



SAFETY DATA SHEET

1. Identification

Product identifier	SmartChoice™ HC
Other means of identification	
SDS number	464
Product registration number	5481-579
Recommended use	Organophosphate insecticide. For control of corn rootworms, cutworms and other listed soil insect pests in corn.
Recommended restrictions	This is a Restricted Use Pesticide and is for use in the SmartBox® enclosed system. Keep out of the Reach of Children!
EPA Registration number	EPA: 5481-579
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer	
Company name	AMVAC Chemical Corporation
Address	4100 E Washington Blvd Los Angeles, CA 90024
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, oral	Category 3
	Acute toxicity, dermal	Category 4
	Acute toxicity, inhalation	Category 2
	Carcinogenicity	Category 1A
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		



Signal word	Danger
Hazard statement	Toxic if swallowed. Harmful in contact with skin. Fatal if inhaled. May cause cancer by inhalation.

Precautionary statement

Prevention

Do not handle until all safety precautions have been read and understood.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Wear respiratory protection.

Response

If swallowed: Immediately call a poison center/doctor. Rinse mouth.
If on skin: Wash with plenty of water. Take off contaminated clothing and wash before reuse.
If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
Collect spillage.

Storage

Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

Disposal

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

Hazard(s) not otherwise classified (HNOC)

Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

Supplemental information

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

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Chlorethoxyfos	O,O-Diethyl O-(1,2,2,2-tetrachloroethyl)phosphorothioate Fortress®	54593-83-8	12.9
Bifenthrin	Cyclopropanecarboxylic acid, 3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propenyl]- -2,2-dimethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester, (1R,3R)-rel-	82657-04-3	2.1
Carrier		1318-93-0	70 - 85

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. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately.

Skin contact

Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact

Do not rub eyes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eyes and lids with water. If there will be a delay in getting medical attention, rinse the eyes an additional 15 minutes.

Ingestion

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Never give anything by mouth to a victim who is unconscious or is having convulsions.

Most important symptoms/effects, acute and delayed

Acute cholinesterase depression may be evidenced by headache, nausea, vomiting, diarrhea, abdominal cramps, excessive sweating, salivation and tearing, constricted pupils, blurred vision, tightness in chest, weakness, muscle twitching and confusion; in extreme cases unconsciousness, convulsions, severe respiratory depression and death may occur.
Repeated exposures to small doses of organophosphates may lower the cholinesterase to levels where the above symptoms of acute overexposure are observed.

Indication of immediate medical attention and special treatment needed

This product is an Organophosphate (OP) Insecticide. Do not handle the patient without the following protective equipment in place: chemical resistant gloves and apron (preferably nitrile). Remove contaminated clothing and do not reuse without thorough cleaning with detergent and hot water. Dispose of heavily contaminated clothing, including shoes, as a hazardous waste. Do not wait for laboratory confirmation to treat patients with strong clinical evidence of poisoning. In the USA and other countries, contact your local or national poison control center for more information. Establish airway and oxygenation. IV Atropine sulfate is the antidote of choice against parasympathetic nervous stimulation. If there are signs of parasympathetic stimulation, Atropine Sulfate should be injected at 10 minute intervals in doses of 1 to 2 milligrams until complete atropinization has occurred. Pralidoxime chloride (2-PAM chloride) may also be used as an effective antidote in addition to and while maintaining full atropinization. In adults, an initial dose of 1 gram of 2-PAM should be injected, preferably as an infusion, in 250 cc of saline over a 15 to 20 minute period. If this is not practical, 2-PAM may be administered slowly by intravenous injection as a 5% solution in water over not less than 2 minutes. After about an hour, a second dose of 1 gram of 2-PAM will be indicated if muscle weakness has not been relieved. For infants and children, the dose of 2-PAM is 0.25 grams. Avoid morphine, aminophylline, phenothiazine, reserpine, furosemide and ethacrynic acid. Clear chest by postural drainage. Oxygen administration may be necessary. Observe patient continuously for 48 hours. Repeated exposure to cholinesterase inhibitors may, without warning, cause prolonged susceptibility to very small doses of any cholinesterase inhibitor. Allow no further exposure until time for cholinesterase regeneration has been attained as determined by a blood test. Bathe and shampoo contaminated skin and hair. If ingested, empty stomach; activated charcoal is useful to further limit absorption. If victim is alert, Syrup of Ipecac (2 tablespoons in adults, 1 tablespoon in small children) is indicated. If symptoms such as loss of gag reflex, convulsions, or unconsciousness occur before emesis, gastric lavage should be considered following intubation with a cuffed endotracheal tube.

General information

Keep victim under observation. Keep victim warm. Symptoms may be delayed.

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. This product is a Cholinesterase Inhibitor. A physician should be contacted in all cases of exposure to the technical and its formulations.

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

During fire, gases hazardous to health may be formed.

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

Use water spray to cool unopened containers. Dike and collect extinguishing water.

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

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up

This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. Stop the flow of material, if this is without risk. Shovel the material into waste container. Clean surface thoroughly to remove residual contamination. Decontaminate the area and equipment with dilute alkali or ammonia (less than 5%) and detergent.

Never return spills to original containers for re-use.

Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. Handling and storage

Precautions for safe handling

Do not handle until all safety precautions have been read and understood. Should be handled in closed systems, if possible. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep away from food, drink and animal feedstuffs. Keep out of the reach of children.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Impurities	Type	Value	Form
free respirable Crystalline (quartz) Silica (CAS 14808-60-7)	PEL	0.05 mg/m3	Respirable dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Impurities	Type	Value	Form
free respirable Crystalline (quartz) Silica (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable.

US. ACGIH Threshold Limit Values

Impurities	Type	Value	Form
free respirable Crystalline (quartz) Silica (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Impurities	Type	Value	Form
free respirable Crystalline (quartz) Silica (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

Biological limit values

No biological exposure limits noted for the ingredient(s).

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.

Ensure adequate ventilation. When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [CFR 170.240 (D)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS. Refer to the product label for additional Engineering Controls.

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 Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

Thermal hazards Not applicable.

General hygiene considerations

Keep away from food and drink. 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 Gray to reddish brown clay granule

Physical state Solid.

Form Granular.

Color	Gray to reddish brown
Odor	Slight aromatic solvent odor
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
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	2.08E+00 mm Hg from aromatic solvent
Vapor density	11.6
Relative density	Not available.
Solubility(ies)	
Solubility (water)	3 ppm (68 °F (20 °C))
Solubility (solvents)	Aliphatic and aromatic solvents, ketones.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Specific gravity	0.72

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Strong bases.
Hazardous decomposition products	Heating product to decomposition will cause emission of acid smoke and fumes of phosphorus oxides, and carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Fatal if inhaled. May cause cancer by inhalation.
Skin contact	Harmful in contact with skin.
Eye contact	Causes eye irritation. Mild irritant
Ingestion	Toxic if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics Acute cholinesterase depression may be evidenced by headache, nausea, vomiting, diarrhea, abdominal cramps, excessive sweating, salivation and tearing, constricted pupils, blurred vision, tightness in chest, weakness, muscle twitching and confusion; in extreme cases, unconsciousness, convulsions, severe respiratory depression and death may occur. Contact with Bifenthrin may occasionally produce skin sensitization such as rashes, numbing, burning or tingling.

Information on toxicological effects

Acute toxicity Fatal if inhaled. Toxic if swallowed. Harmful in contact with skin.

Product	Species	Test Results
SmartChoice™ HC		
Acute		
Dermal		
<i>Dust</i>		
LD50	Rabbit	2080 mg/kg (male) Tox Cat IV 1217 mg/kg (female) Tox Cat IV
Inhalation		
<i>Dust</i>		
LC50	Rat	0.53 mg/l (female) Tox Cat II 0.05 mg/l (male) Tox Cat II
Oral		
<i>Dust</i>		
LD50	Rat	132 mg/kg (female) Tox Cat II

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation	Not a skin irritant.
Serious eye damage/eye irritation	Mild irritant.
Respiratory or skin sensitization	
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	Non-irritating
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	May cause cancer. Respirable crystalline silica is listed as being carcinogenic by both IARC and NTP. Prior to incorporation of the active ingredient(s) onto the carrier it is present at less than 1% of the carrier in the product. Incorporation of the active ingredient(s) is likely to remove the crystalline silica from the respirable range of particles. Bifenthrin has produced an increased incidence of urinary bladder tumors in male mice at the highest dose level tested. This response however was considered equivocal and not evidence of a clear compound related effect. EPA has classified Bifenthrin as a class C carcinogen, a possible human carcinogen. None of the following agencies have classified Bifenthrin as carcinogenic: IARC, NTP, OSHA or ACGIH.
IARC Monographs. Overall Evaluation of Carcinogenicity	
free respirable Crystalline (quartz) Silica (CAS 14808-60-7)	1 Carcinogenic to humans.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)	
free respirable Crystalline (quartz) Silica (CAS 14808-60-7)	Cancer
US. National Toxicology Program (NTP) Report on Carcinogens	
free respirable Crystalline (quartz) Silica (CAS 14808-60-7)	Known To Be Human Carcinogen.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Nervous system through cholinesterase inhibition.
Specific target organ toxicity - repeated exposure	Potential neurotoxicity as an organophosphate.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Repeated exposures to small doses of organophosphates may lower the cholinesterase to levels where the symptoms of acute overexposure are observed.
12. Ecological information	
Ecotoxicity	Very toxic to aquatic life with long lasting effects.

Components	Species	Test Results
Bifenthrin (CAS 82657-04-3)		
Aquatic		
Crustacea	LC50	Water flea (Ceriodaphnia dubia) 0 - 0.0002 mg/l, 48 hours Water flea (Daphnia magna) 0.0001 - 0.0009 mg/l, 48 hours
Persistence and degradability	No data is available on the degradability of this product.	
Bioaccumulative potential		
Mobility in soil	No data available.	
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	

13. Disposal considerations

Disposal instructions	Return the damaged SmartBox® container to AMVAC Chemical Corporation. See box label for more complete instructions. Collect and reclaim or dispose in sealed containers at licensed waste disposal site according to all applicable regulations. 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 spilled contents 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	Dispose of in accordance with all applicable regulations. 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 SmartBox® containers should be returned to AMVAC Chemical Corporation per instructions provided. See the label on the container for more complete information. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number	UN2783
UN proper shipping name	Organophosphorus pesticides, solid, toxic (Chlorethoxyfos, Bifenthrin)
Transport hazard class(es)	
Class	6.1(PGI, II)
Subsidiary risk	-
Label(s)	6.1
Packing group	II
Environmental hazards	
Marine pollutant	No
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	IB8, IP2, IP4, N77, T3, TP33
Packaging exceptions	153
Packaging non bulk	212
Packaging bulk	242

IATA

UN number	UN2783
UN proper shipping name	Organophosphorus pesticides, solid, toxic (Chlorethoxyfos, Bifenthrin)
Transport hazard class(es)	
Class	6.1(PGI, II)
Subsidiary risk	-
Label(s)	6.1
Packing group	II
Environmental hazards	Yes, when transported in bulk over large bodies of water
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.
Read safety instructions, SDS and emergency procedures before handling.	

IMDG

UN number UN2783
UN proper shipping name Organophosphorus pesticides, solid, toxic (Chlorethoxyfos, Bifenthrin), MARINE POLLUTANT
Transport hazard class(es)
Class 6.1(PGI, II)
Subsidiary risk -
Label(s) 6.1
Packing group II
Environmental hazards
Marine pollutant Yes
EmS Not available.
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

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

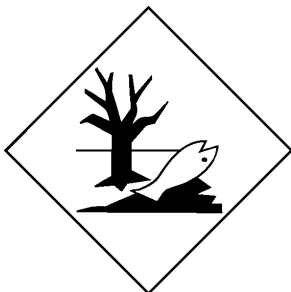
DOT



IATA; IMDG



Marine pollutant



General information

IMDG Regulated Severe Marine Pollutant.

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 as a RESTRICTED USE PESTICIDE. 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 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.

HAZARD TO HUMANS AND DOMESTIC ANIMALS.

WARNING: Fatal if swallowed, inhaled or absorbed through the skin. Causes moderate eye irritation. Harmful if absorbed through skin. Do not breathe dust. Avoid contact with eyes, skin, and clothing. Wear a mask or pesticide respirator jointly approved by the Mining Enforcement and Safety Administration and the National Institute for Occupational Safety and Health. Wear protective clothing, a face shield or goggles and rubber gloves. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash separately before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. For handling activities, use a non-powered air purifying respirator equipped with an N-, R-, or P-series filter. When mixing or loading or applying this product to turf via tractor-drawn spreader, wear a dust mask. Repeated exposure can lead to an asymptomatic increase in the susceptibility to poisoning. Avoid prolonged exposure to the product.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to mammals, birds, fish, and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

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)

free respirable Crystalline (quartz) Silica (CAS 14808-60-7)	Cancer
	lung effects
	immune system effects
	kidney effects

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) Carcinogenicity Specific target organ toxicity (single or repeated exposure)
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SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Bifenthrin	82657-04-3	2.1

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



WARNING: WARNING: This product contains a chemical known to the State of California to cause cancer.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

free respirable Crystalline (quartz) Silica (CAS 14808-60-7) Listed: October 1, 1988

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

free respirable Crystalline (quartz) Silica (CAS 14808-60-7)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*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	Apr-06-2016
Revision date	May-09-2018
References	ACGIH®: American Conference of Governmental Industrial Hygienists CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act EPA: Environmental Protection Agency FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act IARC: International Agency for Research on Cancer NTP: National Toxicology Program OSHA: Occupational Safety and Health Agency SARA: Superfund Amendments and Reauthorization Act TSCA: Toxic Substances Control Act DOT: Department of Transportation IMDG: International Maritime Dangerous Goods IATA: International Air Transport Association
Version #	3.0
HMIS® ratings	Health: 3* Flammability: 0 Physical hazard: 0
NFPA ratings	Health: 3 Flammability: 0 Instability: 0

Disclaimer

This information is provided for the limited guidance to the user. While AMVAC believes that the information is, as of the date hereof, reliable, it is the user's responsibility to determine the suitability of the information for its purposes. The user is advised not to construe the information as absolutely complete since additional information may be necessary or desirable when particular, exceptional, or variable conditions or circumstances exist (like combinations with other materials), or because of applicable regulations. No express or implied warranty of merchantability or fitness for a particular purpose or otherwise is made hereunder with respect to the information or the product to which the information relates.

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

Revision information

This document has undergone significant changes and should be reviewed in its entirety.