

# SAFETY DATA SHEET

## 1. Identification

**Product identifier** FRUIT FIX™ CONCENTRATE 200

**Other means of identification**

**SDS number** 128\_v2.0

**Synonym(s)** Fruit Fix™ Concentrate

**Recommended use** Plant growth regulator.

**Recommended restrictions** Keep out of the Reach of Children!

**EPA Registration number** EPA: 5481-129

**Pest Control Products Act  
(Canada)** 16027

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

**Company name** AMVAC Chemical Corporation

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Los Angeles, CA 90023 USA

**Telephone** AMVAC Chemical Corp 323-264-3910  
AMVAC Chemical Corp 323-268-1028 (FAX)

**Website** www.Amvac-Chemical.com

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**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** Not classified.

**Environmental hazards** Not classified.

**OSHA defined hazards** Not classified.

**Label elements**

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** The mixture does not meet the criteria for classification.

**Precautionary statement**

**Prevention** Observe good industrial hygiene practices.

**Response** Wash hands after handling.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of waste and residues in accordance with local authority requirements.

**Hazard(s) not otherwise  
classified (HNOC)** None known.

**Supplemental information** None.

## 3. Composition/information on ingredients

**Mixtures**

Chemical name	Common name and synonyms	CAS number	%
Ammonium naphthalene-1-acetate		25545-89-5	5.68
Other components			94.32

Additional components	Common name and synonyms	CAS number	%
Chemical name			
AMMONIA		7664-41-7	Trace amounts

#### 4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
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	Not applicable, non-combustible.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	None (non-combustible).
Fire fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
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. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Dike the spilled material. Siphon the spilled liquid into a recovery drum for reuse or disposal, depending on the circumstances. 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. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

#### 7. Handling and storage

Precautions for safe handling	Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

#### 8. Exposure controls/personal protection

##### Occupational exposure limits

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

Additional components	Type	Value
AMMONIA (CAS 7664-41-7)	PEL	35 mg/m3  50 ppm

**US. ACGIH Threshold Limit Values**

Additional components	Type	Value
AMMONIA (CAS 7664-41-7)	STEL	35 ppm
	TWA	25 ppm

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

Additional components	Type	Value
AMMONIA (CAS 7664-41-7)	STEL	27 mg/m3
		35 ppm
	TWA	18 mg/m3
		25 ppm

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls** General ventilation normally adequate.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** If contact is likely, safety glasses with side shields are recommended.

**Skin protection**

**Hand protection** For prolonged or repeated skin contact use suitable protective gloves.

**Other** Wear suitable protective clothing.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards** Not applicable.

**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**

<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Colourless to light yellow.

**Odor** Slight Ammoniacal.

**Odor threshold** Not available.

**pH** 9 - 10 (as is)

**Melting point/freezing point** 30.2 °F (-1 °C)

**Initial boiling point and boiling range** 214 °F (101 °C)

**Flash point** Not applicable - water based solution

**Evaporation rate** Not available.

**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** 1.10E-05 hPa estimated

**Vapor density** Not available.

**Relative density** Not available.

**Solubility(ies)**

**Solubility (water)** Miscible

**Auto-ignition temperature** Not available.

<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Specific gravity</b>	1.016 @ 20°C/4°C

## 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>	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>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	No adverse effects due to inhalation are expected.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

#### Acute toxicity

Product	Species	Test Results
FRUIT FIX™ CONCENTRATE 200		
<b>Oral</b>		
<i>Liquid</i>		
LD50	Rat	> 5050 mg/kg (male) > 4400 mg/kg (female)
<b><u>Acute</u></b>		
<b>Dermal</b>		
<i>Liquid</i>		
LD50	Rabbit	> 2020 mg/kg
<b>Inhalation</b>		
<i>Mist</i>		
LC50	Rat	> 1.62 mg/l, 4 hr (aerosol)
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.	
<b>Irritation Corrosion - Skin</b>		
FRUIT FIX™ CONCENTRATE 200	Result: irritant Species: Rabbit Organ: skin Severity: minimal	
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.	
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.	

<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Structurally related compounds, sodium salt of Naphthaleneacetic acid (NAA) and Naphthaleneacetamide (NAD), have shown no evidence of carcinogenicity when tested in laboratory animals.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Not listed.	
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	
Not regulated.	
<b>US. National Toxicology Program (NTP) Report on Carcinogens</b>	
Not listed.	
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects. No evidence of reproductive toxicity has been observed with the sodium salt, 1-NAANa. At the highest dose tested there was some evidence of parental toxicity with accompanying associated effects on offspring survival and growth.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not an aspiration hazard.

## 12. Ecological information

Ecotoxicity	This product is a plant growth regulator. Do not contaminate bodies of water with product.		
Additional components	Species	Test Results	
AMMONIA (CAS 7664-41-7)			
Aquatic			
Fish	LC50	Chinook salmon (Oncorhynchus tshawytscha)	0.43 - 0.47 mg/l, 96 hours
Persistence and degradability	No data is available on the degradability of this product.		
Bioaccumulative potential	No data available.		
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

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
<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>	Dispose of in accordance with local 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 instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	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 established.

## 15. Regulatory information

### US federal regulations

This product is not known to be 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.  
United States Environmental Protection Agency (EPA) 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.

HAZARD TO HUMANS AND DOMESTIC ANIMALS.

CAUTION! Harmful if swallowed, absorbed through skin or inhaled. Avoid contact with eyes, skin, and clothing. In case of eye contact, immediately flush eyes with plenty of water. Get medical attention if irritation persists.

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. Avoid drift of spray mist.

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

Not regulated.

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

AMMONIA (CAS 7664-41-7) Listed.

### SARA 304 Emergency release notification

AMMONIA (CAS 7664-41-7) 100 LBS

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories**  
Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

### SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity	Threshold planning quantity	Threshold planning quantity, lower value	Threshold planning quantity, upper value
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AMMONIA	7664-41-7	100	500 lbs		
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**SARA 311/312 Hazardous chemical** No

### 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)

AMMONIA (CAS 7664-41-7)

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

AMMONIA (CAS 7664-41-7)

**US. Massachusetts RTK - Substance List**

AMMONIA (CAS 7664-41-7)

**US. New Jersey Worker and Community Right-to-Know Act**

AMMONIA (CAS 7664-41-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

AMMONIA (CAS 7664-41-7)

**US. Rhode Island RTK**

AMMONIA (CAS 7664-41-7)

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

#### 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** 05-31-2015

**Revision date** 06-14-2016

**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 #** 03

**Further information** Not available.

**HMIS® ratings** Health: 0  
Flammability: 0  
Physical hazard: 0

**NFPA ratings** Health: 1  
Flammability: 0  
Instability: 0

**Disclaimer**

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

**Revision information**

Toxicological Information: Toxicological Property Data

Transport Information: Material Transportation Information