




# SAFETY DATA SHEET

## 1. Product and Company Identification

<b>Product identifier</b>	<b>IMS-III Sanitizing Concentrate (4211-34)</b>		
<b>Other means of identification</b>	Not available		
<b>Recommended use</b>	Disinfectant / Cleaner / Sanitizer / Deodorizer		
<b>Recommended restrictions</b>	None known.		
<b>Manufacturer/Importer/Supplier/Distributor information</b>			
<b>Manufacturer</b>			
<b>Company name</b>	Nu-Calgon		
<b>Address</b>	2611 Schuetz Road St. Louis, MO 63043 United States		
<b>Telephone</b>	Phone:	314-469-7000 / 800-554-5499	
<b>E-mail</b>	info@nucalgon.com		
<b>Emergency phone number</b>	Emergency Phone:	1-800-424-9300 (CHEMTREC)	

## 2. Hazards Identification

<b>Physical hazards</b>	Not classified.		
<b>Health hazards</b>	Skin corrosion/irritation	Category 2	
	Serious eye damage/eye irritation	Category 2	
<b>Environmental hazards</b>	Not classified.		
<b>OSHA defined hazards</b>	Not classified.		
<b>Label elements</b>			
<b>Signal word</b>	Warning		
<b>Hazard statement</b>	Causes skin irritation. Causes serious eye irritation.		
<b>Precautionary statement</b>			
<b>Prevention</b>	Wash thoroughly after handling. Wear protective gloves. Wear eye protection/face protection.		
<b>Response</b>	If on skin: Wash with plenty of water. Specific treatment (see information on this label). If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. 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.		
<b>Storage</b>	Store away from incompatible materials.		
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.		
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.		
<b>Supplemental information</b>	This is a registered EPA product. The product labeling is in compliance with EPA regulations and guidelines.		

## 3. Composition/Information on Ingredients

### Mixtures

<b>Chemical name</b>	<b>Common name and synonyms</b>	<b>CAS number</b>	<b>%</b>
Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chloride		53516-76-0	0.781
Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride		85409-23-0	0.781

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#### 4. First Aid Measures

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<b>Inhalation</b>	IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
<b>Skin contact</b>	IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.
<b>Eye contact</b>	IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
<b>Ingestion</b>	IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
<b>Most important symptoms/effects, acute and delayed</b>	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage  Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Wear rubber gloves and chemical splash goggles. Keep out of reach of children.

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#### 5. Fire Fighting Measures

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<b>Suitable extinguishing media</b>	Dry chemical. Foam. Carbon dioxide. Fog.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Firefighters should wear a self-contained breathing apparatus.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters should wear full protective clothing including self-contained breathing apparatus.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

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#### 6. Accidental Release Measures

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<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Large Spills: Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use.  Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Prevent entry into waterways, sewers, basements or confined areas.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters.

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#### 7. Handling and Storage

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<b>Precautions for safe handling</b>	Use only with adequate ventilation. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Wash thoroughly after handling. Do not get in eyes, on skin or on clothing. Avoid breathing vapors or mists of this product. Use good industrial hygiene practices in handling this material. Keep container tightly closed.
<b>Conditions for safe storage, including any incompatibilities</b>	Do not contaminate water, food or feed by storage or disposal. Store only in closed, properly labeled containers. Store in original container in areas inaccessible to small children. Store locked up.

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## 8. Exposure Controls/Personal Protection

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<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear chemical goggles. Use a face shield if splashing is possible. Eye wash fountain and emergency showers are recommended.
<b>Skin protection</b>	
<b>Hand protection</b>	Impervious gloves. Confirm with reputable supplier first.
<b>Other</b>	Wear appropriate chemical resistant clothing. As required by employer code.
<b>Respiratory protection</b>	Avoid breathing mists or vapors. Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
<b>Thermal hazards</b>	Not applicable.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Wash hands before breaks and immediately after handling the product. Use good industrial hygiene practices in handling this material.

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## 9. Physical and Chemical Properties

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<b>Appearance</b>	Clear
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid
<b>Color</b>	Colorless to Straw
<b>Odor</b>	Characteristic
<b>Odor threshold</b>	Not available.
<b>pH</b>	9 - 11
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Pour point</b>	Not available.
<b>Specific gravity</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Flash point</b>	> 212.0 °F (> 100.0 °C) Pensky-Martens Closed Cup
<b>Evaporation rate</b>	Same as water
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available
<b>Flammability limit - upper (%)</b>	Not available
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available
<b>Vapor density</b>	Not available
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.

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## 10. Stability and Reactivity

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<b>Reactivity</b>	Reacts violently with acids. This product may react with oxidizing agents.
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<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Hazardous vapours may be produced when mixed with chlorinated detergents or sanitizers. Do not use or store near heat or open flame. Do not mix with oxidizers, anionic soaps and detergents.
<b>Incompatible materials</b>	Acids.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of nitrogen. Oxides of carbon.

## 11. Toxicological Information

### Information on likely routes of exposure

<b>Inhalation</b>	No adverse effects due to inhalation are expected.
<b>Skin contact</b>	Causes skin irritation.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	May cause stomach distress, nausea or vomiting.

**Symptoms related to the physical, chemical and toxicological characteristics** Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

### Information on toxicological effects

#### Acute toxicity

Product	Species	Test Results
IMS-III Sanitizing Concentrate (4211-34) (CAS Mixture)		
<b>Acute</b>		
<i>Dermal</i>		
LD50		> 2000 mg/kg, Tested
<i>Oral</i>		
LD50		> 5000 mg/kg, Tested

Components	Species	Test Results
Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chloride (CAS 53516-76-0)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Not available	
Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride (CAS 85409-23-0)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Not available	
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Not available	

**Skin corrosion/irritation** Causes skin irritation.

<b>Exposure minutes</b>	Not available.
<b>Erythema value</b>	Not available.
<b>Oedema value</b>	Not available.

**Serious eye damage/eye irritation** Causes serious eye irritation.

<b>Corneal opacity value</b>	Not available.
<b>Iris lesion value</b>	Not available.
<b>Conjunctival reddening value</b>	Not available.
<b>Conjunctival oedema value</b>	Not available.
<b>Recover days</b>	Not available.

### Respiratory or skin sensitization

<b>Respiratory sensitization</b>	Not available.
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<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	Non-hazardous by OSHA criteria.
<b>Carcinogenicity</b>	Not classified or listed by IARC, NTP, OSHA and ACGIH.
<b>ACGIH Carcinogens</b>	
Benzene, (chloromethyl)- (CAS 100-44-7)	A3 Confirmed animal carcinogen with unknown relevance to humans.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Benzene, (chloromethyl)- (CAS 100-44-7)	Volume 29, Supplement 7, Volume 71 - 2A Probably carcinogenic to humans.
<b>US - California Proposition 65 - CRT: Listed date/Carcinogenic substance</b>	
Benzene, (chloromethyl)- (CAS 100-44-7)	
<b>US. National Toxicology Program (NTP) Report on Carcinogens</b>	
Not listed.	
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	
Not regulated.	
<b>Reproductive toxicity</b>	Non-hazardous by OSHA criteria.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not available.
<b>Chronic effects</b>	Prolonged inhalation may be harmful.
<b>Further information</b>	Not available.

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## 12. Ecological Information

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<b>Ecotoxicity</b>	This product is toxic to fish.
<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Mobility in general</b>	Not available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

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## 13. Disposal Considerations

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<b>Disposal instructions</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.  Do not contaminate water, food or feed by storage or disposal.  CONTAINER DISPOSAL/PESTICIDE STORAGE: Non-refillable container. Store only in original container. Do not reuse empty container. Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep this product under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use. Triple rinse as follows: Fill container ¼ full with water and reclose the container. Agitate vigorously and dispose of rinsate. Repeat two more times. Wrap container and put in trash or offer for recycling if available.  RESIDUE REMOVAL INSTRUCTIONS: Triple rinse container promptly after emptying. Triple rinse as follows: Fill the container ¼ full with water and recap. Shake for 10 seconds. Follow Pesticide Disposal instructions for rinsate disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>US RCRA Hazardous Waste P List: Reference</b>	
Benzene, (chloromethyl)- (CAS 100-44-7)	P028
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

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## 14. Transport Information

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### U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

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## 15. Regulatory Information

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### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

This is a registered EPA product. The product labeling is in compliance with EPA regulations and guidelines.

EPA Reg. # 10324-166-65516

EPA Est. # 72026-IL-01

**PRECAUTIONARY STATEMENTS: HAZARDS TO HUMANS AND DOMESTIC ANIMALS.**  
**WARNING. KEEP OUT OF REACH OF CHILDREN.** Causes substantial but temporary eye injury. Harmful if swallowed, inhaled, or absorbed through the skin. Do not get in eyes or on clothing. Avoid contact with skin. Wear goggles or face shield when handling. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

**ENVIRONMENTAL HAZARD:** This product is toxic to fish.

**PHYSICAL OR CHEMICAL HAZARDS:** Do not use or store near heat or open flame. Do not mix with oxidizers, anionic soaps and detergents.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Benzene, (chloromethyl)- (CAS 100-44-7) Listed.

### US EPCRA Section 304 Extremely Haz. Subs. & CERCLA Haz. Subs.: Section 304 EHS reportable quantity

Benzene, (chloromethyl)- (CAS 100-44-7) 100 LBS

### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories**  
Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance** No

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**  
Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Benzene, (chloromethyl)- (CAS 100-44-7)

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

#### Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Benzene, (chloromethyl)- (CAS 100-44-7) 8570

#### Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Benzene, (chloromethyl)- (CAS 100-44-7) 20 %WV

#### DEA Exempt Chemical Mixtures Code Number

Benzene, (chloromethyl)- (CAS 100-44-7) 8568

**Food and Drug Administration (FDA)** Not regulated.

## US state regulations

### US - Illinois Chemical Safety Act: Listed substance

Benzene, (chloromethyl)- (CAS 100-44-7)

### US - Louisiana Spill Reporting: Listed substance

Benzene, (chloromethyl)- (CAS 100-44-7) Listed.

### US - Minnesota Haz Subs: Listed substance

Benzene, (chloromethyl)- (CAS 100-44-7) BENZYL CHLORIDE

### US - New Jersey RTK - Substances: Listed substance

Benzene, (chloromethyl)- (CAS 100-44-7)

### US - North Carolina Toxic Air Pollutants: Listed substance

Benzene, (chloromethyl)- (CAS 100-44-7)

### US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

### US. Massachusetts RTK - Substance List

Benzene, (chloromethyl)- (CAS 100-44-7)

### US. New Jersey Worker and Community Right-to-Know Act

Benzene, (chloromethyl)- (CAS 100-44-7)

### US. Pennsylvania RTK - Hazardous Substances

Benzene, (chloromethyl)- (CAS 100-44-7)

### US. Pennsylvania Worker and Community Right-to-Know Law

Benzene, (chloromethyl)- (CAS 100-44-7)

### US. Rhode Island RTK

Benzene, (chloromethyl)- (CAS 100-44-7)

### US. California Proposition 65



**WARNING:** This product can expose you to Benzene, (chloromethyl)-, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Benzene, (chloromethyl)- (CAS 100-44-7) Listed: January 1, 1990

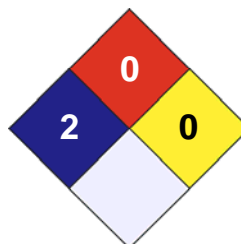
Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

## 16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	/ 2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X



### Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

### Issue date

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### Version #

02

### Further information

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.

### Prepared by

Nu-Calgon Technical Service Phone: (314) 469-7000