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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : Spray-Rite
Product code : M77520

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.3. Details of the supplier of the safety data sheet

JR Simplot Company Boise, ID 83707 T 1-208-336-2110

1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Acute Tox. 4 (Oral) H302 Skin Irrit. 2 H315 Eye Irrit. 2A H319

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS07

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H302 - Harmful if swallowed

H315 - Causes skin irritation

H319 - Causes serious eye irritation

Precautionary statements (GHS-US) : P264 - Wash ... thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P280 - Wear protective gloves/protective clothing/eye protection/face protection P301 + P312 - If swallowed: Call a poison center/doctor/... if you feel unwell

P302 + P352 - If on skin: Wash with plenty of water/...

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing P321 - Specific treatment (see ... on this label)

P330 - Rinse mouth

P332 + P313 - If skin irritation occurs: Get medical advice/attention P337 + P313 - If eye irritation persists: Get medical advice/attention P362 - Take off contaminated clothing and wash before reuse

P501 - Dispose of contents/container to ...

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

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3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
citric acid	(CAS No) 77-92-9		Skin Irrit. 2, H315 Eye Irrit. 2A, H319
ammonium sulfate	(CAS No) 7783-20-2		Eye Irrit. 2B, H320 STOT SE 3, H335

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice

(show the label where possible).

First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by

warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect

spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Provide good ventilation in process area to prevent formation of

vapor.

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container

closed when not in use.

Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Respiratory protection : Wear appropriate mask.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : White free flowing granule.

Color : White
Odor : Odorless

Odor threshold : No data available рΗ No data available Relative evaporation rate (butyl acetate=1) : No data available Melting point No data available Freezing point : No data available : No data available Boiling point Flash point : No data available Auto-ignition temperature : No data available Decomposition temperature No data available Flammability (solid, gas) No data available No data available Vapor pressure Relative vapor density at 20 °C No data available Relative density : No data available

Solubility : Water: Solubility in water of component(s) of the mixture :

52 - 57 lb/ft^3

•: 77 g/100ml •: 59 g/100ml

Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Density

No additional information available

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10.2. Chemical stability

Stable. Not established.

10.3. Possibility of hazardous reactions

Not established.

Spray-Rite

10.4. Conditions to avoid

Excessive heat and open flame. Extremely high temperatures. Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Oxidizers. bases. Chlorites. Nitrates. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Temperatures above 282 C causes release of ammonia and sulfur trioxide. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed.

ATE US (oral) 500.00000000 mg/kg body weight		500.0000000 mg/kg body weight
	ammonium sulfate (7783-20-2)	
	LD50 oral rat	2840 mg/kg (Rat)
	LD50 dermal rat	> 2000 mg/kg
	ATE US (oral)	2840.00000000 mg/kg body weight

citric acid (77-92-9)	
LD50 oral rat	3000 mg/kg (Rat; Literature study)
ATE US (oral)	3000.00000000 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified

Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated

exposure)

: Not classified

Based on available data, the classification criteria are not met

Aspiration hazard : Not classified

Based on available data, the classification criteria are not met

Potential Adverse human health effects and

symptoms

: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

ammonium sulfate (7783-20-2)	
LC50 fish 1	126 mg/l (96 h; Poecilia reticulata)
EC50 Daphnia 1	202 mg/l (96 h; Daphnia magna)
LC50 fish 2	250 - 480 mg/l (96 h; Brachydanio rerio)
EC50 Daphnia 2	433 mg/l (50 h; Daphnia magna)
TLM fish 1	1290 ppm (96 h; Gambusia affinis)

citric acid (77-92-9)	
LC50 fish 1	2600 mg/l (48 h; Leuciscus idus; pH = 7)

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citric acid (77-92-9)	
EC50 Daphnia 1	120 mg/l (72 h; Daphnia magna; pH < 7)
LC50 fish 2	1516 mg/l (96 h; Lepomis macrochirus)
EC50 Daphnia 2	85 mg/l (Daphnia magna)
Threshold limit algae 1	80 mg/l (192 h; Microcystis aeruginosa; Reproduction)
Threshold limit algae 2	640 mg/l (168 h; Scenedesmus quadricauda)

12.2. Persistence and degradability

Spray-Rite		
Persistence and degradability	Not established.	
ammonium sulfate (7783-20-2)		
Persistence and degradability	Biodegradability in water: no data available. Not established.	
citric acid (77-92-9)		
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Not established.	
Biochemical oxygen demand (BOD)	0.420 g O ₂ /g substance	
Chemical oxygen demand (COD)	0.728 g O ₂ /g substance	
ThOD	0.686 g O ₂ /g substance	
BOD (% of ThOD)	(20 day(s)) 0.89	

12.3. Bioaccumulative potential

2.0. Bloaceumulative potential		
Spray-Rite		
Not established.		
ammonium sulfate (7783-20-2)		
-5.1		
Bioaccumulation: not applicable. Not established.		
citric acid (77-92-9)		
-1.72 (Experimental value)		
Bioaccumulation: not applicable. Not established.		

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on ozone layer : No additional information available

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

Transport document description :

Transport by sea

No additional information available

Air transport

No additional information available

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SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed on the Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

15.2.2. National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

SECTION 16: Other information

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Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE

COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending

Regulation (EC) No 1907/2006.

Other information : None.

Full text of H-phrases: see section 16:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H320	Causes eye irritation
H335	May cause respiratory irritation

SDS US (GHS HazCom 2012)

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