

Potassium Special 10-20-30

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 : Potassium Special 10-20-30
Product code : M77920

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)

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) :

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
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
P337 + P313 - If eye irritation persists: Get medical advice/attention
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 nitrate	(CAS No) 7757-79-1		Eye Irrit. 2B, H320

Potassium Special 10-20-30

Safety Data Sheet

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

Name	Product identifier	%	Classification (GHS-US)
Monoammonium Phosphate	(CAS No) 7722-76-1		Eye Irrit. 2B, H320 STOT SE 3, H335
potassium sulfate	(CAS No) 7778-80-5		Not classified
edta iron(iii) sodium salt	(CAS No) 15708-41-5		Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
ammonium nitrate	(CAS No) 6484-52-2		Eye Irrit. 2B, H320
Manganese EDTA	(CAS No) 55448-20-9		Not classified
Copper EDTA	(CAS No) 14025-15-1		Not classified
Zinc EDTA	(CAS No) 14025-21-9		Not classified
Sodium Borate	(CAS No) 12008-41-2		Acute Tox. 4 (Oral), H302
disodium molybdate	(CAS No) 7631-95-0		Not classified

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.

Potassium Special 10-20-30

Safety Data Sheet

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

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

edta iron(iii) sodium salt (15708-41-5)

USA ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³
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disodium molybdate (7631-95-0)

USA ACGIH	ACGIH TWA (mg/m ³)	0.5 mg/m ³
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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 : Pale blue powder.
Color : Blue
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
Solubility : Water: Solubility in water of component(s) of the mixture :
•: 32 g/100ml •: 190 g/100ml •: 38 g/100ml •: 11 g/100ml •: 9.5 g/100ml •: 100 g/100ml •: < 10 g/100ml
Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available

Potassium Special 10-20-30

Safety Data Sheet

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

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

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

potassium nitrate (7757-79-1)	
LD50 oral rat	3750 mg/kg (Rat)
LD50 dermal rat	> 5000 mg/kg
ATE US (oral)	3750.00000000 mg/kg body weight

ammonium nitrate (6484-52-2)	
LD50 oral rat	4820 mg/kg (Rat)
LD50 dermal rabbit	> 3000 mg/kg (Rabbit)
ATE US (oral)	4820.00000000 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)
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

Sodium Borate (12008-41-2)	
LD50 oral rat	2 g/kg
LD50 dermal rabbit	> 2000 mg/kg
ATE US (oral)	2000.00000000 mg/kg body weight

edta iron(iii) sodium salt (15708-41-5)	
LD50 oral rat	5000 mg/kg (Rat)
ATE US (oral)	5000.00000000 mg/kg body weight

disodium molybdate (7631-95-0)	
LD50 oral rat	4000 mg/kg (Rat)
LD50 dermal rat	> 2000 mg/kg (Rat)
LC50 inhalation rat (mg/l)	> 2.1 mg/l/4h (Rat; >584 mg/l/4h; Rat)

Potassium Special 10-20-30

Safety Data Sheet

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

disodium molybdate (7631-95-0)	
ATE US (oral)	4000.00000000 mg/kg body weight
Skin corrosion/irritation	: Not classified
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
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

potassium nitrate (7757-79-1)	
LC50 fish 1	162 mg/l (96 h; Pisces; Lethal)
LC50 other aquatic organisms 1	39 mg/l (96 h; Daphnia magna)
EC50 other aquatic organisms 1	200 - 1000 mg/l (Plankton; Nocivity test)
LC50 fish 2	1378 mg/l (Poecilia reticulata)
LC50 other aquatic organisms 2	490 mg/l (48 h; Daphnia magna)
TLM fish 1	3000 mg/l (96 h; Lepomis macrochirus)
TLM fish 2	162 mg/l (96 h; Gambusia affinis)
Threshold limit other aquatic organisms 1	39 mg/l (96 h; Daphnia magna)
Threshold limit other aquatic organisms 2	490 mg/l (48 h; Daphnia magna)
ammonium nitrate (6484-52-2)	
LC50 fish 1	74 mg/l (48 h; Cyprinus carpio; Lethal)
EC50 Daphnia 1	555 mg/l (Daphnia magna)
LC50 fish 2	800 mg/l (3.9 h; Pisces)
TLM fish 1	100 - 1000,96 h; Pisces
TLM other aquatic organisms 1	100 - 1000,96 h
Threshold limit algae 1	83 mg/l (Scenedesmus quadricauda; Growth rate)
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)
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)
edta iron(iii) sodium salt (15708-41-5)	
LC50 fish 1	2592 mg/l (96 h; Pisces)

Potassium Special 10-20-30

Safety Data Sheet

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

disodium molybdate (7631-95-0)	
LC50 fish 1	> 1000 mg/l (96 h; Oncorhynchus kisutch; Dihydrate)
EC50 Daphnia 1	330 mg/l (48 h; Daphnia magna; Dihydrate)
LC50 fish 2	7600 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
Threshold limit algae 1	4.6 mg/l (72 h; Selenastrum capricornutum; Nominal concentration)
Threshold limit algae 2	12.5 mg/l (72 h; Scenedesmus subspicatus; Dihydrate)

12.2. Persistence and degradability

Potassium Special 10-20-30	
Persistence and degradability	Not established.

potassium nitrate (7757-79-1)	
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

ammonium nitrate (6484-52-2)	
Persistence and degradability	Biodegradable in water. Biodegradable in the soil. 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

Sodium Borate (12008-41-2)	
Persistence and degradability	Not established.

Copper EDTA (14025-15-1)	
Persistence and degradability	Not established.

edta iron(iii) sodium salt (15708-41-5)	
Persistence and degradability	Biodegradable in water. Not established.

Manganese EDTA (55448-20-9)	
Persistence and degradability	Not established.

disodium molybdate (7631-95-0)	
Persistence and degradability	Biodegradability: not applicable. Photolysis in water. Not established.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Zinc EDTA (14025-21-9)	
Persistence and degradability	Non degradable in the soil. Adsorbs into the soil. Not established.

12.3. Bioaccumulative potential

Potassium Special 10-20-30	
Bioaccumulative potential	Not established.

potassium nitrate (7757-79-1)	
Bioaccumulative potential	No bioaccumulation data available. Not established.

ammonium nitrate (6484-52-2)	
Log Pow	-3.1
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.

Potassium Special 10-20-30

Safety Data Sheet

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

Monoammonium Phosphate (7722-76-1)	
Bioaccumulative potential	Not bioaccumulative. Not established.
potassium sulfate (7778-80-5)	
Bioaccumulative potential	Not bioaccumulative. Not established.
Sodium Borate (12008-41-2)	
Bioaccumulative potential	Not established.
Copper EDTA (14025-15-1)	
Bioaccumulative potential	Not established.
edta iron(iii) sodium salt (15708-41-5)	
Log Pow	-10.6
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.
Manganese EDTA (55448-20-9)	
Bioaccumulative potential	Not established.
disodium molybdate (7631-95-0)	
BCF fish 1	4.9 (28 days; Oncorhynchus tshawytscha)
BCF other aquatic organisms 1	164.3 (Mollusca)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500). Not established.
Zinc EDTA (14025-21-9)	
Bioaccumulative potential	No bioaccumulation data available. 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

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

Manganese EDTA	CAS No 55448-20-9	
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Potassium Special 10-20-30

Safety Data Sheet

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

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.

Manganese EDTA (55448-20-9)

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

potassium nitrate (7757-79-1)

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

ammonium nitrate (6484-52-2)

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