SAFETY DATA SHEET

1. Product and Company Identification

Product identifier **IMS-III Sanitizing Concentrate (4211-34)**

Other means of identification Not available

Recommended use Disinfectant / Cleaner / Sanitizer / Deodorizer

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Nu-Calgon

Address 2611 Schuetz Road
St. Louis, MO 63043
United States

Telephone Phone: 314-469-7000 / 800-554-5499

E-mail info@nucalgon.com

Emergency phone number Emergency Phone: 1-800-424-9300 (CHEMTREC)

2. Hazards Identification

Physical hazards Not classified.

Health hazards Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Causes skin irritation. Causes serious eye irritation.

Precautionary statement

Prevention Wash thoroughly after handling. Wear protective gloves. Wear eye protection/face protection.

Response 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.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC) None known.

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

3. Composition/Information on Ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
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

4. First Aid Measures

Inhalation	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.
Skin contact	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.
Eye contact	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.
Ingestion	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.
Most important symptoms/effects, acute and delayed	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	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.

5. Fire Fighting Measures

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

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	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.
Methods and materials for containment and cleaning up	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.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters.

7. Handling and Storage

Precautions for safe handling	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.
Conditions for safe storage, including any incompatibilities	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.

8. Exposure Controls/Personal Protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	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.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear chemical goggles. Use a face shield if splashing is possible. Eye wash fountain and emergency showers are recommended.
Skin protection	
Hand protection	Impervious gloves. Confirm with reputable supplier first.
Other	Wear appropriate chemical resistant clothing. As required by employer code.
Respiratory protection	Avoid breathing mists or vapors. Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
Thermal hazards	Not applicable.
General hygiene considerations	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.

9. Physical and Chemical Properties

Appearance	Clear
Physical state	Liquid.
Form	Liquid
Color	Colorless to Straw
Odor	Characteristic
Odor threshold	Not available.
pH	9 - 11
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Pour point	Not available.
Specific gravity	Not available.
Partition coefficient (n-octanol/water)	Not available.
Flash point	> 212.0 °F (> 100.0 °C) Pensky-Martens Closed Cup
Evaporation rate	Same as water
Flammability (solid, gas)	Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not available
Flammability limit - upper (%)	Not available
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available
Vapor density	Not available
Relative density	Not available.
Solubility(ies)	Not available.
Auto-ignition temperature	Not available
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and Reactivity

Reactivity	Reacts violently with acids. This product may react with oxidizing agents.

Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	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.
Incompatible materials	Acids.
Hazardous decomposition products	May include and are not limited to: Oxides of nitrogen. Oxides of carbon.

11. Toxicological Information

Information on likely routes of exposure

Inhalation	No adverse effects due to inhalation are expected.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	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)		
Acute		
Dermal		
LD50		> 2000 mg/kg, Tested
Oral		
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)		
Acute		
Inhalation		
LC50	Not available	
Oral		
LD50	Not available	
Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride (CAS 85409-23-0)		
Acute		
Dermal		
LD50	Not available	
Inhalation		
LC50	Not available	
Oral		
LD50	Not available	

Skin corrosion/irritation	Causes skin irritation.
Exposure minutes	Not available.
Erythema value	Not available.
Oedema value	Not available.
Serious eye damage/eye irritation	Causes serious eye irritation.
Corneal opacity value	Not available.
Iris lesion value	Not available.
Conjunctival reddening value	Not available.
Conjunctival oedema value	Not available.
Recover days	Not available.
Respiratory or skin sensitization	
Respiratory sensitization	Not available.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity Non-hazardous by OSHA criteria.

Carcinogenicity Not classified or listed by IARC, NTP, OSHA and ACGIH.

ACGIH Carcinogens

Benzene, (chloromethyl)- (CAS 100-44-7) A3 Confirmed animal carcinogen with unknown relevance to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Benzene, (chloromethyl)- (CAS 100-44-7) Volume 29, Supplement 7, Volume 71 - 2A Probably carcinogenic to humans.

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

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

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

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

Not regulated.

Reproductive toxicity Non-hazardous by OSHA criteria.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not available.

Chronic effects Prolonged inhalation may be harmful.

Further information Not available.

12. Ecological Information

Ecotoxicity This product is toxic to fish.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Mobility in general Not available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal Considerations

Disposal instructions 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.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

US RCRA Hazardous Waste P List: Reference

Benzene, (chloromethyl)- (CAS 100-44-7) P028

Waste from residues / unused products 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).

Contaminated packaging 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.

14. Transport Information

U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

15. Regulatory Information

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.

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

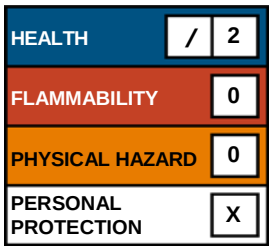
Benzene, (chloromethyl)- (CAS 100-44-7) Listed: January 1, 1990

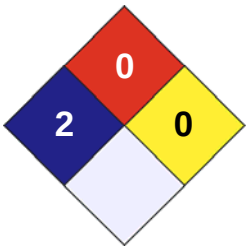
Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*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





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.

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

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