



SAFETY DATA SHEET

1. Identification

Product identifier Equus 720 SST Fungicide

Other means of identification

SDS number 567

Product registration number 5481-619

Recommended use Fungicide. See label for a complete list of uses.

Recommended restrictions No other uses are advised.
Keep out of the Reach of Children!

EPA Registration number EPA: 5481-619

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
Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 2
Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation

Environmental hazards

Hazardous to the aquatic environment, acute hazard	Category 1
Hazardous to the aquatic environment, long-term hazard	Category 1

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement

Precautionary statement

Prevention

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear respiratory protection.

Response

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Storage

Disposal

Not available.

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

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Chlorothalonil	2,4,5,6-Tetrachloro-1,3-benzenedicarboni trile	1897-45-6	52.38 - 55.62
Proprietary Solvent		Proprietary	< 10

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation

Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.

Skin contact

Not available.

Eye contact

Not available.

Ingestion

Not available.

Most important symptoms/effects, acute and delayed

High vapor concentrations may cause central nervous system depression which can lead to dizziness, weakness and headache.

General information

When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.

5. Fire-fighting measures

Suitable extinguishing media

Not available.

Unsuitable extinguishing media

Not available.

Specific hazards arising from the chemical

Not applicable.

Special protective equipment and precautions for firefighters

Not available.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Large Spills: Siphon the spilled liquid into a recovery drum for reuse or disposal, depending on the circumstances. Clean the area as described for a small spill. Clean the area with common powdered household detergent and a stiff brush and just enough water to make a slurry.

Environmental precautions

Not available.

7. Handling and storage**Precautions for safe handling**

Avoid breathing mist or vapor.

Conditions for safe storage, including any incompatibilities

Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection**Occupational exposure limits**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Proprietary Solvent	STEL	10 mg/m ³	Aerosol, inhalable.
		50 ppm	Vapor fraction
	TWA	25 ppm	Vapor fraction

Biological limit values

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

Appropriate engineering controls

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Not available.

Skin protection**Hand protection**

Neoprene, butyl rubber, nitrile or Viton gloves are recommended.

Other

Long-sleeved shirt and long pants or coveralls, socks and closed toe shoes are required.

Respiratory protection

For exposures that may exceed the TLV, a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) is required. A full-face respirator or a SCBA may be required if misting or splashing are possible.

Thermal hazards

Not available.

9. Physical and chemical properties**Appearance****Physical state**

Liquid.

Form

Liquid.

Color

Off-white

Odor

Slight.

Odor threshold

Not available.

pH

7.7 (1% dispersion)

Melting point/freezing point

Not available.

Initial boiling point and boiling range

Not available.

Flash point

210 °F (99 °C) estimated

Evaporation rate

Not available.

Flammability (solid, gas)

Not available.

Upper/lower flammability or explosive limits**Flammability limit - lower (%)**

2.6 % estimated

Flammability limit - upper (%)

12.6 % estimated

Explosive limit - lower (%)

Not available.

Explosive limit - upper (%)

Not available.

Vapor pressure

Not available.

Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Auto-ignition temperature	700 °F (371 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	1.32 g/cm ³
Dynamic viscosity	807 cP
Flammability class	Combustible IIIB estimated
Percent volatile	6.4 % estimated
VOC	6.4 % estimated

10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Not available.
Possibility of hazardous reactions	Not available.
Conditions to avoid	Keep out of reach of children. Store away from foodstuffs, animal feed, and fertilizers.
Incompatible materials	Alkaline compounds. Metals such as aluminum, tin, and zinc.
Hazardous decomposition products	Not available.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Not available.
Skin contact	Not available.
Eye contact	Not available.
Ingestion	Not available.

Symptoms related to the physical, chemical and toxicological characteristics Serious eye irritation.

Information on toxicological effects

Acute toxicity Causes serious eye irritation.

Product	Species	Test Results
Equus 720 SST Fungicide		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg
Inhalation		
LC50	Rat	> 2.02 mg/l, 4 h
Oral		
LD50	Rat	> 5000 mg/kg

Skin corrosion/irritation Not irritating to skin.

Serious eye damage/eye irritation Not available.

Respiratory or skin sensitization

Respiratory sensitization	Not available.
Skin sensitization	Not available.

Germ cell mutagenicity Not available.

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Chlorothalonil (CAS 1897-45-6)

2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Not available.**Specific target organ toxicity - single exposure** Not available.**Specific target organ toxicity - repeated exposure** Based on available data, the classification criteria are not met.**Aspiration hazard** Not available.**12. Ecological information****Ecotoxicity** Very toxic to aquatic life.

Components		Species	Test Results
Chlorothalonil (CAS 1897-45-6)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	0.081 - 0.113 mg/l, 48 hours
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)	0.0136 mg/l, 96 hours

Persistence and degradability Not available.**Bioaccumulative potential** Not available.**Mobility in soil** Not available.**Other adverse effects** Not available.**13. Disposal considerations****Disposal instructions** Not available.**Waste from residues / unused products** Dispose of in accordance with all applicable regulations.**Contaminated packaging** Not available.**14. Transport information****DOT**

UN number	UN3082
UN proper shipping name	Environmentally hazardous substances, liquid, n.o.s. (Chlorothalonil)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Label(s)	9
Packing group	III
Environmental hazards	
Marine pollutant	No
Special precautions for user	Not available.
Special provisions	8, 146, 335, IB3, T4, TP1, TP29
Packaging exceptions	155
Packaging non bulk	203
Packaging bulk	241

IATA

UN number	UN3082
UN proper shipping name	Environmentally hazardous substances, liquid, n.o.s. (Chlorothalonil)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Label(s)	9
Packing group	III
Environmental hazards	Yes, when shipped in bulk over large bodies of water

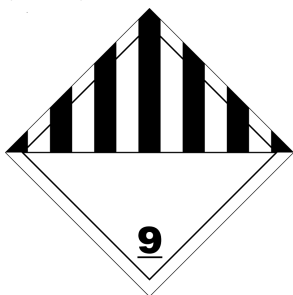
Special precautions for user Not available.

IMDG

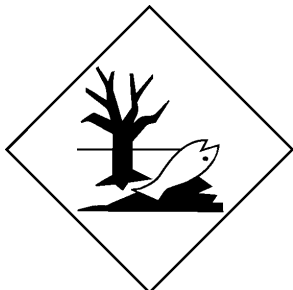
UN number UN3082
UN proper shipping name Environmentally hazardous substances, liquid, n.o.s. (Chlorothalonil), MARINE POLLUTANT
Transport hazard class(es)
Class 9
Subsidiary risk -
Label(s) 9
Packing group III
Environmental hazards
Marine pollutant Yes
EmS Not available.
Special precautions for user Not available.

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

DOT; IATA; IMDG



Marine pollutant



General information

This product is not regulated when shipped by highway, rail, or air in non-bulk packaging (maximum capacity of 450 L (119 gallons) or less).

15. Regulatory information

US federal regulations

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HAZARD TO HUMANS AND DOMESTIC ANIMALS.

WARNING: Causes eye irritation. May cause skin irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not get in eyes. Avoid breathing spray mist. Do not take internally.

Note to user: This product may produce temporary allergic side effects characterized by redness of the eyes, mild bronchial irritation, and redness or rash on exposed skin areas. Persons having allergic reactions should contact a physician.

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates and wildlife. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate. This chemical is known to leach through soil into groundwater under certain conditions as a result of labeled use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Proprietary Solvent (CAS Proprietary) 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)
Serious eye damage or eye irritation
Carcinogenicity
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Chlorothalonil	1897-45-6	52.38 - 55.62

Other federal regulations

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

Proprietary Solvent (CAS Proprietary)

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: This product can expose you to Chlorothalonil, which is known to the State of California to cause cancer, and Proprietary Solvent, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Chlorothalonil (CAS 1897-45-6)

Listed: January 1, 1989

California Proposition 65 - CRT: Listed date/Developmental toxin

Proprietary Solvent (CAS Proprietary)

Listed: June 19, 2015

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

Chlorothalonil (CAS 1897-45-6)

Proprietary Solvent (CAS Proprietary)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	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** Aug-28-2017**Revision date** Aug-29-2018**Version #** 2.0**HMIS® ratings** Health: 2*
Flammability: 0
Physical hazard: 0**NFPA ratings** Health: 2
Flammability: 0
Instability: 0**Disclaimer**

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Revision information

Hazard(s) identification: Hazard statement

Hazard(s) identification: Hazard(s) not otherwise classified (HNOC)

Hazard(s) identification: Supplemental information

Composition / Information on Ingredients: Disclosure Overrides

Regulatory information: California Proposition 65

Regulatory information: Water Pollution Control Act

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

GHS: Classification