Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1: Identification of the subs	tance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Mixture
Product name	: Phoenix 0-2-12
Product code	: M77829
1.2. Relevant identified uses of the substa	ance or mixture and uses advised against
1.3. Details of the supplier of the safety da	ata sheet
JR Simplot Company	
P.O. Box 70013	
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 mix	xture
Classification (GHS-US)	
Skin Corr. 1A H314	
Full text of H-phrases: see section 16	
2.2. Label elements	
GHS-US labeling Hazard pictograms (GHS-US)	
	GH505
Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	: H314 - Causes severe skin burns and eye damage
Precautionary statements (GHS-US)	: P260 - Do not breathe dust/fume/gas/mist/vapors/spray
	P264 - Wash thoroughly after handling P280 - Wear protective gloves/protective clothing/eye protection/face protection
	P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
	P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
	P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
	P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact
	lenses, if present and easy to do. Continue rinsing P310 - Immediately call a poison center/doctor/
	P321 - Specific treatment (see on this label)
	P363 - Wash contaminated clothing before reuse P405 - Store locked up
	P501 - Dispose of contents/container to in accordance with local/regional/national
	regulations
2.3. Other hazards	
No additional information available	
2.4. Unknown acute toxicity (GHS-US)	
Not applicable	
SECTION 3: Composition/information	on ingredients
3.1. Substance	
Not applicable	
3.2. Mixture	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	Classification (GHS-US)
Balances for ingredients < 100% are Proprietary*	(CAS No) Trade Secret		Not classified
potassium carbonate	(CAS No) 584-08-7		Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Aquatic Acute 3, H402
potassium hydroxide	(CAS No) 1310-58-3		Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314 Aquatic Acute 3, H402
tetrapotassium pyrophosphate, anhydrous	(CAS No) 7320-34-5		Not classified

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of H-phrases: see section 16

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	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician. Allow victim to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician. 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 cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	: Immediately call a poison center or doctor/physician. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and effective statements and effective sta	fects, both acute and delayed
Symptoms/injuries	: Causes severe skin burns and eye damage. Not expected to present a significant hazard under anticipated conditions of normal use.
4.3. Indication of any immediate med	ical 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
Reactivity	: Thermal decomposition generates : Corrosive vapors.
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 mo	easures
	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	
	otify authorities if liquid enters sewers or public waters.
6.3. Methods and material for contain	
the motions and material for contain	

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

05/27/2015

spillage. Store away from other materials.

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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	Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact during pregnancy/while nursing. 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.
Hygiene measures	Wash thoroughly after handling.
7.2. Conditions for safe storage, including	any incompatibilities
Technical measures	Comply with applicable regulations.
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.
	: >= 25 (5 - 42) °C

Specific end use(s) 7.3.

No additional information available

SECTION 8: Exposure controls/personal protection

Phoenix 0-2-12			
ACGIH	Not applicable		
OSHA	Not applicable		
potassium carbon	nate (584-08-7)		
ACGIH	Not applicable		
OSHA	Not applicable		
potassium hydrox	kide (1310-58-3)		
ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³	
OSHA	Not applicable		
tetrapotassium py	rophosphate, anhydrous (7320-34-5)		
ACGIH	Not applicable		
OSHA	Not applicable	Not applicable	
Balances for ingre	edients < 100% are Proprietary		
ACGIH	Not applicable		
OSHA	Not applicable		
.2. Exposure	controls		

Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or face shield. Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Wear appropriate mask.
Other information	: Do not eat, drink or smoke during use.

SECTI	SECTION 9: Physical and chemical properties		
9.1.	Information on basic physical and chemic	ical properties	
Physical	al state : Lic	iquid	
Color	: bro	rown	

Safety Data Sheet

N 4. <u>م</u> ۲ .Let a

according to Federal Register / Vol. 77, No. 58 / Monda	y, March 26, 2012 / Rules and Regulations
Odor	: Characteristic odour
Odor threshold	: No data available
рН	: >= 12
Melting point	: No data available
Freezing point	: <= 0 °C
Boiling point	: >= 100 °C
Flash point	: None
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: >= 1.4 g/ml
Solubility	 Soluble in water. Water: Solubility in water of component(s) of the mixture : •: •: 112 g/100ml •: 187 g/100ml •: 111 g/100ml
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
9.2. Other information	
VOC content	: <= 10 g/l
SECTION 10: Stability and reactivit	y
10.1. Reactivity	
Thermal decomposition generates : Corrosive	vapors.
10.2. Chemical stability	
Not established.	
10.3. Possibility of hazardous reactions	
Not established.	
10.4. Conditions to avoid	
Direct sunlight. Extremely high or low temperat	iures.
10.5. Incompatible materials	
Strong acids. Strong bases.	
10.6. Hazardous decomposition produc	ts

Thermal decomposition generates : Corrosive vapors. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified potassium carbonate (584-08-7) 1870 mg/kg (>2000 mg/kg bodyweight; Rat; Rat; Experimental value) LD50 oral rat ATE US (oral) 1870.000 mg/kg body weight potassium hydroxide (1310-58-3) LD50 oral rat 333 mg/kg (Rat; Experimental value, Rat; Experimental value) 05/27/2015 EN (English US) 4/1

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

potassium hydroxide (1310-58-3)		
ATE US (oral)	333.000 mg/kg body weight	
tetrapotassium pyrophosphate, anhydrous (7320-34-5)	
LD50 dermal rabbit	> 4640 mg/kg (Rabbit)	
Skin corrosion/irritation	: Causes severe skin burns and eye damage.	
	pH: >= 12	
Serious eye damage/irritation	: Not classified.	
	pH: >= 12	
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	
Aspiration hazard	: Not classified	
Potential Adverse human health effects and	: Based on available data, the classification criteria are not met.	
symptoms		

SECTION 12: Ecological information	
12.1. Toxicity	
potassium carbonate (584-08-7)	
LC50 fish 1	200 mg/l (72 h; Pisces; GLP)
EC50 Daphnia 1	200 mg/l (48 h; Daphnia pulex; GLP)
LC50 fish 2	68 mg/l (96 h; Oncorhynchus mykiss)
potassium hydroxide (1310-58-3)	
LC50 fish 1	> 28.6 mg/l (96 h; Pisces; Lethal)
LC50 fish 2	80 mg/l (Gambusia affinis)
TLM fish 1	80 ppm (24 h; Gambusia affinis)
tetrapotassium pyrophosphate, anhydrous (7320-34-5)	
LC50 fish 1	> 750 mg/l (48 h; Leuciscus idus)

Persistence and degradability 12.2.

Phoenix 0-2-12	
Persistence and degradability	Not established.
potassium carbonate (584-08-7)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available. Not established.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
potassium hydroxide (1310-58-3)	
Persistence and degradability	Biodegradability: not applicable. Not established.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

potassium hydroxide (1310-58-3)		
ThOD	Not applicable	
BOD (% of ThOD)	Not applicable	
tetrapotassium pyrophosphate, anhydro	ous (7320-34-5)	
Persistence and degradability	Biodegradability: not applicable.	
Biochemical oxygen demand (BOD)	Not applicable	
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
BOD (% of ThOD)	Not applicable	
Balances for ingredients < 100% are Pro	oprietary	
Persistence and degradability	Not established.	
2.3. Bioaccumulative potential		
Phoenix 0-2-12		
Bioaccumulative potential	Not established.	
potassium carbonate (584-08-7)		
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.	
potassium hydroxide (1310-58-3)		
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.	
tetrapotassium pyrophosphate, anhydrous (7320-34-5)		
Bioaccumulative potential	Bioaccumulation: not applicable.	
Balances for ingredients < 100% are Proprietary		
Bioaccumulative potential	Not established.	

No additional information available

12.5. Other adverse effects	
Effect on the global warming	: No known ecological damage caused by this product.
Other information	: Avoid release to the environment.
SECTION 13: Disposal consideratio	ns

15.1. Waste treatment methods	
Waste disposal recommendations	: Dispose of contents/container to Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)	
In accordance with DOT	
Not regulated for transport	
Additional information	
Other information	: No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ontrol Act) inventory		
listing, on the United States E	nvironmental Protection Age	ency Toxic
CAS No		
	listing, on the United States E	listing, on the United States Environmental Protection Age

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.

potassium hydroxide (1310-58-3)	
Not listed on the United States SARA Section 313	3
RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

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

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD] Not classified

National regulations

No additional information available

15.3. US State regulations

ро	otassium hydroxide (1310-58-3)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

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:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Irrit. 2	Skin corrosion/irritation Category 2
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H319	Causes serious eye irritation
H402	Harmful to aquatic life

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given. 0 - Materials that will not burn. 0 - Normally stable, even under fire exposure conditions, and are not reactive with water. None
: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.
: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.
: None
\checkmark
: 2 Moderate Hazard - Temporary or minor injury may occur
: 0 Minimal Hazard - Materials that will not burn
: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
: C
C - Safety glasses, Gloves, Synthetic apron

SDS US (GHS HazCom 2012)

Disclaimer: This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE INFORMATION HEREIN PROVIDED. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.