SAFETY DATA SHEET

1. Identification

Product identifier	Crystal Spotter		
Other means of identification			
Product code	CS-4.1		
Recommended use	Carpet cleaner.		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplier/	Distributor information		
Manufacturer/Supplier	R.E.Whittaker Co.		
	302 South Croton Avenue		
	New Castle, PA. 16101 USA		
Telephone	(724) 658-8568		
Emergency telephone number	(800) 535-5053		
2. Hazard(s) identification			
Physical hazards	Not classified.		
Health hazards	Not classified.		
OSHA defined hazards	Not classified.		
Label elements			
Hazard symbol	None.		
Signal word	None.		
Hazard statement	The product does not meet the criteria for classification.		
Precautionary statement			
Prevention	Observe good industrial hygiene practices.		
Response	Wash hands after handling.		
Storage	Store away from incompatible materials.		
Disposal	Dispose of waste and residues in accordance with local authority requirements.		
Hazard(s) not otherwise classified (HNOC)	None known.		
Supplemental information	This product meets Green Seal's requirements for skin and eye irritation and acute toxicity at the as-used dilution.		

3. Composition/information on ingredients

Mixtures

Chemical name		CAS number	%
Ammonium Lauryl Sulfate		68081-96-9	1 - < 3
Ammonium hydroxide		1336-21-6	0.1 - < 0.25
Composition comments	All concentrations are in percent by weigh percent by volume.	ht unless ingredient is a gas. Ga	as concentrations are in
4. First-aid measures			
Inhalation	Move to fresh air. Call a physician if symp	otoms develop or persist.	
Skin contact	Wash off with soap and water. Get medic	al attention if irritation develops	and persists.
Eye contact	Immediately flush eyes with plenty of wat present and easy to do. Continue rinsing.		
Ingestion	Rinse mouth. Get medical attention if syn	nptoms occur.	

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Most important symptoms/effects, acute and delayed	Exposed individuals may experience eye tearing, redness, and discomfort.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
5. Fire-fighting measures	

Suitable extinguishing media	Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	For industrial use, wear appropriate personal protective equipment (See Section 8). Wear protective gloves.
Methods and materials for containment and cleaning up	Absorb spill with vermiculite or other inert material, then place in a container for chemical waste for proper disposal.
	Large Spills: Dike for later disposal. Flush area with water. Prevent runoff from entering drains, sewers, or streams.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
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7. Handling and storage

Precautions for safe handling	Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid contact with skin and eyes. Keep from freezing. If frozen, allow to thaw to room temperature. Mix before using.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store in upright position. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Туре	Value	
Ammonium hydroxide (CAS 1336-21-6)	STEL	35 ppm	
	TWA	25 ppm	
US. NIOSH: Pocket Guide to	o Chemical Hazards		
Components	Туре	Value	
Ammonium hydroxide (CAS 1336-21-6)	STEL	27 mg/m3	
		35 ppm	
	TWA	18 mg/m3	
		25 ppm	
ogical limit values	No biological exposure limits noted f	or the ingredient(s).	
propriate engineering trols	Ensure adequate ventilation, especia	ally in confined areas.	
vidual protection measures,	such as personal protective equipn	nent	
Eye/face protection	Wear safety glasses with side shield	s (or goggles).	

Skin protection			
Hand protection	Chemical resistant gloves are recommended.		
Other	Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.		
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.		
Thermal hazards	Not applicable.		
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.		

9. Physical and chemical properties

Appearance			
Physical state	Liquid.		
Form	Clear liquid.		
Color	Colorless to light yellow.		
Odor	No fragrance added.		
Odor threshold	Not available.		
рН	5		
Melting point/freezing point	Not available.		
Initial boiling point and boiling range	Not available.		
Flash point	> 200.0 °F (> 93.3 °C)		
Evaporation rate	< 1 (Butyl acetate = 1)		
Flammability (solid, gas)	Not applicable.		
Upper/lower flammability or exp	losive limits		
Flammability limit - lower (%)	Not available.		
Flammability limit - upper (%)	Not available.		
Vapor pressure	Not available.		
Vapor density	> 1 (Air=1)		
Relative density	1.01		
Solubility(ies)			
Solubility (water)	Complete.		
Partition coefficient (n-octanol/water)	Not available.		
Auto-ignition temperature	Not available.		
Decomposition temperature	Not available.		
Viscosity	Not available.		
Other information			
Explosive properties	Not explosive.		
Oxidizing properties	Not oxidizing.		
10. Stability and reactivity			
Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.		
Chemical stability	Material is stable under normal conditions.		
Possibility of hazardous reactions	Hazardous polymerization does not occur.		

Conditions to avoidContact with incompatible materials. Keep from freezing.Incompatible materialsStrong oxidizing agents. Do not mix with other chemicals or household cleaners.

Hazardous decomposition products

11. Toxicological information

Information on likely routes of exposure

Inhalation	High mist concentrations may cause irritation of respiratory tract.			
Skin contact	Prolonged or repeated skin contact may cause irritation.			
Eye contact	Direct contact with eyes may cause temporary irritation.			
Ingestion	Ingestion may cause irritation and malaise.			
Symptoms related to the physical, chemical and toxicological characteristics	Exposed individuals may experience eye tearing, redness, and discomfort.			
Information on toxicological effe	cts			
Acute toxicity	Expected to b	e a low hazard for usual industrial or comm	nercial handling by trained personnel.	
Skin corrosion/irritation	Prolonged or I	repeated contact may dry skin and cause ir	ritation.	
Serious eye damage/eye irritation	Direct contact	with eyes may cause temporary irritation.		
Respiratory or skin sensitization				
Respiratory sensitization	No data availa	able.		
Skin sensitization	reaction amor	ontains a small amount of sensitizing substing substing substing sensitive individuals.		
Germ cell mutagenicity	No data availa mutagenic or	able to indicate product or any components genotoxic.	present at greater than 0.1% are	
Carcinogenicity	This product is	s not considered to be a carcinogen by IAR	C, ACGIH, NTP, or OSHA.	
IARC Monographs. Overall E	valuation of C	arcinogenicity		
Not listed. NTP Report on Carcinogens				
Not listed. OSHA Specifically Regulated	d Substances ((29 CFR 1910.1001-1050)		
Not regulated.	This was duet in			
Reproductive toxicity	-	s not expected to cause reproductive or de	-	
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.			
Specific target organ toxicity - repeated exposure	Based on ava	Based on available data, the classification criteria are not met.		
Aspiration hazard	Not classified.			
12. Ecological information				
Ecotoxicity	• · · · · · ·	s not classified as environmentally hazardo t large or frequent spills can have a harmfu		
Components		Species	Test Results	
Ammonium hydroxide (CAS 13 Aquatic	336-21-6)			
Crustacea	_C50	Daphnia magna	0.66 mg/l, 48 hours	
Persistence and degradability	No data is ava	ailable on the degradability of this product.		
Bioaccumulative potential	No data availa	able.		
Mobility in soil	No data available.			
Other adverse effects	None known.			
13. Disposal consideration	IS			
Disposal instructions	Dispose of co	ntents/container in accordance with local/re	egional/national/international regulations.	
Hazardous waste code	The waste coo disposal comp	de should be assigned in discussion betwee bany.	en the user, the producer and the waste	
Waste from residues / unused products	Dispose of in a	accordance with local regulations.		

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Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4)

Ammonium hydroxide (CAS 1336-21-6) LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA) US state regulations

US. Massachusetts RTK - Substance List

Ammonium hydroxide (CAS 1336-21-6)

US. New Jersey Worker and Community Right-to-Know Act

Ammonium hydroxide (CAS 1336-21-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Ammonium hydroxide (CAS 1336-21-6)

US. Rhode Island RTK

Ammonium hydroxide (CAS 1336-21-6)

US. California Proposition 65

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	19-August-2016
Revision date	19-August-2016
Version #	02
NFPA ratings	
List of abbreviations	LC50: Lethal Concentration, 50%. STEL: Short term exposure limit. TWA: Time weighted average.
References	HSDB® - Hazardous Substances Data Bank National Toxicology Program (NTP) Report on Carcinogens ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
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