



SAFETY DATA SHEET

1. Identification

Product identifier	SmartBlock®	
Other means of identification		
SDS number	369	
CAS number	10519-33-2	
Product registration number	5481-571	
Synonyms	3-Decen-2-one * SmartBlock® 98% Technical	
Recommended use	Potato sprout inhibitor	
Recommended restrictions	Keep out of the Reach of Children!	
EPA Registration number	EPA: 5481-571	
Manufacturer/Importer/Supplier/Distributor information		
Manufacturer		
Company name	AMVAC Chemical Corporation	
Address	4685 MacArthur Court Suite 1200 Newport Beach, CA 92660	
Telephone	AMVAC Chemical Corp	949-260-1200
	AMVAC Chemical Corp	949-260-6270(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
	Serious eye damage/eye irritation	Category 2A
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	

Label elements



Signal word Warning

Hazard statement

H332	Harmful if inhaled.
H316	Causes serious skin irritation.
H319	Causes moderate eye irritation.

Precautionary statement

Prevention

P261	Avoid breathing mist or vapor.
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P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves and eye/face protection.

Response

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P311 Call a POISON CENTER/doctor.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P391 Collect spillage.

Storage

P402 + P404 Store in a cool, dry area

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

This 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 in section 15. The pesticide label also includes other important information, including directions for use.

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
3-Decen-2-one	3-Decen-2-one SmartBlock® 98% Technical	10519-33-2	≥98.0

Impurities

Chemical name	Common name and synonyms	CAS number	%
Related Compounds		N/A	≤2.0

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

Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. 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	No unusual fire or explosion hazards noted.
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	<p>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.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use.</p>
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.
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	This substance has no PEL, TLV, or other recommended exposure limit.
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
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
Molecular weight	154.25 g/mol
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	Harmful if inhaled.
Skin contact	Causes severe skin irritation.
Eye contact	Moderate Irritation
3-Decen-2-one	Draize Result: Moderately irritating Species: Rabbit Organ: Eye
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. Causes eye irritation. Causes severe skin irritation.

Information on toxicological effects

Acute toxicity

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. Harmful if inhaled. Causes severe skin irritation. Causes eye irritation.

Product	Species	Test Results
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3-Decen-2-one (CAS 10519-33-2)

Acute

Dermal

LD50

Rabbit

> 5000 mg/kg

Inhalation

LC50

Rat

> 2.04 mg/l, 4 h Females
0.52 - 2.04 mg/l, 4 h Males

Oral

LD50

Rat

> 5000 mg/kg Females

Skin corrosion/irritation

Causes severe skin irritation.

Irritation Corrosion - Skin

3-Decen-2-one

Draize
Result: Severe irritant
Species: Rabbit

Serious eye damage/eye irritation

Causes eye irritation.

Eye Contact

3-Decen-2-one

Draize
Result: Moderately irritating
Species: Rabbit
Organ: Eye

Respiratory or skin sensitization

Respiratory sensitization

No data available.

Skin sensitization

Not a sensitizer.

Sensitization

3-Decen-2-one

Result: Not a sensitizer

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.

Carcinogenicity

Not listed as being carcinogenic.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity

Not classified.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

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.

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.
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 methods/information).
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 a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
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.
This 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.

HAZARD 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, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not allow this material to drift onto neighboring crops or non crop areas or use in a manner or at a time other than in accordance with label directions because animal, plant or crop injury, illegal residues, or other undesirable results may occur.

Toxic Substances Control Act (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 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Acute toxicity (any route of exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation

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****California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	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	Oct-18-2016
Revision date	Nov-27-2018
Version #	4.0
HMIS® ratings	Health: 2 Flammability: 0 Physical hazard: 0
NFPA ratings	Health: 2 Flammability: 0 Instability: 0

Disclaimer

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AMVAC Chemical Corporation cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use.

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CHEMTREC is a trademark of the American Chemistry Council, Inc.

HMIS is a trademark of the American Coatings Association.

NFPA is a trademark of the National Fire Protection Association, Inc.

Revision information

Product and Company Identification: Alternate Trade Names

Hazard(s) identification: Supplemental information

Toxicological information: Inhalation

Regulatory information: Canadian regulations