

Safety Data Sheet (SDS)

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

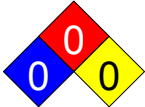
Printing date 01/13/2015

Reviewed on 01/13/2015

* 1 Identification

- **Product identifier**
- **Trade name:** Artificial Perspiration, ISO 3160
- **Product number:** 1700-0026
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Product description** Artificial perspiration manufactured according to ISO 3160
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Pickering Laboratories, Inc.
1280 Space Park Way
Mountain View, CA 94043
Phone: (650) 694-6700
Fax: (650) 968-0749
www.pickeringlabs.com
support@pickeringlabs.com
- **Emergency telephone number:**
Clean Harbors Environmental Services
(800) 654-3330

* 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
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**

 - Health = 0
 - Fire = 0
 - Reactivity = 0
- **HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0
- **Other hazards** None

* 3 Composition/information on ingredients

CAS: 7732-18-5 RTECS: ZC 0110000	water, distilled, conductivity or of similar purity	90-99%
CAS: 57-13-6 RTECS: YR 6250000	urea	≤ 1.0%
CAS: 7647-14-5	Sodium Chloride	≤ 2.5%

- **Chemical characterization: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

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· Dangerous Components:		
CAS: 12125-02-9 RTECS: BP 4550000	ammonium chloride ⚠ Acute Tox. 4, H302; Eye Irrit. 2A, H319	≤ 2.5%
CAS: 50-21-5 RTECS: OD 2800000	Lactic Acid ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	≤ 2.5%
CAS: 64-19-7 RTECS: AF 1225000	Glacial Acidic Acid ⚠ Flam. Liq. 3, H226; ⚠ Skin Corr. 1A, H314	≤ 0.5%

* 4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Not anticipated under normal use.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.
- **After swallowing:**
Rinse mouth with water ensuring that rinse is not swallowed. Drink 2 glasses of water to dilute and induce vomiting by touching finger to the back of the victims throat. Get medical assistance immediately.
- **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:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **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**
Wear protective equipment. Keep unprotected persons away.
- **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:**
Ensure adequate ventilation.
Absorb with liquid-binding material (ie. sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
- **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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* 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
 Ensure good ventilation/exhaustion at the workplace.
 Avoid contact with skin, eyes and clothing
 Avoid breathing fumes.
 Use personal protection equipment as outlined in section 8.
- **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:** Store frozen
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **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:**

12125-02-9 ammonium chloride

REL	Short-term value: 20 mg/m ³ Long-term value: 10 mg/m ³
TLV	Short-term value: 20 mg/m ³ Long-term value: 10 mg/m ³

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 Use adequate exhaust ventilation to prevent inhalation of product vapors.
 Do not eat or drink while handling product.
 Avoid contact with the eyes and skin.
 Wash hands before breaks and at the end of work.
 Immediately remove all soiled and contaminated clothing.
- **Breathing equipment:**
 Respiratory protection is not required unless handling of the material produces nuisance airborne concentrations.
- **Protection of hands:**



Protective gloves

- **Material of gloves** Rubber, latex or vinyl.
- **Penetration time of glove material**
 The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.
- **Eye protection:** Tightly sealed goggles

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· **Body protection:** Lab coat

* 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Liquid
Color:	Colorless
Odor:	Odorless
Odor threshold:	Not determined.
pH-value:	4.7 ± 0.1 @25 ± 0.4°C

· **Change in condition**

Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	Not determined.

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:**

Decomposition temperature: Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

· **Vapor pressure:** Not determined.

· **Density:**

Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.

· **Solubility in / Miscibility with**

Water: Aqueous solution

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

Dynamic:	Not determined.
Kinematic:	Not determined.

· **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.

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- **Hazardous decomposition products:** No dangerous decomposition products known.

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.

Group 1 - Carcinogenic to humans Group 2A - Probably carcinogenic to humans Group 2B - Possibly carcinogenic to humans Group 3 - Not classifiable as to its carcinogenicity to humans Group 4 - Probably not carcinogenic to humans

- **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:** Generally not hazardous for water

- **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:**

This product may be mixed with a combustible solvent and burned in a chemical incinerator equipped with an after burner and scrubber. This product can also be sent to an EPA approved waste disposal facility. Observe all federal, state and local environmental regulations when disposing of this material.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

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- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **UN-Number**
- **DOT, ADN, IMDG, IATA** Non-Regulated Material
- **ADR** Non-Regulated Material
- **UN proper shipping name** Not Regulated
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es)**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class** Non-Regulated Material
- **Packing group**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:**
- **Marine pollutant:** No
- **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":** -

***15 Regulatory information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· Section 355 (extremely hazardous substances):	None of the ingredients are listed.
· Section 313 (Specific toxic chemical listings):	None of the ingredients are listed.
· TSCA (Toxic Substances Control Act):	All ingredients are listed.
· 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.
· Carcinogenic categories	
· EPA (Environmental Protection Agency)	57-13-6 urea II
· TLV (Threshold Limit Value established by ACGIH)	None of the ingredients are listed.

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<ul style="list-style-type: none"> · NIOSH-Ca (National Institute for Occupational Safety and Health) 		
None of the ingredients are listed.		
<ul style="list-style-type: none"> · GHS label elements Non-Regulated Material · Hazard pictograms Non-Regulated Material · Signal word Non-Regulated Material · Hazard statements Non-Regulated Material 		
<ul style="list-style-type: none"> · National regulations: 		
The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.		
<ul style="list-style-type: none"> · State Right to Know 		
CAS: 7647-14-5	Sodium Chloride	≤ 2.5%
CAS: 12125-02-9 RTECS: BP 4550000	ammonium chloride ⚠ Acute Tox. 4, H302; Eye Irrit. 2A, H319	≤ 2.5%
CAS: 50-21-5 RTECS: OD 2800000	Lactic Acid ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	≤ 2.5%
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CAS: 64-19-7 RTECS: AF 1225000	Glacial Acetic Acid ⚠ Flam. Liq. 3, H226; ⚠ Skin Corr. 1A, H314	≤ 0.5%
CAS: 7732-18-5 RTECS: ZC 0110000	water, distilled, conductivity or of similar purity	90-99%
All ingredients are listed.		

· **Chemical safety assessment:** 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** 01/13/2015 / 6

· **Abbreviations and acronyms:**

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (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)
- HMSI: Hazardous Materials Identification System (USA)
- Flam. Liq. 3: Flammable liquids, Hazard Category 3
- Acute Tox. 4: Acute toxicity, Hazard Category 4
- Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A
- Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
- Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
- STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

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

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