V10

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)
Issue date: 3/13/2025 Version: 1.0

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Trade name : V10

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Professional uses,Plant Protection products,Control of aggressive Pepino Mosaic Viruses
Restrictions on use : No additional information available

1.4. Supplier's details

Supplier
Koppert Biological Systems, Inc.
1502 Old US 23, Howell, MI 48843, USA
1-810-632-8750

1.5. Emergency phone number

Emergency number : Poison Control Center 1-800-222-1222

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR § 1910.1200)

Reproductive toxicity, Category 1B H360 May damage fertility or the unborn child.
Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :

Signal word (GHS US) : Danger
Hazard statements (GHS US) : H360 - May damage fertility or the unborn child
Precautionary statements (GHS US) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P405 - Store locked up.
P501 - Dispose of contents and container to a hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

Other hazards which do not result in classification : Microorganisms may have the potential to provoke sensitising reactions. To avoid risks to human health and the environment, comply with the instructions for use.

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR § 1910.1200)
Boric acid	CAS-No.: 10043-35-3	≥ 0.1 – < 1	Repr. 1B, H360
Disodium tetraborate decahydrate, borax decahydrate	CAS-No.: 1303-96-4	≥ 0.1 – < 1	Eye Irrit. 2, H319 Repr. 1B, H360

Comments : The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of § 1910.1200

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Wash skin thoroughly with mild soap and water. Take off contaminated clothing and wash it before reuse. Get medical attention if symptoms occur.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell.

First-aid measures after ingestion : Do not induce vomiting. Rinse mouth out with water. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

Symptoms/effects after skin contact : Not expected to present a significant skin hazard under anticipated conditions of normal use.

Symptoms/effects after eye contact : Not expected to present a significant eye contact hazard under anticipated conditions of normal use.

Symptoms/effects after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

Chronic symptoms : May damage fertility or the unborn child.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Alcohol-resistant foam. Dry powder. Carbon dioxide. Water spray. Use extinguishing agent suitable for surrounding fire.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Presents no particular fire or explosion hazard. Burning produces stinking and toxic fumes. In case of fire and/or explosion do not breathe fumes.

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon dioxide. Carbon monoxide. Sulfur dioxide.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Evacuate the danger area. Move containers from fire area if it can be done without personal risk. Use water spray or fog for cooling exposed containers. Fight fire from safe distance and protected location. Use extinguishing media appropriate for surrounding fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing. Do not attempt to take action without suitable protective equipment.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid all contact with skin, eyes, or clothing.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Evacuate unnecessary personnel. Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing vapors. Do not touch or walk on the spilled product. No action shall be taken without appropriate training or involving any personal risk.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment.

Emergency procedures : Evacuate unnecessary personnel. Ventilate area.

Environmental precautions : Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.2. Methods and materials for containment and cleaning up

For containment : Stop leak, if possible without risk. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Caution : this product can cause the floor to be slippery.

Methods for cleaning up : Move containers from spill area. Recover small spills with a suitable absorbent, like diatomaceous earth. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Ventilate spillage area. Clean contaminated surfaces with an excess of water. Prevent entry to sewers and public waters.

Other information : Dispose of via an authorised person/ licensed waste disposal contractor or by other suitable waste treatment techniques. Dispose of materials or solid residues at an authorized site.

For further information refer to section 13,For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact during pregnancy/while nursing. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Ensure good ventilation of the work station. Provide local exhaust or general room ventilation. Do not breathe vapors. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing.

Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Oxidising agents, Acids, Bases, Store in a dry place, Avoid high temperatures. Keep away from food, drink and animal feed. Keep container tightly closed. Containers which are opened should be properly resealed and kept upright to prevent leakage. Store in accordance with local, regional, national or international regulation.

Maximum storage period : 3 days

Storage temperature : 4 – 10 °C

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Boric acid (10043-35-3)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Boric acid
ACGIH OEL TWA	2 mg/m³ (I - Inhalable particulate matter)
ACGIH OEL STEL	6 mg/m³ (I - Inhalable particulate matter)
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2024

Disodium tetraborate decahydrate, borax decahydrate (1303-96-4)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Sodium tetraborate, decahydrate
ACGIH OEL TWA	2 mg/m³ (I - Inhalable particulate matter)
ACGIH OEL STEL	6 mg/m³ (I - Inhalable particulate matter)
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2024
Monitoring methods	
Monitoring methods	Refer to all applicable national, international and local regulations or provisions.

8.2. Appropriate engineering controls

Appropriate engineering controls : Provide local exhaust or general room ventilation. Ensure exposure is below occupational exposure limits (where available). Handle in accordance with good industrial hygiene and safety procedures. Avoid all unnecessary exposure.

Environmental exposure controls	:	Avoid release to the environment. Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:
Wear recommended personal protective equipment. Personal protective equipment should be chosen according to the NIOSH standards and in discussion with the supplier of the protective equipment.

Hand protection:
Chemical resistant gloves (according to NIOSH standard). Breakthrough time : 6 (> 480 minutes). Please follow the instructions related to the permeability and the penetration time provided by the manufacturer
Eye protection:
Even though no specific eye irritation data are available, wear eye protection appropriate to conditions of use when handling this material
Skin and body protection:
Wear suitable protective clothing. Skin protection appropriate to the conditions of use should be provided
Respiratory protection:
No respiratory protection needed under normal use conditions. Where excessive vapor, mist, or dust may result, use approved respiratory protection equipment. All respirators must conform to specifications for efficiency and performance indicated by OSHA Standard 29 CFR 1910.134 and NIOSH Standards

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	:	Liquid
Color	:	Olive green
Odor	:	grass-like odour
Odor threshold	:	No data available
pH	:	7.45 – 8.6 (20 °C; 68 °F)
Melting point	:	No data available
Freezing point	:	0 °C (32 °F)
Boiling point	:	100 °C (212 °F)
Flash point	:	No data available
Flammability (solid, gas)	:	No data available
Vapor pressure	:	2.3 kPa (20 °C; 68 °F)
Relative vapor density at 20°C	:	No data available
Relative density	:	1.019 – 1.142
Solubility	:	completely miscible with: water.
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	0.734 mm²/s (40 °C; 104 °F); 1.104 cSt (20 °C; 68 °F)
Explosion limits	:	No data available
Particle characteristics	:	No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Hazardous polymerization: Will not occur.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Protect from sunlight. Overheating. Extremely high or low temperatures.

10.5. Incompatible materials

Oxidising agents. Acids. Bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Boric acid (10043-35-3)	
LD50 oral rat	3450 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Disodium tetraborate decahydrate, borax decahydrate (1303-96-4)	
LD50 oral rat	> 2500 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Skin corrosion/irritation : Not classified
pH: 7.45 – 8.6 (20 °C; 68 °F)
Serious eye damage/irritation : Not classified
pH: 7.45 – 8.6 (20 °C; 68 °F)
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : May damage fertility or the unborn child.
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

V10	
Viscosity, kinematic	0.734 mm²/s (40 °C; 104 °F); 1.104 cSt (20 °C; 68 °F)

Symptoms/effects after inhalation : Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
Symptoms/effects after skin contact : Not expected to present a significant skin hazard under anticipated conditions of normal use.

Symptoms/effects after eye contact : Not expected to present a significant eye contact hazard under anticipated conditions of normal use.
Symptoms/effects after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of normal use.
Chronic symptoms : May damage fertility or the unborn child.
Other information : No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. Avoid release to the environment.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Not classified

Boric acid (10043-35-3)	
LC50 - Fish [1]	447 mg/l (96 h)
EC50 - Other aquatic organisms [1]	180.6 mg/l (24 h)
LOEC (acute)	99.4 mg/l (96 h)
LOEC (chronic)	108 mg/l (14 days)
NOEC chronic fish	18 mg/l (87 days)

12.2. Persistence and degradability

V10	
Persistence and degradability	Biodegradability in water: no data available.

12.3. Bioaccumulative potential

V10	
Bioaccumulative potential	No data available concerning bioaccumulation.

12.4. Mobility in soil

V10	
Ecology - soil	No additional information available.

12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available.
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Do not dispose of waste into sewer.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecological waste information : Avoid release to the environment.

SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT)	:	Not regulated
Proper Shipping Name (TDG)	:	Not regulated
Proper Shipping Name (IMDG)	:	Not regulated
Proper Shipping Name (IATA)	:	Not regulated

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not regulated

TDG
Transport hazard class(es) (TDG) : Not regulated

IMDG
Transport hazard class(es) (IMDG) : Not regulated

IATA
Transport hazard class(es) (IATA) : Not regulated

14.4. Packing group

Packing group (DOT)	:	Not regulated
Packing group (TDG)	:	Not regulated
Packing group (IMDG)	:	Not regulated
Packing group (IATA)	:	Not regulated

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT
Not regulated

TDG
Not regulated

IMDG
Not regulated

IATA
Not regulated

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA

Boric acid (10043-35-3)

Listed on the Canadian DSL (Domestic Substances List)

Disodium tetraborate decahydrate, borax decahydrate (1303-96-4)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Boric acid (10043-35-3)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Disodium tetraborate decahydrate, borax decahydrate (1303-96-4)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. 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

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Issue date	:	3/13/2025
Data sources	:	Supplier's safety documents.
Training advice	:	Training staff on good practice.

Full text of hazard classes and H-statements	
H319	Causes serious eye irritation
H360	May damage fertility or the unborn child

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.