Best Palm Plus 13-5-8

Safety Data Sheet

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

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

1.1. Product identifier

Product form : Mixture

Product name : Best Palm Plus 13-5-8

Product code : M74167

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)

Skin Irrit. 2 H315
Eye Irrit. 2B H320
STOT SE 3 H335

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) : H315 - Causes skin irritation
H320 - Causes eye irritation
H335 - May cause respiratory irritation

Precautionary statements (GHS-US) : P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P264 - Wash ... thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302+P352 - If on skin: Wash with plenty of water/…
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
P312 - Call a poison center/doctor/… if you feel unwell
P321 - Specific treatment (see ... on this label)
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
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
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

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
potassium sulfate	(CAS No) 7778-80-5		Not classified
urea	(CAS No) 57-13-6		Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
dolomite	(CAS No) 16389-88-1		Eye Irrit. 2B, H320
ammonium sulfate	(CAS No) 7783-20-2		Eye Irrit. 2B, H320 STOT SE 3, H335
Monoammonium Phosphate	(CAS No) 7722-76-1		Eye Irrit. 2B, H320 STOT SE 3, H335
Polymer Coating			Not classified
Pacmix	(CAS No) None		Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Manganese Sucrate			Not classified
potassium chloride	(CAS No) 7447-40-7		Not classified
Iron Oxysulfate			Eye Irrit. 2B, H320
Sand			STOT SE 3, H335
Manganese Oxysulfate			Eye Irrit. 2B, H320
Wax	(CAS No) 64771-72-8		Not classified
diatomaceous earth	(CAS No) 61790-53-2		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 : On land, sweep or shovel into suitable containers. Minimize generation of dust. 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.

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

dolomite (16389-88-1)		
USA ACGIH	ACGIH TWA (mg/m³)	3 mg/m³

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 : Solid

Appearance : Multicolored granules.

Color : Colorless

Odor : characteristic

Odor threshold : No data available

pH : No data available

Relative evaporation rate (butyl acetate=1) : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapor pressure	:	No data available
Relative vapor density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	62 - 63 lbs/ft^3
Solubility	:	Slowly soluble, coating insoluble. Water: Solubility in water of component(s) of the mixture : • : 100 g/100ml • : 77 g/100ml • : 38 g/100ml • : 34 g/100ml • : 11 g/100ml • : 0.0078 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

No additional information available

10.2. Chemical stability

Stable. Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Extremely high temperatures. Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Oxidizing agent. Prolonged contact may cause oxidation of unprotected metals. Strong acids. Strong bases.

10.6. Hazardous decomposition products

During high temperature in fire conditions. The product may reach melting point and decompose to release NH3, SOx, POx, or CN. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

urea (57-13-6)	
LD50 oral rat	8471 mg/kg (Rat)
LD50 dermal rat	> 3200 mg/kg (Rat)
LD50 dermal rabbit	> 21000 mg/kg (Rabbit)
ATE US (oral)	8471.00000000 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

Monoammonium Phosphate (7722-76-1)	
LD50 oral rat	5750 mg/kg (Rat)
LD50 dermal rat	> mg/kg
LD50 dermal rabbit	> 7940 mg/kg (Rabbit)

Monoammonium Phosphate (7722-76-1)	
ATE US (oral)	5750.00000000 mg/kg body weight

potassium sulfate (7778-80-5)	
LD50 oral rat	6600 mg/kg (Rat)
ATE US (oral)	6600.00000000 mg/kg body weight

potassium chloride (7447-40-7)	
LD50 oral rat	2600 mg/kg (Rat)
ATE US (oral)	2600.00000000 mg/kg body weight

Manganese Oxysulfate	
LD50 oral rat	2150 mg/kg
ATE US (oral)	2150.00000000 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes 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

diatomaceous earth (61790-53-2)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified

Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : May cause respiratory irritation.

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

urea (57-13-6)	
LC50 fish 1	> 6810 mg/l (96 h; Leuciscus idus)
EC50 Daphnia 1	> 10000 mg/l (48 h; Daphnia magna)
LC50 fish 2	17500 mg/l (96 h; Poecilia reticulata)
EC50 Daphnia 2	> 10000 mg/l (24 h; Daphnia magna)
TLM fish 1	17500 ppm (96 h; Poecilia reticulata)
Threshold limit other aquatic organisms 1	120000 mg/l (16 h; Bacteria; Toxicity test)
Threshold limit other aquatic organisms 2	> 10000 mg/l (Pseudomonas putida)
Threshold limit algae 2	> 10000 mg/l (168 h; Scenedesmus quadricauda)

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)

Monoammonium Phosphate (7722-76-1)	
LC50 fish 1	155 ppm (96 h; Pimephales promelas)

potassium sulfate (7778-80-5)	
LC50 fish 1	1692.4 mg/l (96 h; Alburnus alburnus)

potassium sulfate (7778-80-5)	
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)
EC50 Daphnia 1	890 mg/l (48 h; Daphnia magna; Static system)
LC50 fish 2	653 - 796 mg/l (96 h; Lepomis macrochirus)
EC50 Daphnia 2	1180 mg/l (96 h; Crustacea)
TLM fish 1	3550 ppm (96 h; Lepomis sp.)
Threshold limit other aquatic organisms 1	> 1000 mg/l (96 h)
Threshold limit algae 1	2900 mg/l (72 h; Scenedesmus subspicatus)

potassium chloride (7447-40-7)	
LC50 fish 1	920 mg/l (96 h; Gambusia affinis; Static system)
EC50 Daphnia 1	630 mg/l (48 h; Ceriodaphnia dubia)
LC50 fish 2	2010 mg/l (96 h; Lepomis macrochirus; Static system)
EC50 Daphnia 2	660 mg/l (48 h; Daphnia magna)
Threshold limit algae 1	850 mg/l (72 h; Scenedesmus subspicatus)
Threshold limit algae 2	> 100 mg/l (72 h; Scenedesmus subspicatus; GLP)

12.2. Persistence and degradability

Best Palm Plus 13-5-8	
Persistence and degradability	Not established.

urea (57-13-6)	
Persistence and degradability	Inherently biodegradable. Hydrolysis in water. Not established.
ThOD	0.27 g O_2 /g substance

ammonium sulfate (7783-20-2)	
Persistence and degradability	Biodegradability in water: no data available. Not established.

Monoammonium Phosphate (7722-76-1)	
Persistence and degradability	Biodegradability in water: no data available. Not established.

potassium sulfate (7778-80-5)	
Persistence and degradability	Biodegradability: not applicable. Not established.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Iron Oxysulfate	
Persistence and degradability	Not established.

potassium chloride (7447-40-7)	
Persistence and degradability	Biodegradability: not applicable. Not established.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Wax (64771-72-8)	
Persistence and degradability	Not established.

Pacmix (None)	
Persistence and degradability	Not established.

Sand	
Persistence and degradability	Not established.

dolomite (16389-88-1)	
Persistence and degradability	Biodegradability: not applicable. Not established.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

diatomaceous earth (61790-53-2)	
Persistence and degradability	Biodegradability: not applicable. Not established.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Manganese Sucrate	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Best Palm Plus 13-5-8	
Bioaccumulative potential	Not established.

urea (57-13-6)	
BCF fish 1	1 (72 h; Brachydanio rerio; Fresh water)
BCF other aquatic organisms 1	11700 (Chlorella sp.)
Log Pow	-2.59 - -1.59
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.

ammonium sulfate (7783-20-2)	
Log Pow	-5.1
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.

Monoammonium Phosphate (7722-76-1)	
Bioaccumulative potential	Not bioaccumulative. Not established.

potassium sulfate (7778-80-5)	
Bioaccumulative potential	Not bioaccumulative. Not established.

Iron Oxysulfate	
Bioaccumulative potential	Not established.

potassium chloride (7447-40-7)	
Log Pow	-0.46 (Estimated value)
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.

Wax (64771-72-8)	
Bioaccumulative potential	Not established.

Pacmix (None)	
Bioaccumulative potential	Not established.

Sand	
Bioaccumulative potential	Not established.

dolomite (16389-88-1)	
Bioaccumulative potential	No bioaccumulation data available. Not established.

diatomaceous earth (61790-53-2)	
Bioaccumulative potential	No bioaccumulation data available. Not established.

Manganese Sucrate	
Bioaccumulative potential	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

SECTION 15: Regulatory information

15.1. US Federal regulations

Best Palm Plus 13-5-8
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

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

Iron Oxysulfate	CAS No	C>=1.00% ; C<=5.00%
Polymer Coating	CAS No	C>=5.00% ; C<=12.00%
Pacmix	CAS No None	C>=3.00% ; C<=10.00%
Manganese Oxysulfate	CAS No	C>=0.10% ; C<=0.50%
Sand	CAS No	C>=0.50% ; C<=0.90%
Manganese Sucrate	CAS No	C>=5.00% ; C<=10.00%

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.

Iron Oxysulfate
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

Sand
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

Manganese Sucrate
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

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

diatomaceous earth (61790-53-2)
U.S. - New Jersey - Right to Know Hazardous Substance List

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:

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
H315	Causes skin irritation
H320	Causes eye irritation
H335	May cause respiratory irritation

SDS US (GHS HazCom 2012)

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