KEY TO LIFE

Safety Data Sheet
Silver Bullet

SECTION 1: Identification

1.1 Product identifier

Product name	Silver Bullet
Brand	Key To Life
Substance name	Sulfur
CAS no.	7704-34-9

1.4 Supplier's details

Name	Key To Life
Address	10900 W 120th Avenue Suite C Broomfield, CO 80021 USA
Telephone	(303) 955-7838
email	info@keytolifegarden.com

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

- Acute toxicity, oral (chapter 3.1), Cat. 4
- Acute toxicity, dermal (chapter 3.1), Cat. 4
- Acute toxicity, inhalation (chapter 3.1), Cat. 2
- Skin corrosion/irritation (chapter 3.2), Cat. 2

2.2 GHS label elements, including precautionary statements

Pictogram



Signal word	**Danger**
Hazard statement(s)	
H302	Harmful if swallowed
H312	Harmful in contact with skin
H330	Fatal if inhaled
H315	Causes skin irritation

Precautionary statement(s)

P264	Wash … thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/.../if you feel unwell,
P330	Rinse mouth.
P501	Dispose of contents/container to …
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water/...
P312	Call a POISON CENTER/doctor/... if you feel unwell.
P321	Specific treatment (see … on this label).
P362+P364	Take off contaminated clothing and wash it before reuse.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P284	[In case of inadequate ventilation] wear respiratory protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310	Immediately call a POISON CENTER/doctor/...
P320	Specific treatment is urgent (see … on this label).
P403+P233	Store in a well ventilated place. Keep container tightly closed.
P405	Store locked up.
P332+P313	If skin irritation occurs: Get medical advice/attention.

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name	Sulfur
CAS no.	7704-34-9
Formula	S
Molecular weight	32.07
Other names / synonyms	Sulfur

Hazardous components

1. Sulfur

Concentration	97-98 %
CAS no.	7704-34-9

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call physician or poison control center immediately.
In case of skin contact	Wash off with soap and plenty of water for 15-20 minutes. Call poison control center or doctor for treatment advice. Remove contaminated clothing and shoes.
In case of eye contact	Hold eye open and rinse slowly and gently with water for at least 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye, Call a poison control center or doctor for treatment advice.
If swallowed	Call a physician or poinson control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

4.2 Most important symptoms/effects, acute and delayed
No information available.

4.3 Indication of immediate medical attention and special treatment needed, if necessary
No information available. Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Specific hazards arising from the chemical
No information available.

5.3 Special protective actions for fire-fighters
Use personal protection equipment. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full pretective gear.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid contact with skin, eyes and clothing.

6.2 Environmental precautions
Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up
Sweep up and shovel into suitable containers for disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Avoid breathing dust. Keep away from heat, sparks and open flame. - No smoking. Avoid contact with skin, eyes and clothing. In case of insufficient ventilation, wear suitable respiratory equipment.

7.2 Conditions for safe storage, including any incompatibilities
Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur. Store in a dry place and/or in closed container. Keep containers tightly closed in a cool, well-ventilated place.
Incompatible Materials : Stong oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Sulfur (CAS: 7704-34-9)

8.2 Appropriate engineering controls
Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection
Avoid contact with eyes. Goggles.

Skin protection
Long sleeved clothing. Long pants. Chemical resistant gloves. Waterproof gloves. Socks and footwear.

Respiratory protection
Where airborne exposure is likely, use NIOSH approved repiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Solid; amber color
Odor	Rotten egg-like
Odor threshold	
pH	No information available
Melting point/freezing point	115 C / 239 F
Initial boiling point and boiling range	444
Flash point	207 C
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Upper/lower flammability limits	No information available
Vapor pressure	0.0086 mbar
Vapor density	No information available
Relative density	Bulk 0.86-1.00 (Tap) g/ml
Solubility(ies)	No information available
Partition coefficient: n-octanol/water	No information available
Auto-ignition temperature	232 C
Decomposition temperature	No information available
Viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
None under normal processing.

10.4 Conditions to avoid
Extremes of temperatures and direct sunlight.

10.5 Incompatible materials
Strong oxidizing agents.

10.6 Hazardous decomposition products
No information available.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Single exposure studies indicate :
Oral : No more than slightly toxic to rats (LD50 > 2,000 mg/kg)
Dermal : Slightly toxic to rats (LD50 2,000 mg/kg)
Inhalation : Slightly toxic to rats (4hr LC50 1.35 mg/l)

Skin corrosion/irritation
May be harmful if absorbed through the skin.

Serious eye damage/irritation
May cause irritation.

Respiratory or skin sensitization
Harmful by inhalation.

Germ cell mutagenicity
No information available.

Carcinogenicity
There are no known carcinogenic chemicals in this product.

Reproductive toxicity
No information available.

Aspiration hazard
No information available.

Additional information
dog LDLo intravenous 10mg/kg (10mg/kg) Journal of the American Pharmaceutical Association, Scientific Edition. Vol. 29, Pg. 289, 1940.
guinea pig LDLo intraperitoneal 55mg/kg (55mg/kg) Journal of the American Pharmaceutical Association, Scientific Edition. Vol. 29, Pg. 289, 1940.
mammal (species unspecified) LC50 inhalation 1660mg/m3 (1660mg/m3) Gigiena Truda i Professional'nye Zabolevaniya. Labor Hygiene and Occupational Diseases. Vol. 34(12), Pg. 8, 1990.
rabbit LDLo intravenous 5mg/kg (5mg/kg) Journal of the American Pharmaceutical Association, Scientific Edition. Vol. 29, Pg. 289, 1940.
rabbit LDLo oral 175mg/kg (175mg/kg) Journal of the American Pharmaceutical Association, Scientific Edition. Vol. 29, Pg. 289, 1940.
rat LD oral > 8437mg/kg (8437mg/kg) Gigiena Truda i Professional'nye Zabolevaniya. Labor Hygiene and Occupational Diseases. Vol. 18(5), Pg. 48, 1974.
rat LDLo intravenous 8mg/kg (8mg/kg) Journal of the American Pharmaceutical Association, Scientific Edition. Vol. 29, Pg. 289, 1940.

SECTION 12: Ecological information

Toxicity
Do not apply directly to water to areas where surface water is present or to intertidal areas below the mean high water mark. Do not clean

equipment or dispose of equipment washwater in a manner that will contaminate water resources or areable land. Do not apply when weather conditions favor drift from treated areas.

Persistence and degradability
No information available.

Bioaccumulative potential
No information available.

Other adverse effects
No information available.

SECTION 13: Disposal considerations

SECTION 14: Transport information

DOT (US)
Not Regulated.

IMDG
Not Regulated.

IATA
Not Regulated.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Pennsylvania Right To Know Components
Chemical name: Sulfur
CAS number: 7704-34-9

New Jersey Right To Know Components
Common name: SULFUR
CAS number: 7704-34-9

Massachusetts Right To Know Components

HMIS Rating

Sulfur	
HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	
PERSONAL PROTECTION	

NFPA Rating



SECTION 16: Other information