

## 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  
**Address** 4100 E Washington Blvd  
 Los Angeles, CA 90023 USA  
**Telephone** AMVAC Chemical Corp 323-264-3910  
 AMVAC Chemical Corp 323-268-1028 (FAX)  
**Website** www.Amvac-Chemical.com  
**E-mail** CustServ@Amvac-Chemical.com  
**Emergency phone number** Medical 888-681-4261  
 CHEMTREC® (USA+Canada) 800-424-9300  
 Product Use 888-462-6822  
 CHEMTREC® (Outside USA) +1-703-527-3887

## 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 (CO<sub>2</sub>).

### 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

<b>Personal precautions, protective equipment and emergency procedures</b>	Not available.
<b>Methods and materials for containment and cleaning up</b>	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.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	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.
<b>Conditions for safe storage, including any incompatibilities</b>	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

<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Exposure guidelines</b>	Amvac recommended PEL = 200 mg/m <sup>3</sup> .
<b>Appropriate engineering controls</b>	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.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin protection</b>	
<b>Hand protection</b>	Wear appropriate chemical resistant gloves.
<b>Other</b>	Wear appropriate chemical resistant clothing (see label).
<b>Respiratory protection</b>	Not available.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	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

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

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

## 10. Stability and reactivity

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

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	No data available	
<b>Skin contact</b>	SmartBlock®; SmartBlock® 98% Technical, 3-Decen-2-one	Result: Severe irritant (Tox Cat II). Species: Rabbit
<b>Eye contact</b>	SmartBlock®; SmartBlock® 98% Technical, 3-Decen-2-one	Result: Not an eye irritant Species: Rabbit
<b>Ingestion</b>	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
<b>Persistence and degradability</b>	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.		
<b>Bioaccumulative potential</b>	Not available.		
<b>Partition coefficient n-octanol / water (log Kow)</b>			
SmartBlock®; SmartBlock® 98% Technical, 3-Decen-2-one		3.45	
<b>Mobility in soil</b>	Not available.		
<b>Other adverse effects</b>	Not available.		

### 13. Disposal considerations

<b>Disposal instructions</b>	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.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	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).
<b>Contaminated packaging</b>	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**

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

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**Revision Information**

Toxicological Information: Toxicological Property Data

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

GHS: Classification