
Partition coefficient: n-octanol/water:	>4
Thermal decomposition:	No information available
Viscosity:	Low viscosity
Explosive properties:	No information available
Oxidizing properties:	Not considered as oxidizing, Structure-activity relationship (SAR)
VOC Content:	0

### 9.2 Other information

Ionic character:	Cationic
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## 10. Stability and reactivity

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### 10.1 Reactivity

No information available

### 10.2 Chemical stability

Stable under normal conditions

### 10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur

### 10.4 Conditions to avoid

No information available

### 10.5 Incompatible materials

Contact with anionic materials, soap and sulfated oils is not recommended

### 10.6 Hazardous decomposition products

On combustion or on thermal decomposition: carbon monoxide, aldehydes, flammable hydrocarbon fragments

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## 11. Toxicological information

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### 11.1 Information on toxicological effects

#### Acute toxicity

Acute oral:	LD <sub>50</sub> 700-1,300 mg/kg
Acute dermal:	LD <sub>50</sub> >4,000 mg/kg
Acute inhalation:	No information available
Acute toxicity (other routes of administration):	No information available

#### Skin corrosion/irritation

Skin irritation:	Causes skin irritation CIR: up to 0.25% appropriate for <i>leave-on</i> cosmetic products, no limit for <i>rinse-off</i> cosmetic products
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<b>Eye damage/irritation</b>		
Eye irritation:		Causes serious eye irritation CIR: 0.1% non-irritating, 0.5% mild irritation that cleared after 72 hrs
<b>Respiratory or skin sensitization</b>		
Sensitization:		Not classified as sensitizing by skin contact
<b>CMR Summary- Carcinogenicity</b>		
Carcinogenicity:		This product does not contain any ingredient designated as probable or suspected human carcinogens by IARC, ACGIH
<b>Mutagenicity</b>		
Genotoxicity in vitro:		No information available
Genotoxicity in vivo:		No information available
<b>Reproduction and development toxicity</b>		
Toxicity to reproduction/fertility:		No information available
Developmental toxicity/teratogenicity:		No information available
<b>Specific Target Organ Toxicity</b>		
STOT-single exposure:		No information available
STOT-repeated exposure:		No information available
<b>Aspiration toxicity</b>		
Aspiration toxicity:		No information available

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## 12. Ecological information

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<b>12.1 Toxicity</b>		
Aquatic toxicity:		No information available
<b>12.2 Persistence and degradability</b>		
Biodegradation:		Expected to be readily biodegradable
<b>12.3 Bioaccumulative potential</b>		
Partition coefficient: n-octanol/water:		Not applicable Surface-Active
Bioconcentration factor (BCF):		Not bioaccumulable
<b>12.4 Mobility in soil</b>		
Known distribution to environmental compartments:		Ultimate destination of the product: Water/Sediment
<b>12.5 Results of PBT and vPvB assessment</b>		
		No information available
<b>12.6 Other adverse effects</b>		
Environmental assessment:		Toxic to aquatic life

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## 13. Disposal considerations

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<b>13.1 Waste treatment methods</b>		
RCRA Waste Code:		Not regulated under RCRA 40CFR261
Product disposal:		Observe all applicable federal, state, and local regulations.
Packaging:		Remove all residue when emptying.

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## 14. Transportation information

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DOT Hazard Classification:		
UN number:		Not regulated
NMFC:		50303

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## 15. Regulatory information

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### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Notification status (Global Chemical Inventory Compliance):

Country	Regulatory list	Notification
USA	TSCA	Product and/or all components are listed as Active on the TSCA Inventory
	FIFRA	Inert ingredient: N,N,N-Trimethyl-1-hexadecanaminium chloride
	FDA	UNII Code: UC9PE95IBP
Canada	DSL	Listed or in compliance with the requirements the inventory
Mexico	INSQ	Listed or in compliance with the requirements the inventory
EU	EINECS	Listed or in compliance with the requirements the inventory; EC#203-928-6
	REACH	List of Registered Substances
Australia	AICS	Listed or in compliance with the requirements the inventory
China	IECSC	Listed or in compliance with the requirements the inventory
Japan	ENCS	Listed or in compliance with the requirements the inventory; 2-184X
Korea	ECL, AREC	Listed or in compliance with the requirements the inventory; 2000-1-509; KE-34535
New Zealand	NZIoC	Listed or in compliance with the requirements the inventory
Philippines	PICCS	Listed or in compliance with the requirements the inventory
Harmonized Tariff Code		340241

OSHA Hazard Communication Standard (29 CFR 1910.1200): Hazardous  
 CERCLA (RQ)

Ingredient(s)	CAS#	Weight	CERCLA RQ	Section 302 TPQ
Not listed				

SARA/EPCRA Extremely Hazardous Substances (302/304)

Ingredient(s)	CAS#	Weight	RQ	TPQ
Not listed				

SARA Hazard Categories (311/312)

Fire	Reactive	Acute health hazard	Chronic health hazard
No	No	Yes	No

SARA Toxic Substances (313) The following components are subject to SARA Section 313 reporting requirements

Ingredient(s)	CAS#	Weight
Not listed		

CAA (311) Volatile Organic compounds

Ingredient(s)	CAS#	Weight
Not listed		

State regulations

California

Prop 65 Components:

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Carcinogens & Reproductive Toxicity (CRT):

Not listed

CARB Identified Toxic Air Contaminants:

Not listed

SB-258 Cleaning Products Right to Know:

Not listed

15.2 Other regulations

WHMIS Classification

Classified in accordance with Health Canada Hazardous Products Regulations (SOR/2015-17)

Classification: Not controlled

Harmonized Tariff Schedule Codes

US Census Bureau Schedule B (2022): 3402.41.0000

Departmental Consolidation of the *Customs Tariff* (2022) (Canada): 3402.41.00 00

Chemical Weapons Convention List Schedules I, II & III Chemicals

Not listed

Montreal Protocol (Annexes A, B, C, E)

Not listed

Stockholm Convention on Persistent Organic Pollutants

Not listed

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed

16. Other information

NFPA-Classification		HMIS-Classification	
Health	2 moderate	Health	2 moderate
Flammability	0 minimal	Flammability	0 minimal
Instability or Reactivity	0 minimal	Reactivity	0 minimal
		HMIS PPE	B
		B=Safety glasses, Gloves	

Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH: American Conference of Governmental Industrial Hygienists	NIOSH: National Institute for Occupational Safety and Health
HMIS: Hazardous Materials Identification System	NTP: National Toxicology Program
IARC: International Agency for Research on Cancer	OSHA: Occupational Safety and Health Administration
NFPA: National Fire Protection Association	

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