

**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 08/28/2017

Reviewed on 08/1/2018

**1 Identification**

- **Product Identifier**
- **Trade name: Test / Calibration Solution**
- **Relevant identified uses of the substance or mixture and uses advised against:**
- **Product Description** Up to 1000ppm of Anhydrous Ammonia in water
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**  
Cool Air Incorporated  
1544 134th Avenue NE  
Ham Lake, Minnesota 55304  
P: 763-205-0844  
F: 763-432-295  
info@coolairinc.com
- **Emergency telephone number:** 763-205-0844

**2 Hazard(s) Identification**

- **Classification of the substance or mixture:**  
The product does not need classification according to OSHA HazCom Standard 29 CFR paragraph (d) of §1910.1200(g) and GHS Rev 03.
- **Label elements:**
- **GHS label elements** Non-Regulated Material
- **Hazard pictograms:** Non-Regulated Material
- **Signal word:** Non-Regulated Material
- **Hazard statements:** Non-Regulated Material
- **Unknown acute toxicity:**  
This value refers to knowledge of known, established toxicological or ecotoxicological values.
- **Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	0	Fire = 0
REACTIVITY	0	Physical Hazard = 0

- **Hazard(s) not otherwise classified (HNOC):** None known

**3 Composition/Information on Ingredients**

- **Non-hazardous components:**

7732-18-5	Water, distilled water, deionized water	>99%
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- **Chemical characterization: Mixtures**
- **Description:** Mixture of substances listed below with non-hazardous additions.

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<b>· Dangerous Components:</b>		
CAS: 7664-41-7 RTECS: BO 0875000	Ammonia, anhydrous ☠ Acute Tox. 3, H331; ☠ Skin Corr. 1B, H314; ☠ Aquatic Acute 1, H400; ☠ Acute Tox. 4, H302; Flam. Gas 2, H221; Press. Gas, H280	<1.0%

**· Additional information:**

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

**4 First-Aid Measures****· Description of first aid measures:**

**· General information:** No special measures required.

**· After inhalation:** Supply fresh air; consult doctor in case of complaints.

**· After skin contact:**

Wash with soap and water.

If skin irritation occurs, consult a doctor.

**· After eye contact:**

If eye irritation occurs, consult a doctor.

Rinse opened eye for several minutes under running water.

**· After swallowing:**

Do not induce vomiting without medical advice.

If swallowed and symptoms occur, consult a doctor.

**· Information for doctor:**

**· Most important symptoms and effects, both acute and delayed:** No further relevant information available.

**· Indication of any immediate medical attention and special treatment needed:**

No further relevant information available.

**5 Fire-Fighting Measures****· Extinguishing media:**

**· Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

**· Special hazards arising from the substance or mixture:** No further relevant information available.

**· Advice for firefighters:****· Protective equipment:**

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

**6 Accidental Release Measures**

**· Personal precautions, protective equipment and emergency procedures:** Not required.

**· Environmental precautions:**

Dilute with plenty of water.

Do not allow to enter sewers/surface or ground water.

**· Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).

Dispose of the collected material according to regulations.

**· Reference to other sections:**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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· **Protective Action Criteria for Chemicals**

· <b>PAC-1:</b>		
7664-41-7	Ammonia, anhydrous	30 ppm
· <b>PAC-2:</b>		
7664-41-7	Ammonia, anhydrous	160 ppm
· <b>PAC-3:</b>		
7664-41-7	Ammonia, anhydrous	1,100 ppm

### 7 Handling and Storage

- **Handling**
- **Precautions for safe handling:** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities:**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s):** No further relevant information available.

### 8 Exposure Controls/Personal Protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters:**
- **Components with occupational exposure limits:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls:**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:** Not required.
- **Material of gloves:** Not applicable.
- **Penetration time of glove material:** Not applicable.
- **Eye protection:** Not required.

### 9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Pungent
<b>Odor threshold:</b>	Not determined.

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- **pH-value:** Not applicable.
- **Change in condition**
  - **Melting point/Melting range:** Not determined.
  - **Boiling point/Boiling range:**  $\geq 100\text{ }^{\circ}\text{C}$  ( $\geq 212\text{ }^{\circ}\text{F}$ )
- **Flash point:** None
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:** Not applicable
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
  - **Lower:** Not determined.
  - **Upper:** Not determined.
- **Vapor pressure @ 20°C (68 °F):**  $\leq 23\text{ hPa}$  ( $\leq 17\text{ mm Hg}$ )
- **Density @ 20°C (68 °F):**  $1\text{ g/cm}^3$  (lbs/gal)
- **Relative density:** Not determined.
- **Vapor density:** Not determined.
- **Evaporation rate:** Not determined.
- **Solubility in / Miscibility with:**
  - **Water:** Fully miscible.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - **Dynamic:** Not determined.
  - **Kinematic:** Not determined.
- **Solvent content:**
  - **Water:** 99.9 %
  - **VOC content:** 0.00 %
  - **Solids content:** 0.0 %
- **Other information:** No further relevant information available.

**10 Stability and Reactivity**

- **Reactivity:** No further relevant information available.
- **Chemical stability:** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

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**Trade name: Test / Calibration Solution****11 Toxicological Information****· Information on toxicological effects:****· Acute toxicity:****· Primary irritant effect:****· On the skin:** No irritating effect.**· On the eye:** No irritating effect.**· Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations.

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

**· Carcinogenic categories:****· IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

**· NTP (National Toxicology Program):**

None of the ingredients are listed.

**· OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

**12 Ecological Information****· Toxicity:****· Aquatic toxicity:** No further relevant information available.**· Persistence and degradability:** No further relevant information available.**· Behavior in environmental systems:****· Bioaccumulative potential:** No further relevant information available.**· Mobility in soil:** No further relevant information available.**· Additional ecological information:****· General notes:**

Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.

**· Results of PBT and vPvB assessment:****· PBT:** Not applicable.**· vPvB:** Not applicable.**· Other adverse effects:** No further relevant information available.**13 Disposal Considerations****· Waste treatment methods:****· Recommendation:**

Smaller quantities can be disposed of with household waste.

Observe all federal, state and local environmental regulations when disposing of this material.

**· Uncleaned packagings****· Recommendation:** Disposal must be made according to official regulations.**· Recommended cleansing agent:** Water, if necessary with cleansing agents.

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### 14 Transport Information

- **UN-Number:** Non-Regulated Material
- **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name:** Non-Regulated Material
- **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es):**
- **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
- **Class:** Non-Regulated Material
- **Packing group:** Non-Regulated Material
- **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Special precautions for user:** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
- **UN "Model Regulation":** Non-Regulated Material

### 15 Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**

· **Section 355 (extremely hazardous substances):**

7664-41-7	Ammonia, anhydrous
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· **Section 313 (Specific toxic chemical listings):**

7664-41-7	Ammonia, anhydrous
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· **TSCA (Toxic Substances Control Act):**

All ingredients are listed or exempt from listing.

· **California Proposition 65:**

· **Chemicals known to cause cancer:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

· **New Jersey Right-to-Know List:**

7664-41-7	Ammonia, anhydrous
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· **New Jersey Special Hazardous Substance List:**

7664-41-7	Ammonia, anhydrous	CO
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· **Pennsylvania Right-to-Know List:**

7664-41-7	Ammonia, anhydrous
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· <b>Pennsylvania Special Hazardous Substance List:</b>	
7664-41-7 Ammonia, anhydrous	E
· <b>Carcinogenic categories:</b>	
· <b>EPA (Environmental Protection Agency):</b>	
None of the ingredients are listed.	
· <b>TLV (Threshold Limit Value established by ACGIH):</b>	
None of the ingredients are listed.	
· <b>NIOSH-Ca (National Institute for Occupational Safety and Health):</b>	
None of the ingredients are listed.	
· <b>GHS label elements</b> Non-Regulated Material	
· <b>Hazard pictograms:</b> Non-Regulated Material	
· <b>Signal word:</b> Non-Regulated Material	
· <b>Hazard statements:</b> Non-Regulated Material	
· <b>National regulations:</b>	
None of the ingredients are listed.	
· <b>Chemical safety assessment:</b> A Chemical Safety Assessment has not been carried out.	

**16 Other Information**

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· **Date of preparation / last revision:** 08/28/2017 / -· **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road  
ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
ACGIH: American Conference of Governmental Industrial Hygienists  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
VOC: Volatile Organic Compounds (USA, EU)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
NIOSH: National Institute for Occupational Safety and Health  
OSHA: Occupational Safety & Health Administration  
TLV: Threshold Limit Value  
PEL: Permissible Exposure Limit  
REL: Recommended Exposure Limit  
Flam. Gas 2: Flammable gases – Category 2  
Press. Gas: Gases under pressure – Compressed gas  
Acute Tox. 4: Acute toxicity – Category 4  
Acute Tox. 3: Acute toxicity – Category 3  
Skin Corr. 1B: Skin corrosion/irritation – Category 1B  
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

· **\* Data compared to the previous version altered.**

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