



Safety Data Sheet

Aries 3008

Section 1. Identification

Product Identifier Aries 3008
Synonyms Boiler treatment chemical
Manufacturer Stock
Numbers N/A

Recommended use Boiler water treatment
Uses advised against N/A

Manufacturer Contact
Address Aries Chemical Incorporated
 PO BOX 519
 Beaver Falls, NY, 13305

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	INFOTRAC	

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aries@arieschem.com	www.arieschem.com

Section 2. Hazards Identification

Classification HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD - Category 1
 SKIN CORROSION/IRRITATION - Category 1
 STOT (Single Exposure) - Category 3

Signal Word Danger

Pictogram



Hazard Statements	Causes severe skin burns and eye damage. May cause respiratory irritation. Very toxic to aquatic life
Precautionary Statements	
Response	Collect spillage If exposed or concerned: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. IF ON SKIN (or hair): Immediately take off all contaminated clothing. Wash thoroughly with water. Wash contaminated clothing before reuse. Get medical attention immediately. IF SWALLOWED: Immediately call POISON CENTER or physician. Rinse mouth with water. Do NOT induce vomiting. IN CASE OF SPILL: Contain with dikes, sandbags, etc. Prevent run-off into water sources. Recover material into containers for disposal. Any remaining material may be diluted with water and neutralized with dilute acetic acid. A dry sorbent can be used to collect neutralized ammonium hydroxide. Wash contaminated clothing before reuse.
Prevention	Avoid release to the environment. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area. Wash hands before eating, drinking or smoking and thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Ingredients of unknown toxicity	0%
Hazards not Otherwise Classified	No Data Available

Section 3. Ingredients

CAS	Ingredient Name	Weight %
1336-21-6	Ammonium hydroxide ((NH ₄)(OH))	100 %
7664-41-7	Ammonia	10% - 35%

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-Aid Measures

Eye contact	Get medical attention immediately. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.
Inhalation	IF INHALED: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	IF ON SKIN (or hair): Get medical attention immediately. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	IF SWALLOWED: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a comfortable position for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media	Use an extinguishing agent suitable for surrounding fire.
Unsuitable Extinguishing Media	No information available
Additional Information	<p>-Special Fire-fighting Procedures: 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. Wear full protective clothing and self-contained breathing apparatus in the pressure demand mode.</p> <p>-Unusual Fire and Explosion Hazards: In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.</p> <p>-Decomposition Products: Nitrogen oxides</p>

Section 6. Accidental Release Measures

Additional Information

-Personal precautions, protective equipment, and emergency procedures: 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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate PPE.

-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). May be harmful to the environment if released in large quantities. Collect spillage.

-Methods for Clean-Up: Cleanup personnel must wear proper protective equipment.

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 inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: 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 into a 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.

Section 7. Handling and Storage

- Handling Do not get in eyes, on skin or clothing. Use with adequate ventilation and employ respiratory protection where mist or spray may be generated. Wash hands before eating, drinking or smoking. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice. Keep the containers closed when not in use.
- Storage Keep away from food and drinking water. Store locked up in a tightly closed container. Do not store in direct sunlight. Store in a well-ventilated area.
- Handling Wear appropriate personal protective equipment (See Section 8) when handling, including an approved respirator if mist or vapor levels exceed exposure limits.
- Storage Emergency eye wash and safety shower should be located nearby.
- Handling Do not breathe (dust, vapor, mist, gas). Do not taste or ingest. Empty containers retain product residue and can be hazardous. Do not reuse this container.
- Storage Store in original container. Store in a cool, well-ventilated area away from direct sunlight. Store away from incompatible materials.
- Handling Do not cut, grind or weld on or near container.
- Storage Keep away from heat, sparks, and flame.
- Handling Material should be stored in secondary containers, or in a diked area, as appropriate.

Additional Information -Conditions to Avoid: Heating above ambient temperatures causes the vapor pressure of ammonia to increase rapidly.
 -Materials to Avoid: Brass, copper, strong oxidizing agents, strong acids.

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits	Ingredient Name	ACGIH TLV	OSHA PEL	STEL
	Ammonium hydroxide ((NH ₄)(OH))	N/A	N/A	N/A
	Ammonia	25 ppm (TWA)	50 ppm	35 ppm

Personal Protective Equipment Goggles, Gloves, Apron, Face Shield

Eye protection Use approved safety goggles or safety glasses, as described in OSHA 29 CFR 1910.133. Splash goggles with a faceshield may be needed if splash hazards exist.

Skin Protection Wear neoprene or rubber gloves, neoprene splash apron, full protective clothing. Wear protective gloves. Please observe the instructions regarding permeability. Avoid contact with skin. If splashes are likely to occur, wear suitable protective clothing such as an apron and rubber boots.

Respiratory protection If exposures exceed the PEL or TLV, use NIOSH/MSHA approved respirator in accordance with OSHA Respiratory Protection Requirements under 29 CFR 1910.134. If there are no applicable or established exposure limit requirements or guidelines, general ventilation should be sufficient.

General hygiene considerations Keep away from foodstuff, beverages, and feed. Do not eat, drink or smoke while handling this product. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Wash hands and face before breaks and immediately after handling the product. Launder contaminated or dirty clothing before reuse. Ensure that eyewash stations and safety showers are close to the workstation location.

Additional Information Appropriate engineering controls: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosure, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposures: 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.

Section 9. Physical and Chemical Properties
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Physical State	Liquid
Color	Clear, Colorless
Odor	Ammonical, Pungent
Odor Threshold	No data available.

Solubility	Complete
Partition coefficient Water/n-octanol	No data available.
VOC%	N/A
Viscosity	No data available.
Specific Gravity	N/A
Density lbs/Gal	N/A
Pounds per Cubic Foot	N/A
Flash Point	No data available.
FP Method	No data available.
pH	12 (5% solution)
Melting Point	See additional info
Boiling Point	38 deg C (100.4 deg F)*
Boiling Range	No data available.
LEL	N/A
UEL	N/A
Evaporation Rate	No data available.
Flammability	See additional info
Decomposition Temperature	No data available.
Auto-ignition Temperature	651 deg C (30% solution)
Vapor Pressure	3-10 psi (16 deg C, 30% soln)
Vapor Density	See additional info.

Additional Information

Specific gravity: 0.897 (30% solution), 0.929 (19% solution)
Melting/freezing point: -82 deg C (30% solution), -34 deg C (19 deg C)
* Boiling point: 38 deg C (anhydrous)
* Vapor density: 0.6 (anhydrous)
Flammability: Flammable in the presence of oxidizing materials
Upper/lower flammability limits: 25/16 %V (30% solution)

Section 10. Stability and Reactivity

Hazardous polymerization Hazardous polymerization will not occur under normal storage and handling.
Chemical stability Stable under normal conditions of storage and handling.
Additional Information -Conditions to Avoid: Heating above ambient temperatures causes the vapor pressure of ammonia to increase rapidly. Heat, sparks, flames.
-Materials to Avoid: Strong acids. Brass, copper, strong oxidizing agents, strong acids.
-Hazardous Decomposition or By-Products: Nitrogen oxides

Section 11. Toxicological Information

Likely routes of exposure Eyes, skin, ingestion
Skin contact Causes severe skin burns.
Eye contact Causes severe eye irritation, possibly resulting in burns and serious damage to eyes.

Sensitization	May cause respiratory irritation.
Specific target organ toxicity-single exposure	Respiratory tract. Inhalation may cause respiratory irritation.
Specific target organ toxicity - repeat exposure	No information available.
Chronic Effects	No information available.
Carcinogenicity	No information available.
Mutagenicity	No information available.
Reproductive effects	No information available.
Additional Information	Acute Toxicity Data: Aqua ammonia (CAS # 1336-21-6): LD50/Rat/Oral: 350 mg/kg LC50/Rat/Inhalation (gas): 7338 ppm (1 hr exposure)

Section 12. Ecological Information

Aquatic toxicity	Highly/very toxic to fish and other water organisms.
Mobility	No data available.
Persistence and degradability	No information available.
Additional Information	Acute Toxicity data: Aqua ammonia (CAS# 1336-21-6) : LC50/Fathead minnow (Pimephales promelas)/96 hr: 12.1 mg/L LC50/Water flea (Daphnia magna)/48 hr: 37.3 mg/L Bioaccumulation: Low (LogPow: -1.38)

Section 13. Disposal

Additional Information	Collect and reclaim or dispose in sealed containers at a licensed waste disposal site. This material and its container may need to be disposed of as hazardous waste. Do not allow this material to drain into sewers or water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents and container in accordance with local, regional and/or international regulations. 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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Section 14. Transport Information

UN Number	2672
UN Proper Shipping Name	UN2672, Ammonia solutions, 8, III
DOT Classification	Corrosive liquid
Packing Group	III

Section 15. Regulatory Information

TSCA	The ingredients of this product are either listed on or exempt from listing on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.
CERCLA Section 103 hazardous substances	Aqua ammonia (CAS 1336-21-6): 100% by wt., RQ = 1000 lbs
California Proposition 65	This product does not contain any ingredients known to the State of California to cause cancer and/or reproductive harm.
Additional Information	<p>FEDERAL REGULATIONS:</p> <p>-SARA Title III Section 302 Extremely Hazardous Substance: Ammonia, anhydrous (7664-41-7), 10-35% by wt.</p> <p>-SARA 311/312 Hazardous Categories: Acute-Yes. Chronic-No. Fire-No. Pressure-No. Reactivity-No.</p> <p>-SARA 313 Toxic Chemical: Yes. This product contains the following toxic chemicals subject to the report requirements of the Emergency Planning and Community Right-to-Know Act of 1986 (40 CFR 372): CAS# 7664-41-7, Ammonia, anhydrous, 10-35% by wt.</p> <p>STATE REGULATIONS:</p> <p>Right-to-Know Lists:</p> <p>CAS# 7664-41-7, Ammonia, anhydrous, 10-35% by wt.: Massachusetts, New York, New Jersey, Pennsylvania</p> <p>CAS # 1336-21-6, Ammonium hydroxide, 100% by wt.: Massachusetts, New York, New Jersey, Pennsylvania</p> <p>INTERNATIONAL REGULATIONS:</p> <p>This product complies with the inventory requirements of the following governing countries:</p> <p>Canada (Canadian Environmental Protection Act, Domestic Substance List, DSL)</p>

Section 16. Other Information

Revision Date	8/9/2018
Version Number	1
Reason for Revision	New product SDS
Disclaimer	While Aries Chemical Inc. believes the data set forth herein is accurate as of the date hereof, Aries Chemical makes no warranty with respect thereto and expressly disclaims all liability for refinance thereon of such data and is offered solely for your consideration, investigation and verification.