



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** FORCE® 10 G HL SmartBox Insecticide

**Other means of identification**

**SDS number** 553

**Product registration number** 100-1615-5481

**Recommended use** Insecticide

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

**EPA Registration number** EPA: 100-1615-5481

**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® 800-424-9300  
(USA+Canada)  
Product Use 888-462-6822  
CHEMTREC® (Outside +1-703-527-3887  
USA)

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Acute toxicity, oral Category 4  
Acute toxicity, inhalation Category 3  
Sensitization, skin Category 1B  
Carcinogenicity Category 1B  
Specific target organ toxicity, repeated exposure Category 2  
Aspiration hazard Category 1

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

**OSHA defined hazards** Combustible dust

**Label elements**



**Signal word** Danger

<b>Hazard statement</b>	Harmful if swallowed. Harmful if inhaled. May cause an allergic skin reaction. May cause cancer by inhalation. May cause damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
<b>Precautionary statement</b>	
<b>Prevention</b>	Avoid breathing dust. Do not get this material in contact with skin. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment.
<b>Response</b>	If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. Collect spillage.
<b>Storage</b>	Store locked up. Store away from incompatible materials.
<b>Disposal</b>	SmartBox® containers should be returned to the manufacturer by following the directions on the label. Dispose of waste and residues in accordance with all applicable regulatory requirements.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	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	%
Tefluthrin	2,3,5,6-tetrafluoro-4-methylbenzyl-(Z)-(1R S,3RS)-3-(2-chloro-3,3,3-trifluoro-1-prope nyl)-2,2-dimethylcyclopropanecarboxylate Tefluthrin	79538-32-2	10
MONTMORILLONITE, CALCINED		70892-59-0	< 74
Total Hydrocarbons	Aromatic Solvent	64742-94-5	< 15
Naphthalene		91-20-3	< 1

Values are not product specifications.

### 4. First-aid measures

<b>Inhalation</b>	If inhaled, remove to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a POISON CENTER or doctor/physician for further treatment advice.
<b>Skin contact</b>	Remove contaminated clothing. Immediately flush skin with running water for at least 20 minutes. Call a physician or poison control center for treatment advice.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue to rinse for at least 15 minutes. Call a physician or poison control center for treatment advice.
<b>Ingestion</b>	If swallowed, seek medical advice immediately and show this container or label. Do not give any liquid to the person. Do not induce vomiting without advice from poison control center. Do not give anything by mouth to an unconscious person.

<b>Most important symptoms/effects, acute and delayed</b>	Sensitization. May cause temporary itching, tingling, burning or numbness of exposed skin, called paresthesia.
<b>Indication of immediate medical attention and special treatment needed</b>	There is no specific antidote. Treat symptomatically.
<b>General information</b>	Have the product container, label or Safety Data Sheet (SDS) with you when calling a poison control center or doctor or going for treatment.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Dry chemical, CO2, water spray or regular foam. If water is used to fight fire, dike and collect the runoff.
<b>Unsuitable extinguishing media</b>	Not available.
<b>Specific hazards arising from the chemical</b>	None known.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	See Section 8 of the SDS for Personal Protective Equipment. Stop the flow of material, if this is without risk, to prevent entry into waterways, sewer, basements or confined areas. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean the area with common powdered household detergent and a stiff brush and just enough water to make a slurry. Pick up wash liquid with additional absorbent and place in a disposable container. Dispose of cleanup materials as hazardous waste (See Section 13).
<b>Environmental precautions</b>	Not available.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Read label before use. Wear appropriate personal protective equipment recommended in section 8. Avoid breathing dust. Do not eat, drink, or smoke when using this product. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics..
<b>Conditions for safe storage, including any incompatibilities</b>	Store locked up. Store in tightly closed original container in a dry, cool and well-ventilated place. Do not store near food, feed, seeds, or tobacco products.

## 8. Exposure controls/personal protection

### Occupational exposure limits

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

Components	Type	Value
Naphthalene (CAS 91-20-3)	PEL	50 mg/m3 10 ppm
Total Hydrocarbons (CAS 64742-94-5)	PEL	400 mg/m3 100 ppm

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Naphthalene (CAS 91-20-3)	TWA	10 ppm	
Total Hydrocarbons (CAS 64742-94-5)	TWA	200 mg/m3	Non-aerosol.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Naphthalene (CAS 91-20-3)	STEL	75 mg/m3 15 ppm
	TWA	50 mg/m3

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
		10 ppm
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).	
<b>Exposure guidelines</b>	Solvent manufacturer has established the following limit: 50 mg/m <sup>3</sup> (8 ppm), TWA Syngenta has established the following limit for Tefluthrin: 0.04 mg/m <sup>3</sup> TWA (skin)	
<b>US - California OELs: Skin designation</b>		
Naphthalene (CAS 91-20-3)	Can be absorbed through the skin.	
<b>US ACGIH Threshold Limit Values: Skin designation</b>		
Naphthalene (CAS 91-20-3)	Can be absorbed through the skin.	
Total Hydrocarbons (CAS 64742-94-5)	Can be absorbed through the skin.	
<b>Appropriate engineering controls</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.	
<b>Individual protection measures, such as personal protective equipment</b>		
<b>Eye/face protection</b>	Tight fitting Chemical goggles are required when dust may be present. Eye wash fountain and emergency showers are recommended.	
<b>Skin protection</b>		
<b>Hand protection</b>	Wear appropriate chemical resistant gloves. Nitrile or butyl rubber gloves are recommended.	
<b>Other</b>	Long-sleeved shirt and long pants or coveralls, socks and chemical resistant closed toe shoes are required.	
<b>Respiratory protection</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below exposure limits. Use a NIOSH/MSHA approved dust/mist filtering respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.	
<b>Thermal hazards</b>	Not applicable.	

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

<b>Physical state</b>	Solid.
<b>Form</b>	Dry flowable granules.
<b>Color</b>	Tan to brown
<b>Odor</b>	Slight aromatic solvent odor
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	6.00E-05 mm Hg (Tefluthrin)
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble (Tefluthrin)
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Stable at normal conditions and storage conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	None known.
<b>Incompatible materials</b>	Not available.
<b>Hazardous decomposition products</b>	Emits hazardous fumes and smoke of unknown composition when heated to decomposition or burned.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Toxic by inhalation.
<b>Skin contact</b>	Slight skin irritant.
<b>Eye contact</b>	May be minimally irritating to eyes.
<b>Ingestion</b>	Harmful if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics**  
Contact with Tefluthrin containing products may occasionally produce skin sensitization such as rashes, numbing, burning or tingling. May cause an allergic skin reaction.

### Information on toxicological effects

**Acute toxicity** Harmful if swallowed. Toxic if inhaled.

<b>Product</b>	<b>Species</b>	<b>Test Results</b>
FORCE® 10 G HL SmartBox Insecticide		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 5000 mg/kg
<b>Inhalation</b>		
LC50	Rat	> 0.1 mg/l
<b>Oral</b>		
LD50	Rat	583 mg/kg
<b>Components</b>	<b>Species</b>	<b>Test Results</b>

Total Hydrocarbons (CAS 64742-94-5)

#### **Acute**

##### **Inhalation**

LC50 Rat 61 mg/l, 4 Hours

**Skin corrosion/irritation** Slightly irritating.

**Serious eye damage/eye irritation** Minimal effects that do not meet the threshold for classification.

### **Respiratory or skin sensitization**

**Respiratory sensitization** Not available.

**Skin sensitization** Product may cause skin sensitization.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

### **Carcinogenicity**

Naphthalene has been listed as a possible carcinogen (Group 2B) by the IARC. None of the other components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

#### **IARC Monographs. Overall Evaluation of Carcinogenicity**

Naphthalene (CAS 91-20-3) 2B Possibly carcinogenic to humans.

#### **OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

Not regulated.

#### **US. National Toxicology Program (NTP) Report on Carcinogens**

Naphthalene (CAS 91-20-3) Reasonably Anticipated to be a Human Carcinogen.

**Reproductive toxicity** None known.

**Specific target organ toxicity - single exposure** Not available.

**Specific target organ toxicity - repeated exposure** May cause damage to organs through prolonged or repeated exposure. Central nervous system. Liver. Kidneys. Blood. Respiratory tract.

**Aspiration hazard** May be harmful if swallowed and enters airways.

## 12. Ecological information

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

Components	Species	Test Results
Tefluthrin (CAS 79538-32-2)		
<i>Acute</i>		
Other	LD50 Duck	4190 mg/kg, 14 days
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	EC50 Daphnia magna	0.07 ppb, 48 hours
Fish	LC50 Rainbow Trout (oncorhynchus mykiss)	0.06 ppb, 96 hours

**Persistence and degradability** Not available.

**Bioaccumulative potential** Not available.

**Partition coefficient n-octanol / water (log Kow)**

Tefluthrin 6.5

**Mobility in soil** Low to slight mobility in all soils tested.

**Other adverse effects** Not available.

## 13. Disposal considerations

**Disposal instructions** Return the damaged SmartBox® container to AMVAC Chemical Corporation. See box label for more complete instructions.  
Dispose of spilled contents in accordance with all applicable local/regional/national/international regulations.

**Hazardous waste code** Not applicable.

**Waste from residues / unused products** Return unused product and empty SmartBox® containers containing residues to AMVAC Chemical Corporation. See the label on the box for more complete instructions.

**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.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

**UN number** UN3077  
**UN proper shipping name** Environmentally hazardous substances, solid, n.o.s. (Tefluthrin)  
**Transport hazard class(es)**  
**Class** 9  
**Subsidiary risk** -  
**Label(s)** 9  
**Packing group** III  
**Environmental hazards** Yes, when transported over large bodies of water  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
 Read safety instructions, SDS and emergency procedures before handling.

### IMDG

**UN number** UN3077  
**UN proper shipping name** Environmentally hazardous substances, solid, n.o.s. (Tefluthrin) (Solvent Naphtha (petroleum), Heavy Arom. (2), Tefluthrin)  
**Transport hazard class(es)**  
**Class** 9  
**Subsidiary risk** -  
**Label(s)** 9  
**Packing group** III

**Environmental hazards****Marine pollutant**

No.

**EmS**

Not available.

**Special precautions for user**

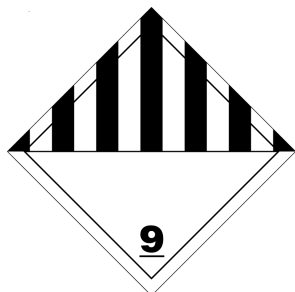
Read safety instructions, SDS and emergency procedures before handling.

Solvent Naphtha (petroleum), Heavy Arom. (2)

Tefluthrin

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.

**IATA; IMDG****General information**

IMDG Regulated Marine Pollutant.

This product is not regulated when shipped by highway, rail, or air in non-bulk packaging (maximum capacity of 400 kg (880 lb) or less). When shipped by vessel or in bulk packaging this product is regulated according to the data shown.

**15. Regulatory information****US federal regulations**

CAUTION! Avoid contact with eyes, skin, and clothing. Causes moderate eye irritation. Avoid breathing dust.

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.**

Harmful if absorbed through skin or eyes, swallowed or inhaled.. 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.

**ENVIRONMENTAL HAZARDS**

This pesticide is very highly toxic to freshwater and estuarine fish and invertebrates. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. 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.

This product may pose a hazard to endangered aquatic species. Follow all use directions. This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Naphthalene (CAS 91-20-3)

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

**Classified hazard categories** Yes  
Combustible dust  
Acute toxicity (any route of exposure)  
Respiratory or skin sensitization  
Carcinogenicity  
Specific target organ toxicity (single or repeated exposure)  
Aspiration hazard

### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Naphthalene	91-20-3	< 1

### Other federal regulations

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

Naphthalene (CAS 91-20-3)

#### 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 Naphthalene, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

#### California Proposition 65 - CRT: Listed date/Carcinogenic substance

Naphthalene (CAS 91-20-3)

Listed: April 19, 2002

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

Naphthalene (CAS 91-20-3)

### 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-05-2017
Revision date	Aug-23-2018
Version #	3.0
HMIS® ratings	Health: 2 Flammability: 1 Physical hazard: 0
NFPA ratings	Health: 2 Flammability: 1 Instability: 0



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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.