

# Best-Tabs 20-10-5 Controlled Release Fertilizer Tablets

## Safety Data Sheet

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

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : Best-Tabs 20-10-5 Controlled Release Fertilizer Tablets  
Product code : M74002

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

No additional information available

#### 1.3. Details of the supplier of the safety data 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: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Skin Irrit. 2 H315 - Causes skin irritation  
Eye Irrit. 2B H320 - Causes eye irritation  
STOT SE 3 H335 - May cause respiratory irritation

Full text of H-statements: see section 16

#### 2.2. Label elements

##### GHS-US labelling

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/vapours/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 attention  
P337+P313 - If eye irritation persists: Get medical 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 ... specify in accordance with local/regional/national regulations

#### 2.3. Other hazards

No additional information available

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### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
formaldehyde/urea,resins	(CAS No) 9011-05-6		Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Monoammonium Phosphate	(CAS No) 7722-76-1		Eye Irrit. 2B, H320 STOT SE 3, H335
potassium sulfate	(CAS No) 7778-80-5		Not classified
Calcium Phosphate	(CAS No) 7758-23-8		Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Dicalcium Phosphate	(CAS No) 7757-93-9		Eye Irrit. 2B, H320
Pacmix	(CAS No) None		Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
ammonium sulfate	(CAS No) 7783-20-2		Eye Irrit. 2B, H320 STOT SE 3, H335
Wax	(CAS No) 64771-72-8		Not classified
magnesium stearate	(CAS No) 557-04-0		Not classified
Ferrous Sulfate Monohydrate	(CAS No) 17375-41-6		Acute Tox. 4 (Oral), H302 Eye Irrit. 2B, H320 STOT SE 3, H335

Full text of H-statements: 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	: Allow breathing of fresh air. 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

Reactivity : Stable.

### 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.

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### 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 vapour.

#### 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.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

magnesium stearate (557-04-0)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>

#### 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 : Mottled grey.

Colour : Gray

Odour : characteristic

Odour threshold : No data available

pH : 7.36

Melting point : No data available

Freezing point : No data available

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Boiling point	: No data available
Flash point	: Non-flammable
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapour pressure	: No data available
Relative density	: No data available
Relative vapour density at 20 °C	: No data available
Density	: 2.97 g/cm <sup>3</sup>
Solubility	: Soluble and slowly soluble.
Log Pow	: 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

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable.

### 10.2. Chemical stability

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

Strong acids. Becomes corrosive to metals when wet. Strong bases.

### 10.6. Hazardous decomposition products

During high temperature in fire conditions. The product may reach melting point and decompose to release NH<sub>3</sub>, SO<sub>x</sub>, PO<sub>x</sub>, or CN. fume. Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

<b>formaldehyde/urea,resins (9011-05-6)</b>	
LD50 oral rat	8394 mg/kg (Rat)
LD50 dermal rat	> 2100 mg/kg (Rat)
ATE US (oral)	8394.000 mg/kg bodyweight
<b>Monoammonium Phosphate (7722-76-1)</b>	
LD50 oral rat	5750 mg/kg (Rat)
LD50 dermal rat	> mg/kg
LD50 dermal rabbit	> 7940 mg/kg (Rabbit)
ATE US (oral)	5750.000 mg/kg bodyweight
<b>Calcium Phosphate (7758-23-8)</b>	
LD50 oral rat	17500 mg/kg (Rat; Literature)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit; Literature)

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<b>Calcium Phosphate (7758-23-8)</b>	
ATE US (oral)	17500.000 mg/kg bodyweight
<b>Dicalcium Phosphate (7757-93-9)</b>	
LD50 oral rat	10000 mg/kg (Rat)
LD50 dermal rat	7940 mg/kg (Rat)
ATE US (oral)	10000.000 mg/kg bodyweight
ATE US (dermal)	7940.000 mg/kg bodyweight
<b>ammonium sulfate (7783-20-2)</b>	
LD50 oral rat	2840 mg/kg (Rat)
LD50 dermal rat	> 2000 mg/kg
ATE US (oral)	2840.000 mg/kg bodyweight
<b>potassium sulfate (7778-80-5)</b>	
LD50 oral rat	6600 mg/kg (Rat)
ATE US (oral)	6600.000 mg/kg bodyweight
<b>Ferrous Sulfate Monohydrate (17375-41-6)</b>	
LD50 oral rat	319 mg/kg
ATE US (oral)	319.000 mg/kg bodyweight
<b>magnesium stearate (557-04-0)</b>	
LD50 oral rat	> 5000 mg/kg (Rat)

Skin corrosion/irritation	: Causes skin irritation. pH: 7.36
Serious eye damage/irritation	: Causes eye irritation. pH: 7.36
Respiratory or skin sensitisation	: 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)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>formaldehyde/urea,resins (9011-05-6)</b>	
LC50 fish 1	> 500 mg/l (96 h; Leuciscus idus; Estimated value)
EC50 Daphnia 1	65000 mg/l (Daphnia magna; QSAR)
<b>Monoammonium Phosphate (7722-76-1)</b>	
LC50 fish 1	155 ppm (96 h; Pimephales promelas)
<b>ammonium sulfate (7783-20-2)</b>	
LC50 fish 1	126 mg/l (96 h; Poecilia reticulata)
EC50 Daphnia 1	202 mg/l (96 h; Daphnia magna)

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<b>ammonium sulfate (7783-20-2)</b>	
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)
<b>potassium sulfate (7778-80-5)</b>	
LC50 fish 1	1692.4 mg/l (96 h; Alburnus alburnus)
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)

### 12.2. Persistence and degradability

<b>Best-Tabs 20-10-5 Controlled Release Fertilizer Tablets</b>	
Persistence and degradability	Not established.
<b>formaldehyde/urea,resins (9011-05-6)</b>	
Persistence and degradability	Not readily biodegradable in water. Not established.
<b>Monoammonium Phosphate (7722-76-1)</b>	
Persistence and degradability	Biodegradability in water: no data available. Not established.
<b>Calcium Phosphate (7758-23-8)</b>	
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
<b>Dicalcium Phosphate (7757-93-9)</b>	
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
<b>ammonium sulfate (7783-20-2)</b>	
Persistence and degradability	Biodegradability in water: no data available. Not established.
<b>potassium sulfate (7778-80-5)</b>	
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
<b>Ferrous Sulfate Monohydrate (17375-41-6)</b>	
Persistence and degradability	Not established.
<b>Pacmix (None)</b>	
Persistence and degradability	Not established.
<b>magnesium stearate (557-04-0)</b>	
Persistence and degradability	Biodegradability in water: no data available. Not established.
<b>Wax (64771-72-8)</b>	
Persistence and degradability	Not established.

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### 12.3. Bioaccumulative potential

<b>Best-Tabs 20-10-5 Controlled Release Fertilizer Tablets</b>	
Bioaccumulative potential	Not established.
<b>formaldehyde/urea,resins (9011-05-6)</b>	
Bioaccumulative potential	No bioaccumulation data available. Not established.
<b>Monoammonium Phosphate (7722-76-1)</b>	
Bioaccumulative potential	Not bioaccumulative. Not established.
<b>Calcium Phosphate (7758-23-8)</b>	
Bioaccumulative potential	No bioaccumulation data available. Not established.
<b>Dicalcium Phosphate (7757-93-9)</b>	
Bioaccumulative potential	Not bioaccumulative. Not established.
<b>ammonium sulfate (7783-20-2)</b>	
Log Pow	-5.1
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.
<b>potassium sulfate (7778-80-5)</b>	
Bioaccumulative potential	Not bioaccumulative. Not established.
<b>Ferrous Sulfate Monohydrate (17375-41-6)</b>	
Bioaccumulative potential	Not established.
<b>Pacmix (None)</b>	
Bioaccumulative potential	Not established.
<b>magnesium stearate (557-04-0)</b>	
Log Pow	14.34 (Estimated value)
Bioaccumulative potential	Not established.
<b>Wax (64771-72-8)</b>	
Bioaccumulative potential	Not established.

### 12.4. Mobility in soil

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 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

### Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport

### TDG

No additional information available

### 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, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

Ferrous Sulfate Monohydrate	CAS No 17375-41-6	%
Pacmix	CAS No None	%

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

##### 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, developmental and/or reproductive harm

### 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, labelling 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-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
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, Respiratory tract irritation
H302	Harmful if swallowed
H315	Causes skin irritation
H320	Causes eye irritation
H335	May cause respiratory irritation

SDS US (GHS HazCom 2012)

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