

**MATERIAL SAFETY DATA SHEET**  
**According to EC Directives 2001/58/EC**

1.	<b><u>Identification of the substances or preparation and of the company</u></b>				
1.1	Identification of the preparation: <b>Protein Spotter</b> Date of revision: May 13 <sup>th</sup> 2009				
1.2	Company identification: Chemical Specialties Manufacturing Corporation Chemspec Europe Unit 36C, Tong Park Otley Road, Baildon West Yorkshire BD17 7QD UK Tel: 01274 597333 Fax: 01274 597444				
1.3	Emergency telephone number, official advisory bodies:				
1.3.1	For medical emergency call Chemtrec at 00-1-703 527-3887				
2.	<b><u>Composition/Information on ingredients</u></b>				
2.1	Chemical description: Water, Inorganic nitrogen compound				
2.2	Hazardous ingredients:				
	Chemical Name	%	CAS-NO	EC#	Hazard Symbol
	Ammonium Hydroxide	5-10	1336-21-6	215-647-6	C.N
3.	<b><u>Hazards identification</u></b>				
3.1	To man: May cause eye, skin and upper respiratory tract irritation.				
3.2	To the environment: None expected if in small quantities				
4.	<b><u>First aid measures</u></b>				
4.1	Inhalation: Remove to fresh air. If symptoms persist consult physician.				
4.2	Eye contact: Flush with water for at least 15 minutes. If irritation persists consult physician and possibly an ophthalmologist.				
4.3	Skin contact: Thoroughly wash exposed skin with soap and water. Remove any contaminated clothing. If irritation persists, consult physician.				
4.4	Ingestion: Do not induce vomiting. Drink 1-2 glasses of water or milk. Consult physician.				
4.5	Physician: Pneumonitis may be anticipated after severe inhalation or ingestion.				
5.	<b><u>Fire-fighting measures</u></b>				
5.1	Suitable extinguishing media: Water, Carbon dioxide or dry chemical				
5.2	Unsuitable Extinguishing media : None known.				

5.3	Special exposure hazards: Possibly oxides of carbon,nitrogen,ammonia and possibly other unidentified organic compounds.
5.4	Special protection equipment for fire-fighters: Self-contained positive pressure breathing apparatus and protective clothing.
6.	<b><u>Accidental release measures</u></b>
6.1	Personal precautions: Prevent eye and skin contact.
6.2	Environmental precautions: Dispose of according to local regulations.
6.3	Methods of cleaning up: Soak up spill with absorbent material and dispose of according to local regulations.


7.	<b><u>Handling and storage</u></b>
7.1	Handling: Prevent eye and skin contact.
7.2	Storage: Keep container in a dry, well ventilated area away from incompatible materials. Protect against physical damage. Keep out of sunlight and away from heat sources.
7.2.2	Incompatible storage: Avoid storing in metal containers for long periods of time.
7.2.3	Other: None known.
8.	<b><u>Exposure controls/personal protection</u></b>
	Please use common sense when handling this product.
8.1	Respiratory protection: Use local exhaust or dilution ventilation.
8.2	Hand protection: Chemical resistant rubber gloves .
8.3	Eye protection: Safety glasses
8.4	Skin protection: Use body covered clothing.
8.5	Working hygiene: Take usual precautions when handling
9.	<b><u>Physical and chemical properties</u></b>
9.1.1	Appearance: Clear liquid.
	Colour: Colourless
9.1.2	Odor: Pungent.
9.2	pH (as used): 11.6-12.6
9.3	Boiling point/Boiling range: not av
9.4	Specific Gravity: 0.97 g/cc
9.5	Wt/Gal: 8.12 lbs./gal
9.6	Solubility in water: Complete
9.7	%VOC: n.av.
9.8	Flash point: n.av.
9.9	Inflammation: n. av.
10.	<b><u>Stability and reactivity</u></b>
10.1	Conditions to avoid: Excessive heat.
10.2	Materials to avoid: Acids, chlorine and hypochlorite

10.3	Hazardous decomposition of materials: See point 5.3.	
11.	<b><u>Toxicological information</u></b>	
11.1	Acute toxicity:	n. av.
11.2	Acute oral toxicity:	Ammonium Hydroxide: LD50 rat: >350mg/kg
11.3	Inhalation: LC50 Mice:	> 4230 ppm
11.4	Chronic effects:	n. av.
11.5	Sensitization:	n. av.
11.6	Carcinogenicity:	n. ap.
11.7	Mutagenicity:	n. av.
11.8	Reproductive toxicity:	n. av.
11.8	Narcotic effects:	n. av.

12.	<b><u>Ecological information</u></b>	
12.1	Water-Hazard class:	n.av
12.2	Biodegradability:	Readily biodegradable.
12.3	Bio-accumulation:	n. av.
12.4	Aquatic toxicity:	
	Ammonium Hydroxide: LC50 Daphnia magna:	32 mg/L
12.5	Other relevant ecological information: May be harmful to aquatic life.	

13.	<b><u>Disposal</u></b>	
13.1	Refer to local regulations.	

14.	<b><u>Transport information</u></b>	
	All ingredients in this formula are non- regulated for non-bulk	

15.	<b><u>Regulations</u></b>	
15.1	Symbol:	Irritant 
15.2	R-Sentences:	R36/38: Irritating to eyes and skin R37: Irritating to respiratory system.
15.3	S-Sentences:	S2: Keep out of reach of children S24/25: Avoid contact with skin and eyes S37/39: Wear suitable gloves and eye/face protection.

16.	<b>Other Information</b>	
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**DISCLAIMER OF LIABILITY**

The manufacturer and seller warrants that this product conforms to its standard specifications when used according to directions. As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without any warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the

material and the results to be obtained from the use thereof.

n.ap = not applicable n.av =not available