Safety Data Sheet

Complies with EC no. 1907/2006
Issue Date:8/20/2015

Section 1: Chemical Product and Company Identification

Cat#: 16717B

Part Name: AMMONIUM HYDROXIDE 28%

Supplier: Polysciences, Inc.
400 Valley Road
Warrington, PA 18976 USA
MSDS Telephone #215-343-6484 Emergency only #215-378-4526

Identified uses: Laboratory use, manufacture of substances

Section 2: Hazards Identification

Hazard Overview

Causes eye burns.

Causes respiratory tract irritation.

Causes skin irritation.

Harmful if inhaled, absorbed through skin or swallowed.

GHS Classification

Acute Toxicity Inhalation Category 4

Serious Eye Damage Category 1C

Skin Irritant Cat 2, Acute Oral Toxicity Cat 4, Acute Inhalation Cat 4,

Skin Irritant Category 2

Danger

Hazard and Precautionary Statements

H302 + H312	Harmful if swallowed or, in contact with skin or if inhaled
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P280A	Wear protective gloves
P285	In case of inadequate ventilation wear respiratory protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305	IF IN EYES:
P305B	IF IN EYES, Separate eyelids with finger tips.
P340	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P361	Remove/Take off immediately all contaminated clothing.
P501	Dispose of contents/container in accordance with local, regional, national and/or international regulations

NFPA Rating

Hazard Ratings:
These ratings are private assesments of the properties of the material using the ANSI/NFPA 704 Standard. Additional information can be found by consulting in the NFPA published ratings lists (List 325 and List 49).

If no data is listed the information is not available.

Health	Flammability	Reactivity
3	1	0

Section 3: Composition/ Information on Ingredients

Note: Items listed with a CASRN... number have no CAS# available.

Item#	Name	EINECS	CAS#	% in product
1	Ammonium hydroxide	215-647-6	0001336216	21 - 30
2	Water	231-791-2	0007732185	71 - 80

Section 4: First Aid Measures

Flush eyes with flowing water for at least 15 minutes.

If breathing is difficult, contact emergency personnel.

Remove contaminated clothing.

Remove to fresh air.

Separate eyelids with finger tips.

Wash skin with deluge of water for at least 15 minutes.

Section 5: Fire Fighting Measures

Flash point, deg F.: not combustible Method: nap

UEL: no data LEL: no data Autoignition temperature, deg. F.: no data

Flammability Classification: no data Flame Propagation Rate: no data

Hazardous Combustion Products: no data

Section 6: Accidental Release Measures

Any information listed below is to be considered in addition to internal guidelines for isolation of spill, containment of spill, removal of ignition sources from immediate area, and collection for disposal of spill by trained, properly protected clean up personnel.

Absorb liquids on absorbent material.

Contain spilled liquids.

Protect personnel from exposure.

Section 7: Handling and Storage

Store at 4 deg. C.

Section 8: Exposure Controls/ Personal Protection

OSHA (ACGIH) Exposure Limits

		TWA		STEL		CEILING	
		ppm	mg/	ppm	mg/m3	ppm	mg/m3
CAS#: 0001336216	IDLH: NE						
OSHA		NE	NE	NE	NE	NE	NE
ACGIH		NE	NE	NE	NE	NE	NE
CAS#: 0007732185	IDLH: NE						
OSHA		NE	NE	NE	NE	NE	NE
ACGIH		NE	NE	NE	NE	NE	NE

The use of eye protection in the form of safety glasses with side shields and the use of skin protection for hands in the form of gloves are considered minimum and non-discretionary in work places and laboratories. Any recommended personal protection equipment or environmental equipment is to be considered as additional to safety glasses and gloves.

Use chemical splash goggles and face shield.

Use latex or equivalent gloves.

Use process enclosures, local exhaust ventilation, or other engineering controls.

Chemical-resistant gloves should be worn whenever this material is handled. The glove material has to be impermeable and resistant to the product. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough.
Rinse and remove gloves immediately after use. Wash hands with soap and water. All glove recommendations presume that the risk of exposure is through splash and not intentional immersion of the hands into the product.
Since glove permeation data does not exist for this material, no recommendation for the glove material can be given for the product.
Permiation data must be obtained from the glove manufacturer to determine if the glove is suitable for the task.

Section 9: Physical and Chemical Properties

Formula:	NH4OH	vapor pressure:	115 mm Hg at 20C
Formula Weight:	35.05	vapor density:	1.2 g/l
boiling point:	no data	Specific gravity:	0.9
melting point:	-77 C	ph:	14
solubility:	miscible	appearance:	clear colorless liquid

Section 10: Stability and Reactivity

Chemical Stabilit stable

Conditions to Avoid: no data

Incompatibility with other materials: copper, copper alloys, iron, zinc

Hazardous Decomposition Products: nitrogen oxides, ammonia

Hazardous Polymerization: will not occur

Section 11:Toxicological Information

Acute Data: Oral Rat LD50 350 mg/kg
Intravenous Mouse LD50 91 mg/kg

Subchronic data: no data

Section 12: Ecological Information

LC 50 Fish 96.0 h <1 mg/l

Section 13: Disposal Considerations

The following chart lists the status of the chemical and its components in reference to 40 CFR Part 261.33. If the product is listed by code number the substance may be subject to special federal and state disposal regulations. If no codes are listed the material must be disposed in compliance with all Federal, State and Local Regulations.

CAS#	Waste Code	Regulated Name
0001336216	not listed	not listed
0007732185	not listed	not listed

Section 14: Transportation Data

Proper Shipping Name Chemical Name	Ammonia solutions
UN	UN2672
Class	8
PG	III

Section 15: Regulatory Information

All components of this product are on the TSCA public inventory.

All components of this product are on the TSCA public inventory.

Prop 65 - Column A identifies those items which are known to the State of California to cause cancer. Column B identified items which are known to the State of California to cause reproductive toxicity.

CAS#	Column A	Column B
0001336216	no	no
0007732185	no	no

State Regulatory Information :If a CAS# is listed below this material is subject to the listed state right-to-know requirements.

CAS#	
0001336216	not listed
0007732185	not listed

SARA Toxic Release Chemicals(as defined in Section 313 of SARA Title III)
This list identifies the toxic chemicals, including their de minimis concentrations for which reporting is required under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA). The list is also referred to as the Toxics Release Inventory (TRI) List.

CAS#	Regulated name	de minimis conc. %	Rep. Thres.
0001336216	not listed	not listed	not listed
0007732185	not listed	not listed	not listed

SARA Extremely Hazardous Substances and TPQs
This list includes hazardous chemicals as defined in 29 CFR 1910.1200(c); and extremely hazardous substances regulated under Section 302 of SARA Title III with their TPQs (in pounds), as listed in 40 CFR 355, Appendices A and B.

CAS#	Regulated name	TPQ (pounds)	EHS-RQ(pounds)
0001336216	not listed	not listed	not listed
0007732185	not listed	not listed	not listed

CERCLA
The hazardous substances, and their reportable quantities (RQs) are listed in the federal regulations at 40 CFR Part 302, Table 302.4. Release of a CERCLA hazardous substance in an amount equal to or greater than its RQ, in any 24-hour period, must be reported to the National Response Center at (800) 424-8802.

CAS#	Regulated name	RQ (pounds)
0001336216	Not listed	Not listed
0001336216	Ammonium hydroxide	1,000
0007732185	Not listed	Not listed

Section 16: Other Information

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END OF MSDS