MATERIAL SAFETY DATA SHEET

MSDS 0233

Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME
Actabs

PRODUCT CODES
68108

CHEMICAL FAMILY
Organic/Inorganic

USE
Evaporator Cooler Treatment

HMIS CODES

Health	2
Flammability	0
Reactivity	0
PPI	B

MANUFACTURER'S NAME
The RectorSeal Corporation
2601 Spenwick Drive
Houston, Texas 77055 USA

EMERGENCY TELEPHONE NO.
Chemtrec 24 Hours
(800)424-9300 USA
(703)527-3887 International

DATE OF VALIDATION
April 18, 2012

TECHNICAL SERVICE TELEPHONE NO.
(800)231-3345 or (713)263-8001

DATE OF PREPARATION
April 18, 2012

Section 2 -- HAZARDS IDENTIFICATION

GHS CLASSIFICATION
PHYSICAL HAZARDS: None
HEALTH HAZARDS
Acute Toxicity:
Oral: Category 5
Dermal: Not Classified
Inhalation: Not Classified
Skin Corrosion/Irritation: Category 3
Serious Eye Damage/Eye Irritation: Category 1
Respiratory or Skin Sensitization: Not Classified
Germ Cell Mutagenicity: Not Classified
Carcinogenicity: Not Classified
Reproductive Toxicology: Not Classified
Target Organ Systemic Toxicity - Single Exposure: Not Classified
Target Organ Systemic Toxicity - Repeated Exposure: Not Classified
Aspiration Toxicity: Not Classified

ENVIRONMENTAL HAZARDS
Hazardous to the Aquatic Environment: Not Classified
Acute aquatic toxicity: Not Classified
Chronic aquatic toxicity: Not Classified
Bioaccumulation potential: Not Classified
Rapid degradability: Not Classified

GHS Label elements, including precautionary statements
Pictogram: N/A
Signal Word: Danger
Hazard Statements:
H302 - Harmful if swallowed.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
Precautionary Statements:
P102 - Keep out of reach of children.
P262 - Do not get in eyes, on skin, or on clothing.
P264 - Wash hands thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+, P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P305+, P351+, P338 - IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P362 - Take off contaminated clothing and wash before reuse.

Classification according to EU Directives 67/548/EEC or 1999/45/EC
LABELING SYMBOLS:

C : Corrosive
RISK R-PHRASES:
R22 : Harmful if swallowed.
R34 : Causes burns.
SAFETY S-PHRASES:
S2 : Keep out of the reach of children.
S7 : Keep container tightly closed.
S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 : Wear suitable protective clothing, gloves and eye/face protection.
S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

HMIS CODES

Health	2
Flammability	0
Reactivity	0
PPI	B

SUMMARY OF ACUTE HAZARDS
Causes irreversible eye damage and skin irritation.
ROUTE OF EXPOSURE, SIGNS AND SYMPTOMS
INHALATION
N/A
EYE CONTACT
Corrosive: Causes irreversible eye damage.
SKIN CONTACT
Skin irritation.
INGESTION
Phosphates are slowly and incompletely absorbed when ingested, and seldom result in systemic effects. Such effects, however, have occurred. Symptoms may include vomiting, lethargy, diarrhea, blood chemistry effects, heart disturbances and central nervous system effects. The toxicity of phosphates is because of their ability to sequester calcium. Systemic acidosis may result as this material is believed to hydrolyze into phosphoric acid when ingested.
SUMMARY OF CHRONIC HAZARDS
None known.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
May induce severe gastroenteric distress (vomiting, gastroenteric pain, and local corrosion and hemorrhages), prostration, anuria, hematuria, anemia, increase in white blood cells, icterus, coma, respiratory difficulties, and circulatory failure.

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Section 3 -- COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL FAMILY: Organic/Inorganic
INGREDIENT: n-Alkyl (98% C12, 2% C14)-dimethyl -1-naphthylmethyl ammonium chloride -monohydrate
PERCENTAGE BY WEIGHT: 20
CAS NUMBER: 53516-75-9
EC# : Not listed

INGREDIENT: Sodium Tripolyphosphate
PERCENTAGE BY WEIGHT: 10
CAS NUMBER: 7758-29-4
EC# : 231-838-7

INGREDIENT: Sodium Borate
PERCENTAGE BY WEIGHT: 20
CAS NUMBER: 1303-96-4
EC# : 215-540-4

INGREDIENT: Sodium Carbonate
PERCENTAGE BY WEIGHT: 10
CAS NUMBER: 497-19-8
EC# : 207-838-8

INGREDIENT: Urea
PERCENTAGE BY WEIGHT: 38
CAS NUMBER: 57-13-6

EC# : 200-315-5

INGREDIENT: Starch
PERCENTAGE BY WEIGHT: 2
CAS NUMBER: 9005-25-8
EC# : 232-679-6

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Section 4 -- FIRST AID MEASURES

If INHALED: N/A
If on SKIN: Immediately wash with soap and water. Remove and wash any contaminated clothing.
If in EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention if irritation persists.
If SWALLOWED: Call a doctor or get medical attention. Do not induce vomiting or give anything by mouth to an unconscious person. Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol.

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Section 5 -- FIRE FIGHTING MEASURES

EXTINGUSING MEDIA
Non-combustible. Use agents appropriate for surrounding fires.
SPECIAL FIRE FIGHTING PROCEDURES: None
UNUSUAL FIRE AND EXPLOSION HAZARDS: None

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Section 6 -- ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Sweep up excess material to prevent footing hazard. Discard in trash.

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Section 7 -- HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store in dry place.
OTHER PRECAUTIONS: Avoid prolonged or repeated contact with skin or clothing.

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Section 8 -- EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENT	UNITS	
n-Alkyl (98% C12, 2% C14)-dimethyl -1-naphthylmethyl ammonium chloride -monohydrate	ACGIH TLV	N/D
	OSHA PEL	N/D
Sodium Tripolyphosphate	ACGIH TLV	N/D
	OSHA PEL	N/D
Sodium Borate	ACGIH TLV	N/D
	OSHA PEL	N/D
Sodium Carbonate	ACGIH TLV	N/D
	OSHA PEL	N/D
Urea	ACGIH TLV	N/D
	OSHA PEL	N/D
Starch	ACGIH TLV	N/D
	OSHA PEL	N/D

RESPIRATORY PROTECTION (SPECIFY TYPE): Normally none required. Use NIOSH/MSHA approved particulate respirator for nuisance dust.
VENTILATION - LOCAL EXHAUST: Acceptable
SPECIAL: N/A
MECHANICAL (GENERAL): Acceptable
OTHER: N/A
PROTECTIVE GLOVES: Wear rubber gloves.
EYE PROTECTION: Safety glasses (ANSI Z-87.1 or equivalent)
OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Coveralls recommended.
WORK/HYGIENIC PRACTICES: Where use can result in skin contact, wash exposed

areas thoroughly before eating, drinking, smoking, or leaving work area. Launder contaminated clothing before reuse.

Section 9 -- PHYSICAL AND CHEMICAL PROPERTIES

pH:	7-8
BOILING POINT:	N/A
SPECIFIC GRAVITY (H20 = 1):	2.28
VAPOR PRESSURE (mm Hg):	N/A
MELTING POINT:	N/D
VAPOR DENSITY (AIR = 1):	N/A
EVAPORATION RATE (ETHYL ACETATE = 1):	N/A
APPEARANCE/ODOR:	White Tablet / No Odor
SOLUBILITY IN WATER:	Soluble
VOLATILE ORGANIC COMPOUNDS(VOC)Content (Theoretical Percentage By Weight):	0% or (0 g/L)
FLASH POINT	None
LOWER EXPLOSION LIMIT	N/D
UPPER EXPLOSION LIMIT	N/D

Section 10 -- STABILITY AND REACTIVITY

STABILITY: Stable
CONDITIONS TO AVOID: None
INCOMPATIBILITY (MATERIALS TO AVOID): None known
HAZARDOUS DECOMPOSITION PRODUCTS: None known
HAZARDOUS POLYMERIZATION: Will not occur.

Section 11 -- TOXICOLOGY INFORMATION

CHRONIC HEALTH HAZARDS

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.

TOXICOLOGY DATA
Ingredient Name

n-Alkyl (98% C12, 2% C14)-dimethyl -1-naphthylmethyl ammonium chloride -monohydrate

Oral-Rat LD50: >5000 mg/kg estimated
Inhalation-Rat LCLo:N/D

Section 12 -- Ecological Information

ECOLOGICAL DATA
Ingredient Name

n-Alkyl (98% C12, 2% C14)-dimethyl -1-naphthylmethyl ammonium chloride -monohydrate

Food Chain Concentration Potential	N/D
WATERFOWL TOXICITY	N/D
BOD	N/D
AQUATIC TOXICITY	N/D

Section 13 -- DISPOSAL CONSIDERATIONS

Waste Classification: Non-regulated solid waste
Disposal Method: Approved landfill
Waste from this product is not considered hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Dispose of in accordance with Federal, State, and Local regulation regarding pollution.

Section 14 -- TRANSPORTATION INFORMATION

DOT:	Non-Regulated
OCEAN (IMDG):	Non-Regulated
AIR (IATA):	Non-Regulated
WHMIS (CANADA):	Non-Regulated

Section 15 -- REGULATORY INFORMATION

REGULATORY DATA

Ingredient Name

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n-Alkyl (98% C12, 2% C14)-dimethyl -1-naphthylmethyl ammonium chloride -monohydrate

SARA 313	No
TSCA Inventory	Yes
CERCLA RQ	N/A
RCRA Code	N/A

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Section 16 -- OTHER INFORMATION

LABELING SYMBOLS:

N/A

RISK R-PHRASES:

R22 : Harmful if swallowed.

R34 : Causes burns.

SAFETY S-PHRASES:

S2 : Keep out of the reach of children.

S7 : Keep container tightly closed.

S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 : Wear suitable protective clothing, gloves and eye/face protection.

S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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