

1. Identification

Product identifier SmartBlock®; SmartBlock® 98% Technical, 3-Decen-2-one

Other means of identification

SDS number 369

QAD Number 12551

Recommended use Potato sprout inhibitor

Recommended restrictions Keep out of the Reach of Children!

Product registration number 5481-568; 5481-571

Pest Control Products Act (Canada) WHMIS: 30889; 39888

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name AMVAC Chemical Corporation
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 Product Use 888-462-6822
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2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Acute toxicity, inhalation Category 4
 Skin corrosion/irritation Category 2

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Harmful if inhaled.

Precautionary statement

Prevention Avoid breathing mist or vapor. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves and eye/face protection.

Response IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Specific treatment (see this label). If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Collect spillage.

Storage Store in a cool, dry area

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information

To avoid risks to human health and the environment, comply with the instructions for use.

United States Environmental Protection Agency Labeling Requirements: This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

HAZARDS TO HUMANS AND DOMESTIC ANIMALS.

WARNING

Causes skin irritation and substantial but temporary eye injury. Harmful if inhaled. Do not get on skin or on clothing. Avoid contact with eyes. Avoid breathing vapors.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
3-Decen-2-one		10519-33-2	>=98.0

Impurities

Chemical name	CAS number	%
Other Compounds	N/A	<= 2

4. First-aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact

Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact

Rinse with water. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth. Get medical attention if symptoms occur. Drink 1 or 2 glasses of water. Never give anything by mouth to a victim who is unconscious or is having convulsions.

Most important symptoms/effects, acute and delayed

Contact with the skin may cause skin irritation. Contact with the eyes causes tearing and pain that will subside after a short period of time. Inhalation may cause shortness of breath.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

None known.

Specific hazards arising from the chemical

Container may explode in heat of fire.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Move containers from fire area if you can do it without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Not available.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk, to prevent entry into waterways, sewer, basements or confined areas. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Avoid breathing mist. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment recommended in section 8. Avoid release to the environment. Keep out of the reach of children. Keep away from food, drink and animal feedstuffs. Use only outdoors or in a well-ventilated area. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store locked up. Keep out of the reach of children. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	Amvac recommended PEL = 200 mg/m ³ .
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear appropriate chemical resistant clothing (see label).
Respiratory protection	Not available.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	A colorless to a slightly yellow color
Physical state	Liquid.
Form	Watery liquid.
Color	Colorless to light yellow.
Odor	Jasmine
Odor threshold	Not established
pH	4.33 (1% dispersion)
Melting point/freezing point	Not determined
Initial boiling point and boiling range	435 °F (224 °C)
Flash point	225 °F (107 °C) Cleveland Open Cup

Evaporation rate	Not determined
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	430 Pa (3.23 mm Hg) at 25 °C
Vapor density	Not available.
Relative density	0.845 g/cm ³
Solubility(ies)	
Solubility (water)	0.14 g/l in water
Partition coefficient (n-octanol/water)	3.45
Auto-ignition temperature	446 °F (230 °C)
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Bulk density	7.05 lb/gal
Explosive properties	This product has been tested and has no explosive properties.
Molecular formula	C ₁₀ H ₁₈ O
Oxidizing properties	No oxidizing properties.
Percent volatile	> 99 %
Specific gravity	0.845

10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	At thermal decomposition temperatures, carbon monoxide and carbon dioxide.

11. Toxicological information

Information on likely routes of exposure

Inhalation	No data available	
Skin contact	SmartBlock®; SmartBlock® 98% Technical, 3-Decen-2-one	Result: Severe irritant (Tox Cat II). Species: Rabbit
Eye contact	SmartBlock®; SmartBlock® 98% Technical, 3-Decen-2-one	Result: Not an eye irritant Species: Rabbit
Ingestion	May cause discomfort if swallowed.	

Symptoms related to the physical, chemical and toxicological characteristics Contact with the skin may cause skin irritation. Contact with the eyes causes tearing and pain that will subside after a short period of time. Inhalation may cause shortness of breath.

Information on toxicological effects

Acute toxicity Toxic if inhaled. Harmful if inhaled. Acute and toxicological and mutagenicity data for this product are given below. The long-term toxicological properties of this potato sprout inhibitor have not been determined. Care should be taken with chemicals that have not been thoroughly investigated.

Product	Species	Test Results
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SmartBlock®; SmartBlock® 98% Technical, 3-Decen-2-one

Acute

Dermal

LD50 Rat > 5000 mg/kg (Tox Cat IV).

Inhalation

LC50 Rat > 1 mg/l/4h Males (Tox Cat IV)

Oral

LD50 Rat > 5000 mg/kg Females, (Tox Cat IV).

Skin corrosion/irritation Causes skin irritation.

Irritation Corrosion - Skin

SmartBlock®; SmartBlock® 98% Technical, 3-Decen-2-one Result: Severe irritant (Tox Cat II).
Species: Rabbit

Serious eye damage/eye irritation

Eye Contact

SmartBlock®; SmartBlock® 98% Technical, 3-Decen-2-one Result: Not an eye irritant
Species: Rabbit

Respiratory or skin sensitization

Respiratory sensitization No data available

Skin sensitization Irritating to skin.

Skin sensitization

SmartBlock®; SmartBlock® 98% Technical, 3-Decen-2-one Result: Not a skin sensitizer.
Species: Guinea pig

Germ cell mutagenicity

This product is not considered to be mutagenic. Non-mutagenic in bacterial reverse mutation assay, in an In Vivo Liver unscheduled DNA Synthesis assay and no evidence of clastogenicity or aneugenicity in the mouse micronucleus assay. Mouse lymphoma assay showed limited evidence of mutagenicity i.e. without metabolic activation only.

Mutagenicity

SmartBlock®; SmartBlock® 98% Technical, 3-Decen-2-one , Non-mutagenic

Carcinogenicity

No carcinogenicity data available for this product. Not listed as being carcinogenic. SmartBlock®; SmartBlock® 98% Technical, 3-Decen-2-one , Not listed as being carcinogenic.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity

No data are available on this product. Not classified.

Reproductivity

SmartBlock®; SmartBlock® 98% Technical, 3-Decen-2-one , No data are available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available Not applicable.

12. Ecological information

Ecotoxicity

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

Product	Species	Test Results
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SmartBlock®; SmartBlock® 98% Technical, 3-Decen-2-one

Aquatic

Acute

Algae EC50 Algae 3.5 mg/l, 72 hours

Product	Species	Test Results	
Crustacea	EC50	Daphnia	1.68 mg/l, 48 hours
Fish	LC50	Fish	1.5 mg/l, 96 hours
Persistence and degradability	No data is available on the degradability of this product. 3-Decen-2-one is considered to be readily biodegradable, but fails the 10-day window.		
Bioaccumulative potential	Not available.		
Partition coefficient n-octanol / water (log Kow)			
SmartBlock®; SmartBlock® 98% Technical, 3-Decen-2-one		3.45	
Mobility in soil	Not available.		
Other adverse effects	Not available.		

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with all applicable local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal according to all applicable regulations. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

15. Regulatory information

US federal regulations This product is registered under EPA/FIFRA Regulations. It is a violation of Federal Law to use this product in any manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
 Immediate Hazard - Yes
 Delayed Hazard - No
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

Not Listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	01-23-2015
Revision date	04-29-2015
Version #	03
Further information	Not available.
HMIS® ratings	Health: 2 Flammability: 0 Physical hazard: 0
NFPA ratings	Health: 2 Flammability: 0 Instability: 0

Disclaimer

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Revision Information

Toxicological Information: Toxicological Property Data

Other information, including date of preparation or last revision: Disclaimer

GHS: Classification