Safety Data Sheet

Section 1: Identification

Product identifier

Product Name • **Adams Plus Pyrethrin Dip**

Synonyms • 3006017; Adams Pyrethrin Dip; EPA Reg. No.: 270-349

Product Description • Clear yellow liquid.

Relevant identified uses of the substance or mixture and uses advised against

Recommended use • Insecticide.

Restrictions on use • Keep out of reach of children. Avoid contact with eyes and skin. Do not take internally.

Details of the supplier of the safety data sheet

Manufacturer • Farnam Companies, Inc.

1501 E. Woodfield Road, Suite 200W
Schaumburg, IL 60173
United States

Emergency telephone number

Manufacturer • 1-800-234-2269

Manufacturer (Transportation) • 1-800-424-9300 - CHEMTREC

Manufacturer (Transportation) • 1-703-527-3887 - CHEMTREC - Outside the US collect calls accepted

Section 2: Hazard Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 • Serious Eye Damage 1
Skin Sensitization 1
Reproductive Toxicity 2

Label elements

OSHA HCS 2012

DANGER

Hazard statements • Causes serious eye damage
May cause an allergic skin reaction
Suspected of damaging fertility or the unborn child.

Precautionary statements

Prevention
- Wear protective gloves/protective clothing/eye protection/face protection.
Avoid breathing dust, fume, gas, mist, vapors and/or spray.
Contaminated work clothing should not be allowed out of the workplace.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.

Response
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.
IF exposed or concerned: Get medical advice/attention.

Storage/Disposal
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
Store locked up.

Other hazards

OSHA HCS 2012
- This pesticide is toxic to aquatic organisms, including fish and invertebrates. Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

Composition		
Chemical Name	**Identifiers**	**%**
Pyrethrins	**CAS:**8003-34-7	0.97%
Piperonyl butoxide	**CAS:**51-03-6	3.74%
N-Octyl Bicyloheptene Dicarboximide	**CAS:**113-48-4	5.7%
Di-n-propyl Isocinchomeronate	**CAS:**136-45-8	1.94%
Butylated Hydroxytolene	**CAS:**128-37-0	1.94%
Polyethylene glycol mono(octylphenyl) ether	**CAS:**9036-19-5	67.3%
Phthalic acid, diethyl ester	**CAS:**84-66-2	0.12%
Other ingredients	NDA	Balance

Section 4: First-Aid Measures

Description of first aid measures

Inhalation
- IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or doctor if you feel unwell.

Skin
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water [or shower]. Wash contaminated clothing before reuse.

Eye

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion

- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed

- Causes serious eye damage. An allergic skin reaction may occur in individuals with a sensitivity to n-octyl bicycloheptene dicarboximide and/or piperonyl butoxide. May damage fertility or the unborn child. Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

- Probable mucosal damage may contradict the use of gastric lavage. Contains petroleum distillate. Treat symptomatically and supportively.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media

- Use water spray, alcohol resistant foam, carbon dioxide, or dry chemical.

Unsuitable Extinguishing Media

- Avoid heavy hose streams.

Firefighting Procedures

- Contact may irritate or burn eyes.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

- No data available.

Hazardous Combustion Products

- Decomposes upon heating and may produce toxic vapors/gases.

Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions

- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate enclosed areas. Avoid any skin contact. Avoid contact with eyes. Use appropriate Personal Protective Equipment (PPE).

Emergency Procedures

- Avoid unnecessary personnel and equipment traffic in the spill area. Avoid release into the environment. Avoid direct contact. Stop leak if you can do it without risk. Wear appropriate personal protective equipment (PPE).

Environmental precautions

- Avoid release to the environment.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Absorb spills with an inert material, clay granules or other inert absorbent material and put in container for disposal.

Section 7 - Handling and Storage

Precautions for safe handling

Handling

- Use good safety and industrial hygiene practices. Avoid contact with skin or eyes. Wash thoroughly with soap and water after handling. See product label for additional information. Wear appropriate personal protective equipment, avoid direct contact.

Conditions for safe storage, including any incompatibilities

Storage

- Store in cool, dry, secure place. Keep out of reach of children. Store locked up. Avoid contact with aluminum or carbon steel to minimize corrosion. Keep from freezing.

Incompatible Materials or Ignition Sources

- Keep away from combustible and flammable materials.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines

- No data available.

Exposure Limits/Guidelines				
	Result	**ACGIH**	**NIOSH**	**OSHA**
Phthalic acid, diethyl ester (84-66-2)	TWAs	5 mg/m3 TWA	5 mg/m3 TWA	Not established
Pyrethrins (8003-34-7)	TWAs	5 mg/m3 TWA	5 mg/m3 TWA	5 mg/m3 TWA
Butylated Hydroxytolene (128-37-0)	TWAs	2 mg/m3 TWA (inhalable fraction and vapor)	10 mg/m3 TWA	Not established

Exposure Limits Supplemental

ACGIH

- Pyrethrins (8003-34-7): **TLV Basis - Critical Effects:** (liver damage; lower respiratory tract irritation)
- Butylated Hydroxytolene (128-37-0): **TLV Basis - Critical Effects:** (upper respiratory tract irritation)
- Phthalic acid, diethyl ester (84-66-2): **TLV Basis - Critical Effects:** (upper respiratory tract irritation)

Exposure controls

Engineering Measures/Controls

- Use adequate ventilation to remove vapors (fumes, dust etc)

Personal Protective Equipment

Pictograms

- 

Respiratory

- If handling without sufficient ventilation, wear a NIOSH approved respirator.

Eye/Face

- Wear chemical splash safety goggles.

Hands	• Wear chemical-resistant gloves such as or made out of barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, or Viton.
Skin/Body	• Long sleeve shirt, long pants, shoes, and socks should be worn.
Environmental Exposure Controls	• Avoid contaminating waterways and sewers.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Clear yellow liquid.
Color	Yellow	Odor	Moderate pleasant, pine-oil like.
Odor Threshold	No data available		
General Properties			
Boiling Point	180 °C(356 °F)	Melting Point/Freezing Point	-1°C
Decomposition Temperature	No data available	pH	7.2
Specific Gravity/Relative Density	1.05 g/cm3	Water Solubility	No data available
Viscosity	275 Centipoise (cPs, cP) or mPas		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available	VOC (Vol.)	14.9 %
Flammability			
Flash Point	> 255 °C(> 491 °F) PMCC (Pensky-Martins Closed Cup)	UEL	No data available
LEL	No data available	Autoignition	No data available
Flammability (solid, gas)	No data available		
Environmental			
Octanol/Water Partition coefficient	No data available		

Section 10: Stability and Reactivity

Reactivity

- Non-reactive under normal handling and storage conditions.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- Heat, sparks, open flame, other ignition sources, and oxidizing conditions.

Incompatible materials

- Strong oxidizing agents and strong acids.

Hazardous decomposition products

- Decomposes upon heating to produce toxic vapors/gases.

Section 11 - Toxicological Information

Information on toxicological effects

Components		
Pyrethrins (0.97%)	8003-34-7	**Acute Toxicity:** Ingestion/Oral-Rat LD50 • 1400 mg/kg; Ingestion/Oral-Rat, adult female LD50 • 700 mg/kg; Ingestion/Oral-Rat, adult male LD50 • 2140 mg/kg; Inhalation-Rat LC50 • 3.4 mg/L; Inhalation-Rat, adult female LC50 • 2.5 mg/L; Inhalation-Rat, adult male LC50 • 3.9 mg/L; Skin-Rabbit LD50 • >2000 mg/kg; **Irritation:** Eye-Rabbit • Mild irritation; Skin-Rabbit • Mild irritation
Piperonyl butoxide (3.74%)	51-03-6	**Acute Toxicity:** Ingestion/Oral-Rat, adult female LD50 • 4570 mg/kg; Inhalation-Rat LC50 • >5.9 mg/L; Skin-Rat LD50 • >2000 mg/kg
N-Octyl Bicyloheptene Dicarboximide (5.7%)	113-48-4	**Acute Toxicity:** Ingestion/Oral-Rat LD50 • 5000 mg/kg; Skin-Rabbit LD50 • >5000 mg/kg; **Irritation:** Eye-Rabbit • Mild irritation; Skin-Rabbit • Moderate irritation
Di-n-propyl Isocinchomeronate (1.94%)	136-45-8	**Acute Toxicity:** Ingestion/Oral-Rat LD50 • 5230 mg/kg; Inhalation-Rat LC50 • >6.09; Skin-Rabbit LD50 • 9400 mg/kg; **Irritation:** Eye-Rabbit • Essentially non-irritating; Skin-Rabbit • Moderate irritation

GHS Properties	Classification
Acute toxicity	**OSHA HCS 2012** • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Classification criteria not met; Acute Toxicity - Oral - Classification criteria not met
Skin corrosion/Irritation	**OSHA HCS 2012** •
Serious eye damage/Irritation	**OSHA HCS 2012** • Serious Eye Damage 1 - due to polyethylene glycol octylphenyl ether
Skin sensitization	**OSHA HCS 2012** • Skin Sensitizer 1
Respiratory sensitization	**OSHA HCS 2012** • Classification criteria not met
Aspiration Hazard	**OSHA HCS 2012** • Classification criteria not met
Carcinogenicity	**OSHA HCS 2012** • Classification criteria not met
Germ Cell Mutagenicity	**OSHA HCS 2012** • Classification criteria not met
Toxicity for Reproduction	**OSHA HCS 2012** • Toxic to Reproduction 2
STOT-SE	**OSHA HCS 2012** • Classification criteria not met
STOT-RE	**OSHA HCS 2012** • Classification criteria not met

Potential Health Effects

Inhalation

Acute (Immediate)
- May cause upper respiratory tract irritation.

Chronic (Delayed)
- No data available

Skin

Acute (Immediate)
- May cause an allergic skin reaction in individuals with a sensitivity to n-octyl bicyloheptene dicarboximide and/or piperonyl butoxide. May cause irritation.

Chronic (Delayed)
- No data available

Eye

Acute (Immediate)
- May cause serious eye damage.

Chronic (Delayed)
- No data available

Ingestion

Acute (Immediate)
- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)
- No data available

Mutagenic Effects
- Pyrethrins were not found to be genotoxic and did not damage DNA in any study conducted which included: Ames assay, chromosome aberration in Chinese hamster ovaries (CHO) cells and in the unscheduled DNA synthesis (UDS) assay in cultured human liver cells. Piperonyl butoxide was not mutagenic in a battery of tests. N-octyl bicycloheptene dicarboximide was concluded to be negative in the CHO chromosome aberration assay. Di-n-propyl isocinchomeronate is not a mutagen.

Carcinogenic Effects
- Pyrethrins are not listed as a carcinogen by OSHA, IARC, or NTP. Piperonyl butoxide is not classified as carcinogen by NTP, IARC and OSHA. N-octyl bicycloheptene dicarboximide is not listed by IARC, NTP, OSHA or ACGIH as a carcinogen. Di-n-propyl Isocinchomeronate is classified by US EPA as a B2-probable human carcinogen, it is not listed by IARC, NTP, OSHA or ACGIH as being carcinogenic.

Reproductive Effects
- Pyrethrins did not produce any birth defects or adverse effects on reproductive parameters in tests with rats and rabbits. Piperonyl butoxide did not produce any birth defects or adverse effects on reproductive parameters in tests with rats and rabbits. Di -n-propyl isocinchomeronate showed adverse effects on reproduction in laboratory animals. N-octyl bicycloheptene dicarboximide has been tested and is not a reproductive toxin. Diethyl phthalate is suspected of damaging male reproductive organs in laboratory test on animals.

Section 12 - Ecological Information

Toxicity

Components		
Pyrethrins (0.97%)	8003-34-7	**Aquatic Toxicity-Fish:** 96 Hour(s) LC50 *Rainbow trout* 0.0051 mg/L [Acute] 96 Hour(s) LC50 *Sheepshead minnow* 0.016 mg/L [Acute] NOEC *Fathead minnow* 0.0019 mg/L [Chronic] NOEC *Sheepshead minnow* 0.0059 mg/L [Chronic (Est.)] **Aquatic Toxicity-Crustacea:** LC50 *Daphnia magna* 0.00086 mg/L [Chronic] NOEC *Mysid shrimp* 0.0001 mg/L [Chronic (Est.)] 48 Hour(s) LC50 *Daphnia magna* 0.0116 mg/L [Acute] 96 Hour(s) LC50 *Mysid shrimp* 0.0014 mg/L [Acute]
Piperonyl butoxide (3.74%)	51-03-6	**Aquatic Toxicity-Fish:** 96 Hour(s) LC50 *Rainbow Trout* 1.9 mg/L [Acute] 96 Hour(s) LC50 *Sheephead minnow* 3.94 mg/L [Acute] NOEC *Fathead minnow* 0.04 mg/L [Chronic] *Fathead minnow* 0.11 mg/L [Chronic LOEC] **Aquatic Toxicity-Crustacea:** *Daphnia magna* 0.047 mg/L [Chronic LOEC] 48 Hour(s) LC50 *Daphnia magna* 0.51 mg/L [Acute] 48 Hour(s) LC50 *Mysid shrimp* 0.49 mg/L [Acute] NOEC *Daphnia magna* 0.03 mg/L [Chronic]
N-Octyl Bicyloheptene Dicarboximide (5.7%)	113-48-4	**Aquatic Toxicity-Fish:** LC50 1.4-2.4 mg/L [Acute] **Aquatic Toxicity-Crustacea:** 48 Hour(s) LC50 *Daphnia magna* 2.3 mg/L [Acute]
Di-n-propyl Isocinchomeronate (1.94%)	136-45-8	**Aquatic Toxicity-Fish:** LC50 *Rainbow Trout* 1 mg/L [Acute] LC50 *Bill gill* 0.44 mg/L [Acute] **Aquatic Toxicity-Crustacea:** 48 Hour(s) LC50 *Daphnia magna* 18 mg/L [Acute]

Persistence and degradability

- No data available.

Bioaccumulative potential

- No data available.

Mobility in Soil

- No data available.

Other adverse effects

Potential Environmental Effects

- This product is toxic to aquatic organisms, including fish and invertebrates.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	UN 3082	Packaging 103 lbs. or greater: Environmentally hazardous substance, liquid, n.o.s. (Pyrethrins)	9	III	Reportable quantity Pyrethrins = 1 lb.
IMO/IMDG	UN 3082	Inner packaging 5 L or greater: Environmentally hazardous substance, liquid, n.o.s. (Pyrethrins)	9	III	Marine Pollutant
IATA/ICAO	UN 3082	Inner packaging 5 L or greater: Environmentally hazardous substance, liquid, n.o.s. (Pyrethrins)	9	III	Acute Aquatic Toxicity

Special precautions for user

- None specified.

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

- No data available

Other information

IMO/IMDG

- No data available

IATA/ICAO

- No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications

- Acute, Chronic, SARA Title III Section 313

FIFRA – Pesticide Labeling

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.

WARNING

Precautionary Statements •

KEEP OUT OF THE REACH OF CHILDREN.

Hazards to Humans and Domestic Animals •

Avoid contact with skin or clothing. Remove contaminated clothing and wash before reuse. Avoid contamination of food. Wash hands with soap and water after using.

First Aid •

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a Poison Control Center or doctor for treatment advice. If swallowed: Immediately call a Poison Control Center or doctor. Do not give any liquid to the person. Do not induce vomiting unless told to by a Poison Control Center or doctor. Do not give anything by mouth to an unconscious person. If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center or doctor for treatment advice.
NOTE TO PHYSICIAN: Probable mucosal damage may contradict the use of gastric lavage. Contains petroleum distillate.

Environmental Hazards •

This pesticide is toxic to aquatic organisms, including fish and invertebrates. 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 washwaters or rinsate.

Inventory		
Component	**CAS**	**TSCA**
Butylated Hydroxytolene	128-37-0	Yes
Di-n-propyl Isocinchomeronate	136-45-8	No
N-Octyl Bicyloheptene Dicarboximide	113-48-4	No
Phthalic acid, diethyl ester	84-66-2	Yes
Piperonyl butoxide	51-03-6	Yes
Polyethylene glycol mono(octylphenyl) ether	9036-19-5	Yes
Pyrethrins	8003-34-7	No

United States

Environment

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Phthalic acid, diethyl ester	84-66-2	1000 lb final RQ; 454 kg final RQ
• Polyethylene glycol mono(octylphenyl) ether	9036-19-5	Not Listed
• Butylated Hydroxytolene	128-37-0	Not Listed
• N-Octyl Bicyloheptene Dicarboximide	113-48-4	Not Listed
• Di-n-propyl Isocinchomeronate	136-45-8	Not Listed
• Pyrethrins	8003-34-7	1 lb final RQ (listed under Pyrethrins); 0.454 kg final RQ (listed under Pyrethrins)
• Piperonyl butoxide	51-03-6	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Phthalic acid, diethyl ester	84-66-2	Not Listed
• Polyethylene glycol mono(octylphenyl) ether	9036-19-5	Not Listed
• Butylated Hydroxytolene	128-37-0	Not Listed
• N-Octyl Bicyloheptene Dicarboximide	113-48-4	Not Listed
• Di-n-propyl Isocinchomeronate	136-45-8	1.0 % de minimis concentration
• Pyrethrins	8003-34-7	Not Listed
• Piperonyl butoxide	51-03-6	1.0 % de minimis concentration

U.S. - RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261

• Phthalic acid, diethyl ester	84-66-2	waste number U088
• Polyethylene glycol mono(octylphenyl) ether	9036-19-5	Not Listed
• Butylated Hydroxytolene	128-37-0	Not Listed
• N-Octyl Bicyloheptene Dicarboximide	113-48-4	Not Listed
• Di-n-propyl Isocinchomeronate	136-45-8	Not Listed
• Pyrethrins	8003-34-7	Not Listed
• Piperonyl butoxide	51-03-6	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constituents

• Phthalic acid, diethyl ester	84-66-2	
• Polyethylene glycol mono(octylphenyl) ether	9036-19-5	Not Listed
• Butylated Hydroxytolene	128-37-0	Not Listed
• N-Octyl Bicyloheptene Dicarboximide	113-48-4	Not Listed
• Di-n-propyl Isocinchomeronate	136-45-8	Not Listed
• Pyrethrins	8003-34-7	Not Listed
• Piperonyl butoxide	51-03-6	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR Rule - Universal Treatment Standards

• Phthalic acid, diethyl ester	84-66-2	0.20 mg/L (wastewater); 28 mg/kg (nonwastewater)
• Polyethylene glycol mono(octylphenyl) ether	9036-19-5	Not Listed
• Butylated Hydroxytolene	128-37-0	Not Listed
• N-Octyl Bicyloheptene Dicarboximide	113-48-4	Not Listed
• Di-n-propyl Isocinchomeronate	136-45-8	Not Listed
• Pyrethrins	8003-34-7	Not Listed
• Piperonyl butoxide	51-03-6	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - U Series Wastes - Acutely Toxic Wastes & Other Hazardous Characteristics

• Phthalic acid, diethyl ester	84-66-2	waste number U088
• Polyethylene glycol mono(octylphenyl) ether	9036-19-5	Not Listed
• Butylated Hydroxytolene	128-37-0	Not Listed
• N-Octyl Bicyloheptene Dicarboximide	113-48-4	Not Listed
• Di-n-propyl Isocinchomeronate	136-45-8	Not Listed
• Pyrethrins	8003-34-7	Not Listed
• Piperonyl butoxide	51-03-6	Not Listed

Section 16 - Other Information

Revision Date • 05/May/2016

Last Revision Date • 05/May/2016

Preparation Date

- 05/May/2016

Disclaimer/Statement of Liability

- The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.