JMN SPECIALTIES, INC.

Safety Data Sheet
AC 700M

SECTION 1: Identification

1.1 GHS Product identifier

Product name	AC 700M
Product number	AC 700M
Brand	JMN

1.3 Recommended use of the chemical and restrictions on use

Recommended use: Industrial organic acid cleaner/descaler.
Restrictions on use: For industrial and professional use only. Not for household, food, or pharmaceutical use.

1.4 Supplier's details

Name	JMN Specialties, Inc.
Address	1100 Victory Drive Westwego LA 70094 USA
Telephone	504-341-3749
Fax	504-341-5868
email	sales@jmnspecialties.com

1.5 Emergency phone number

US & Canada: (800) 255-3924
Outside USA +01-813-248-0585.

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200, 2024)

- Eye damage/irritation (C.4.5), Cat. 2A

2.2 GHS label elements, including precautionary statements

Pictograms

Signal word **WARNING**

Hazard statement(s)

H319	Causes serious eye irritation

Precautionary statement(s)

P264	Wash hands and clean any skin contact thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
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+P313	If eye irritation persists: Get medical advice/attention.
P501	Dispose of container and unused contents in accordance with federal, state and local requirements.

2.3 Other hazards which do not result in classification

Spray or mist may irritate the respiratory tract. Prolonged or repeated skin contact may cause irritation. Spilled Product may create a slip hazard. Contact with certain reactive metals may release hydrogen gas.

Statement regarding ingredients of unknown toxicity

0% (oral, dermal, inhalation)

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Component	Identification	Weight %	Classifications
Ammonium citrate, dibasic	CAS no.: 3012-65-5	40 - 50 %	CLASSIFICATIONS: Skin corrosion/irritation (chapter 3.2), Cat. 2; Eye Irrit. 2. H315: Causes skin irritation; H319: Causes serious eye irritation.. HAZARDS: No data available.
Corrosion inhibitor, non-metallic	CAS no.: 124-04-9	1 %	CLASSIFICATIONS: Eye Irritation 2A. H319 Causes serious eye irritation. H402 Harmful to aquatic life.. HAZARDS: No data available.
1-octane sulfonic acid sodium salt hydrate	CAS no.: 5324-84-5 EC no.: 226-195-4	1 %	CLASSIFICATIONS: Causes skin and eye irritation. H227 Combustible liquid. H315+H320 Causes skin and eye irritation.. HAZARDS: No data available.

Trade secret statement (OSHA 1910.1200(i))

Any concentration presented as a range is provided to protect confidential business information and/or to account for normal batch-to-batch manufacturing variation. Where not specifically identified, the product may contain water (CAS No. 7732-18-5) as the balance of the formulation. The specific chemical identity and/or exact concentration of certain components has been withheld as a trade secret in accordance with applicable OSHA Hazard Communication Standard (29 CFR 1910.1200) provisions.

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	General Advice: Immediately remove affected person from exposure. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. If symptoms persist or significant exposure occurs, seek medical attention. Show this Safety Data Sheet to medical personnel if available.
If inhaled	Move the person to fresh air. Keep comfortable for breathing. If coughing, breathing difficulty, or respiratory irritation develops or persists, obtain medical attention.
In case of skin contact	Immediately remove contaminated clothing and shoes. Flush affected skin thoroughly with plenty of water for at least 15 minutes. Wash with mild soap and water. Do not reuse contaminated clothing until cleaned. If irritation, redness, pain, or chemical burns develop or persist, seek medical attention.
In case of eye contact	Immediately flush eyes cautiously with large amounts of water for at least 15 minutes while holding eyelids apart to ensure complete rinsing of all eye and lid tissue. Remove contact lenses if present and easy to do, then continue rinsing. Avoid allowing contaminated rinse water to contact unaffected eye areas. Obtain medical attention promptly if irritation persists or if pain, redness, swelling, or visual disturbance occurs.
If swallowed	Rinse mouth thoroughly with water. Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious or convulsing person. If swallowed, give small amounts of water if the affected person is conscious and alert. Seek medical attention if discomfort, nausea, vomiting, abdominal pain, or irritation develops or persists.
Personal protective equipment for first-aid responders	Ensure adequate ventilation. Wear chemical-resistant gloves and safety glasses or chemical splash goggles when assisting an exposed person. If exposure to mist is likely, use appropriate respiratory protection.

4.2 Most important symptoms/effects, acute and delayed

Treat symptomatically. Seek prompt medical assessment for persistent eye symptoms, breathing difficulty, or significant ingestion.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically and supportively. Due to the acidic nature of the product, prolonged exposure may result in irritation or tissue injury depending on concentration and exposure duration. No specific antidote is known. Ensure adequate eye irrigation and skin decontamination following exposure. 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.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Suitable Extinguishing Media: Use extinguishing media appropriate for the surrounding fire conditions. Suitable media may include water spray, fog, dry chemical, carbon dioxide (CO_2), alcohol-resistant foam, or regular foam. Unsuitable Extinguishing Media: No specific extinguishing media are known to be unsuitable for this product itself. Avoid using direct high-pressure water streams if this may spread contaminated runoff.

5.2 Specific hazards arising from the chemical

This product is a water-based acidic solution and is not considered flammable or combustible under normal conditions. Containers exposed to intense heat or fire may rupture due to pressure buildup. Contact with certain reactive metals may generate hydrogen gas, which can form flammable or explosive mixtures in confined spaces. Thermal decomposition may produce irritating or hazardous fumes including carbon monoxide, carbon dioxide, and acidic vapors.

5.3 Special protective actions for fire-fighters

Firefighters should wear full protective clothing and a NIOSH-approved self-contained breathing apparatus (SCBA) operating in positive-pressure mode. Use water spray to cool fire-exposed containers and surrounding structures. Avoid inhalation of decomposition fumes, vapors, or mists. Prevent contaminated fire-fighting runoff from entering drains, sewers, waterways, or soil where possible.

Further information

Cool tanks/drums with water spray/remove them into safety. Dilute toxic gases with water spray. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Restrict access to the spill area. Avoid contact with eyes and skin and avoid breathing spray or mist. Provide adequate ventilation. Wear the protective equipment described in Section 8. Spilled Product may make floors slippery.

6.2 Environmental precautions

Prevent uncontrolled entry into drains, sewers, soil, and waterways. Contain spent cleaning solution, which may contain dissolved metals, scale, oil, or other contaminants removed from equipment.

6.3 Methods and materials for containment and cleaning up

Stop the leak if it is safe to do so. Contain the spill with an inert absorbent or suitable barriers. Collect the liquid and contaminated absorbent in compatible, labeled containers for disposal. Rinse remaining residue with water while controlling and collecting the wash water. Do not discharge cleanup water without authorization.

Reference to other sections

See protective measures in Sections 7 and 8. Disposal considerations in Section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with eyes, skin, and clothing. Avoid breathing mist or spray. Use with adequate ventilation and wear the protective equipment specified in Section 8. Keep containers closed when not in use. Wash hands and exposed skin after handling. When diluting, add the Product to water with agitation to limit splashing. Do not mix with bleach or other chlorinating products.

7.2 Conditions for safe storage, including any incompatibilities

Store in a tightly closed, compatible container in a cool, well-ventilated area. Protect from freezing, excessive heat, and physical damage. Store separately from strong oxidizers, strong alkalis, and incompatible reactive metals. Keep secondary containment available where required. Empty containers may retain Product residue and should be handled with the same precautions as full containers.

Specific end use(s)

Industrial cleaning and descaling of heat transfer systems, hot oil units, glycol dehydration systems, and cooling systems; removal of water scale and rust from carbon steel or stainless steel piping. Select concentration, temperature, and circulation time for the equipment and deposits being cleaned. Confirm compatibility with all system materials before use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

CAS: (not specified)

AC 700M

No occupational exposure limit has been established for AC 700M as a mixture. Ammonia may be released under some handling conditions, particularly when the Product is heated or mixed with alkaline materials.

8.2 Appropriate engineering controls

Provide general ventilation during normal transfer and use. Use local exhaust or other controls where heating, spraying, agitation, or open circulation could generate mist or release ammonia. Provide an eyewash station and access to washing facilities where splashes may occur.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Pictograms

Eye/face protection

Wear chemical splash goggles. Add a face shield for pouring, pumping, line opening, or other tasks with significant splash potential.

Skin protection

Wear chemical-resistant gloves, such as nitrile, neoprene, or butyl rubber, selected for the actual contact time and task. Replace damaged or contaminated gloves.

Body protection

Body protection and hygiene measures: Wear clothing and footwear appropriate for chemical handling. Use a chemical-resistant apron or suit where substantial splashing is possible. Remove contaminated clothing and wash before reuse. Wash hands and exposed skin after handling and before eating, drinking, or smoking.

Respiratory protection

Respiratory protection is normally unnecessary with adequate ventilation and no mist generation. If an exposure assessment shows that mist or ammonia cannot be adequately controlled, use a NIOSH-approved respirator selected for the measured exposure under a compliant respiratory protection program.

Thermal hazards

No special thermal protection is normally required under standard industrial handling conditions.

Control banding approach

Apply Control Band 4 (CB4) as the default for open handling, transfer, spraying, or heated circulation of this Product. Use enclosed transfer where practical, local exhaust ventilation at points where mist or vapor may be released, splash protection, and restricted access during higher-exposure tasks. Assess actual airborne ammonia and mist exposure where operating conditions warrant; control banding does not replace applicable occupational exposure limits.

Environmental exposure controls

Contain the Product and spent cleaning solutions. Prevent uncontrolled discharge to soil, drains, or waterways. Spent solutions may contain metals and other contaminants removed during cleaning.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Clear, green liquid
Color	Green
Odor	Mild surfactant odor
Odor threshold	Not Determined
Melting point/freezing point	5 - 14°F (-10 to -15°C)
Boiling point or initial boiling point and boiling range	~100–104 °C (212–220°F)
Flammability	Not flammable
Lower and upper explosion limit/flammability limit	Not applicable
Flash point	Water based, Non-flammable material
Explosive properties	Product is not expected to be explosive
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable for this product
Oxidizing properties	Product is not expected to be oxidizing
pH	3.5 - 3.8 @ 20–25 °C (68–77 °F)
Kinematic viscosity	~ 1.5–1.7 mm^2/s at 25 °C (77 °F)
Solubility	Complete
Partition coefficient n-octanol/water (log value)	Not determined for the Product
Vapor pressure	Not determined
Evaporation rate	Similar to Water
Density and/or relative density	1.23 - 1.26 g/mL at 20–25 °C (68–77 °F)
Relative vapor density	Not determined
Particle characteristics	Not applicable for this product

Further safety characteristics (supplemental)
VOC Content: 0% / 0 g/L

SECTION 10: Stability and reactivity

10.1 Reactivity
The Product is a mildly acidic aqueous solution. It may react with certain reactive metals, potentially releasing hydrogen gas. Mixing with strong alkalis may release ammonia.

10.2 Chemical stability
Stable under recommended handling and storage conditions. Product remains stable at normal ambient temperatures and pressures when stored in compatible containers.

10.3 Possibility of hazardous reactions
No hazardous polymerization is expected. Contact with incompatible metals may generate flammable hydrogen, particularly during prolonged contact or cleaning as the solution becomes loaded with dissolved metals.

10.4 Conditions to avoid
Excessive heat, freezing, uncontrolled mixing with other chemicals, and prolonged contact with incompatible materials.

10.5 Incompatible materials
Strong oxidizers; bleach and other chlorinating products; strong alkalis; and reactive metals such as zinc and aluminum. Assess compatibility with the complete system before circulation.

10.6 Hazardous decomposition products
Fire or strong heating may produce carbon oxides, ammonia, and other irritating fumes. Under normal storage and use, hazardous decomposition is not expected.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
No oral, dermal, or inhalation toxicity study is available for the finished Product. Based on the information currently reviewed, the mixture is not classified for acute toxicity. No mixture ATE has been established.

Skin corrosion/irritation
Prolonged or repeated contact may cause irritation. The finished Product is not currently classified for skin corrosion or irritation.

Serious eye damage/irritation
Category 2A — Causes serious eye irritation (H319). See Section 2.

Respiratory or skin sensitization
No mixture-specific data are available. Sensitization is not expected from the identified principal components; confirm the PAS-8S supplier information before finalizing this assessment.

Germ cell mutagenicity
No mixture-specific data are available. The Product is not classified based on currently available component information.

Carcinogenicity
No mixture-specific data are available. No carcinogenic classification is indicated by the currently identified principal components; confirm all component disclosures before release.

Reproductive toxicity
No mixture-specific data are available. The Product is not classified based on currently available component information.

Summary of evaluation of the CMR properties
This product is not classified as carcinogenic, mutagenic, or toxic to reproduction (CMR) under OSHA 29 CFR 1910.1200 and GHS criteria.
Carcinogenicity: Not classified. Citric acid is not listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.
Germ Cell Mutagenicity: Not classified based on available ingredient information.
Reproductive Toxicity: Not classified based on available ingredient information.
Based on available data for ingredients, this mixture is not expected to exhibit CMR hazards under normal industrial use conditions.

Specific target organ toxicity (STOT) - single exposure
Not classified. Inhalation of generated mist may cause temporary respiratory irritation.

Specific target organ toxicity (STOT) - repeated exposure
Not classified on available information. Repeated skin contact may cause irritation.

Aspiration hazard
The Product is an aqueous solution and does not meet the usual criteria for hydrocarbon aspiration hazards.

Additional information
Medical Conditions Aggravated by Exposure: Pre-existing skin disorders, eye conditions, or respiratory conditions may be aggravated by repeated or prolonged exposure.

SECTION 12: Ecological information

Toxicity
FISH: Product: Fish: Expected to have low toxicity: >100 mg/L (based on similar products / components)
AQUATIC INVERTEBRATES: Product: Daphnia magna: Expected to have low toxicity: >100 mg/L (based on similar products / components)
CHRONIC TOXICITY FISH Product: NOEC/NOEL: >100 mg/L (based on similar products / components)
AQUATIC INVERTEBRATES Product: NOEC/NOEL: >100 mg/L (based on similar products / components)
TOXICITY TO AQUATIC PLANTS Product: Algae: Expected to have low toxicity: >100 mg/L (based on similar products / components) (based on similar products / components)

Persistence and degradability
The principal citrate components are expected to be biodegradable.

Bioaccumulative potential
Low bioaccumulation is expected for the principal citrate components. No whole-mixture measurement is available.

Mobility in soil
The Product is water-miscible and is expected to move with water if released to soil.

Results of PBT and vPvB assessment
Not fulfilling PBT (persistent/bio accumulative/toxic) criteria. Not fulfilling vPvB (very persistent, very bio accumulative) criteria.

Endocrine disrupting properties
This product does not contain any known or suspected endocrine disruptors.

Other adverse effects
Large discharges may affect receiving-water pH and oxygen demand. Spent cleaning solution may contain metals, scale residues, oil, or other contaminants removed from equipment and may present hazards different from those of unused Product. Prevent uncontrolled discharge.

SECTION 13: Disposal considerations

Disposal methods

Product disposal
Recover unused Product where practical. Characterize and dispose of unused or spent Product in accordance with applicable federal, state, and local requirements. Spent cleaning solution may contain dissolved metals, oil, or other contaminants removed from equipment.

Packaging disposal
Empty containers may retain Product residue. Drain containers and manage them through an approved reuse, recycling, or disposal program in accordance with applicable requirements. Do not reuse uncleaned containers for other materials.

Waste treatment
Evaluate the actual spent solution before selecting neutralization or other treatment. Control heat, splashing, and any gas generation during treatment. The waste generator is responsible for determining hazardous-waste status at the time of disposal.

Sewage disposal
Do not discharge Product, spent solution, or cleanup water to a sewer without authorization from the receiving wastewater facility and compliance with its discharge limits.

Other disposal recommendations
Keep spent Product separate from incompatible wastes, including bleach and strong oxidizers. Retain representative waste-characterization records where required.

SECTION 14: Transport information

DOT (US)
UN Number: None
Class: None
Packing Group: None
Proper Shipping Name: Non-Regulated
Reportable quantity (RQ): None
Marine pollutant: No
Poison inhalation hazard: No

IMDG
UN Number: None
Class: None
Packing Group: None
EMS Number: None
Proper Shipping Name: Non-Regulated

IATA
UN Number: None
Class: None
Packing Group: None
Proper Shipping Name: Non-Regulated

SECTION 15: Regulatory information

Component	CAS no.	RTK (US) for state:	TSCA (US)[1]	CA Prop. 65[2]	pfas[3]
Adipic acid	124-04-9	PA, NJ, MA	P	-	-
Ammonium citrate, dibasic	3012-65-5	PA, NJ, MA	P	-	-
1-octane sulfonic acid sodium salt hydrate	5324-84-5	-	P	-	-

[1] "P"—Public list, "C"—Confidential list. [2] "c"—cancer, "r"—reproductive harm. [3] "pfas"—Per- and polyfluoroalkyl substances.

Regulation	Applicability
US EPA TSCA	All components of this Product are listed as active on the U.S. EPA TSCA Chemical Substance Inventory or are exempt from applicable inventory requirements.
States Right To Know Components	Citric acid, CAS No. 77-92-9, may be subject to disclosure under the New Jersey and Pennsylvania Right-to-Know requirements. No components are present at concentrations requiring disclosure under the Massachusetts or Rhode Island Right-to-Know requirements.
SARA 302 Components	This Product does not contain any Extremely Hazardous Substance subject to Section 302 reporting requirements.
SARA 311/312 Hazards	Serious eye damage or eye irritation
SARA 313 Components	This Product does not contain any chemical components with known CAS numbers that exceed the applicable de minimis concentrations established by SARA Title III, Section 313 and 40 CFR Part 372.
California Prop. 65 Components	No Proposition 65-listed substance has been identified from the principal disclosed ingredients.
Massachusetts Toxic Use Reduction Act (TURA) list	Chemical name: Adipic acid CAS number: 124-04-9 TRI listing: unlisted; CERCLA listing: unlisted; TURA-only listing: no; de minimis concentration threshold: 1 percent. Qualifiers/definitions: Delisted. Changes: DELISTED CERCLA chemical RY2010
Massachusetts Toxic Use Reduction Act (TURA) list	Chemical name: Ammonium citrate, dibasic CAS number: 3012-65-5 TRI listing: unlisted; CERCLA listing: X-reportable; TURA-only listing: no; de minimis concentration threshold: 1 percent. Qualifiers/definitions: Report as individual chemical and if dissolved in water as part of Ammonia CAS # 7664417. Changes: CERCLA chemical added RY1992. Ammonia portion included in the amount reported for Ammonia RY1990 on.
Canadian Domestic Substances List (DSL)	Chemical name: Hexanedioic acid CAS number: 124-04-9
Canadian Domestic Substances List (DSL)	Chemical name: 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, diammonium salt CAS number: 3012-65-5
Canadian Domestic Substances List (DSL)	Chemical name: 1-Octanesulfonic acid, sodium salt CAS number: 5324-84-5

15.2 Chemical Safety Assessment

A Chemical Safety Assessment (CSA) has not been carried out for this mixture. (Under EU REACH, CSAs are performed for substances; this product is a mixture formulated from registered substances.)

Annex: Voluntary Chemical Safety Assessment (summary)
Ingestion: May irritate the mouth and digestive tract, causing nausea, vomiting, abdominal discomfort, or diarrhea. Significant systemic toxicity is not expected from incidental exposure, although larger ingestions require medical evaluation.
Eye contact: Direct contact may cause marked irritation, including redness, tearing, stinging, pain, and temporary visual disturbance. Begin flushing promptly as directed in Section 4.
Skin contact: Prolonged or repeated contact may cause redness, dryness, irritation, or discomfort, particularly on sensitive skin.
Inhalation: Mist or spray may irritate the nose, throat, and respiratory tract, causing coughing or throat discomfort. Exposure may increase during spraying, heated use, or work in poorly ventilated areas.

HMIS Rating

AC 700M	
HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	C

NFPA Rating

SECTION 16: Other information

This Safety Data Sheet has been revised as of the issue date indicated in the footer. Changes may include updates to composition, hazard classification, physical and chemical properties, toxicological information, and regulatory data. Previous versions should be discarded. Users are advised to review the entire document to ensure awareness of current information.

16.1 Further information/disclaimer

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, the Company makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the recipients will make their own determination as to its suitability for their intended purposes prior to use. The conditions of use, handling, storage, and disposal of this product are beyond the control of the Company and may involve variables and conditions that cannot be anticipated. The user is solely responsible for determining safe and appropriate conditions of use, including compatibility with other materials and compliance with all applicable federal, state, and local regulations. This product may react with other materials or under certain conditions to produce hazardous or unintended results. It is the responsibility of the user to evaluate and control such risks prior to use. The information provided in this Safety Data Sheet is based on current knowledge and is intended solely as guidance for safe handling, use, processing, storage, transportation, and disposal. It is not to be construed as a guarantee, product specification, or quality specification and does not establish a legally binding contractual relationship. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE WITH RESPECT TO THE INFORMATION OR THE PRODUCT TO WHICH THE INFORMATION REFERS.

16.2 Preparation information

Prepared in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200), as revised in 2024, and aligned with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), Revision 7.