



SAFETY DATA SHEET (GHS)

SECTION 1 – IDENTIFICATION OF THE PRODUCT AND COMPANY

- 1.1. PRODUCT NAME:** PYRANHA® Bug Armor®
EPA REG. No.: 1021-2767-21165 EPA Est. No: 47258-TX-1
- 1.2. PRODUCT DESCRIPTION:** Concentrated insecticide/repellent
- 1.3. MANUFACTURER:** Pyranha, Inc.
6602 Cunningham Rd.
Houston, Texas 77041
www.pyranhainc.com
(800) 231-2966
- 1.4. EMERGENCY TEL:** (800) 222-1222
- 1.5. RECOMMENDED USE:** For use on animals, in Automatic Spray Systems, Misting Systems and Premise spray.

SECTION 2 – HAZARDS IDENTIFICATION

2.1. CLASSIFICATIONS:

OSHA Regulatory Status: This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2B
Skin sensitization	Category 1B
Flammable liquids	Category 4

2.2. LABEL:



Aquatic Toxicity



Irritant (skin and eye)

2.3. SIGNAL WORD:

WARNING

2.4. HAZARD STATEMENTS:

H302 - Harmful if swallowed.
H332 - Harmful if inhaled.
H315 - Causes skin irritation.
H320 - Causes eye irritation.

Material Name: PYRANHA® Bug Armor®
EPA Reg. No. 1021-2767-21165 Version #: 1 Revision date: 5/7/15

H317 - May cause an allergic skin reaction.
 H400 - Very toxic to aquatic life.
 H410 - Very toxic to aquatic life with long lasting effects.
 H227 - Combustible liquid.

2.5. PRECAUTIONARY STATEMENTS:**PREVENTION:**

P264 - Wash face, hands and any exposed skin thoroughly after handling.
 P270 - Do not eat, drink or smoke when using this product.
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
 P271 - Use only outdoors or in a well-ventilated area.
 P272 - Contaminated work clothing should not be allowed out of the workplace.
 P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.

RESPONSE:

P321 - Specific treatment (see Section 4/ First Aid).
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
 P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.
 P363 - Wash contaminated clothing before reuse.
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
 P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P330 - Rinse mouth.
 P370 + P378 - In case of fire: Use CO₂, dry chemical, or foam for extinction.

STORAGE:

P403 + P235 - Store in a well-ventilated place. Keep cool.

DISPOSAL:

P501 - Dispose of contents/container to an approved waste disposal plant.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

3.1. MIXTURES:

CHEMICAL NAME	WEIGHT %	CAS No.
Permethrin	10.0 %	52645-53-1
Piperonyl Butoxide (PBO)	10.0 %	51-03-6
Butylated hydroxytoluene (BHT)	1.0 %	128-37-0

*The exact percentage (concentration) of composition has been withheld as a trade secret.

3.2 COMMENTS:

Ingredients not identified are proprietary or non-hazardous. Values are not product specifications.

SECTION 4 – FIRST-AID MEASURES

4.1. ASPIRATION PNEUMONIA HAZARD: No information available.

4.2. DESCRIPTION OF FIRST AID MEASURES:

- EYE CONTACT:** 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 the eye. Call a poison control center or doctor for treatment advice.
- SKIN CONTACT:** 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.
- INGESTION:** If swallowed, IMMEDIATELY call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or a doctor. Never give anything by mouth to an unconscious person.
- INHALATION:** Remove affected person 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 control center or doctor for further treatment advice.

4.3. SELF PROTECTION OF THE FIRST RESPONDER:

Use personal protective equipment as required.

4.4. NOTE TO PHYSICIANS:

For skin effects, a highly efficient therapeutic agent for Pyrethrin/ Pyrethroid exposure is topical application of tocopherol acetate (Vitamin E).

SECTION 5 – FIRE-FIGHTING MEASURES

5.1. SUITABLE EXTINGUISHING MEDIA: Dry Chemical. Carbon Dioxide (CO₂). Water spray(fog). Alcohol resistant foam.

5.2. UNSUITABLE EXTINGUISHING MEDIA: CAUTION: Use of water spray when fighting fire may be inefficient.

5.3. HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide. Carbon Dioxide (CO₂).

5.4. SPECIAL HAZARD ARISING FROM THE CHEMICAL:

In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. Thermal decomposition can lead to release of irritating and toxic gases and vapors. Keep product and empty container away from heat and sources of ignition. Risk of ignition.

5.5. EXPLOSION DATA:

SENSITIVITY TO MECHANICAL IMPACT: None

SENSITIVITY TO STATIC DISCHARGE: None

5.6. PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA	Health hazards 2	Flammability 2	Instability 0	Special Hazard -
HMIS	Health hazards 2	Flammability 2	Physical hazards 0	Personal protection X
Chronic Hazard Star Legend		* = Chronic Health Hazard		

SECTION 6 – ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:**PERSONAL PRECAUTIONS:**

Use personal protective equipment as required. Avoid contact with eyes and skin. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Pay attention to flashback. Take precautionary measures against static discharges.

ENVIRONMENTAL PRECAUTIONS:

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional ecological information.

6.2. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:**METHODS FOR CONTAINMENT:**

Prevent further leakage or spillage if safe to do so.

METHODS FOR CLEANING UP:

Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water. Prevent product from entering drains. Dam up. Take precautionary measures against static discharges.

SECTION 7 – HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING:**ADVICE ON SAFE HANDLING:**

Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas. Use with local exhaust ventilation. All equipment used when handling the product must be grounded. Keep away from heat /sparks /open flames/ hot surfaces. - No smoking. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:**STORAGE CONDITIONS:**

Keep out of the reach of children. Keep container tightly closed. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Keep in properly labeled containers.

SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

8.1. CONTROL PARAMETERS:**EXPOSURE GUIDELINES:**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NISH IDLH
BHT (Butylated hydroxytoluene) 128-37-0	TWA: 2 mg/m3 inhalable fraction and vapor	(vacated) TWA: 10 mg/m3	TWA: 10 mg/m3

NIOSH IDLH Immediately Dangerous to Life or Health

OTHER INFORMATION: Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

8.2. APPROPRIATE ENGINEERING CONTROLS:

ENGINEERING CONTROLS: Safety showers
Eyewash stations
Ventilation systems

8.2. INDIVIDUAL PROTECTIVE MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION: Tight sealing safety goggles. Face protection shield.

SKIN AND BODY PROTECTION: Wear protective gloves and protective clothing.

RESPIRATORY PROTECTION: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

8.3. GENERAL HYGIENE CONSIDERATIONS: When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

Regular cleaning of equipment, work area and clothing is recommended.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL STATE: Liquid
APPEARANCE: Clear, Yellow
ODOR: Solvent - Mild
ODOR THRESHOLD: No information available
COLOR (GARDNER SCALE): 7

<u>PROPERTY:</u>	<u>VALUES:</u>	<u>COMMENT: • METHOD</u>
pH:	5.19	@21.2°C / @ 5% in H2O
MELTING POINT/FREEZING POINT:	No information available	
BOILING POINT:	No information available	
FLASH POINT:	73.9° C / 165° F	Tag Closed Cup
FLAME EXTENSION TEST:	No information available	
EVAPORATION RATE:	No information available	

FLAMMABILITY (solid, gas):	No information available
UPPER FLAMMABILITY (UEL):	No information available
LOWER FLAMMABILITY (LEL):	No information available
VAPOR PRESSURE:	No information available
VAPOR DENSITY:	Heavier than air
SPECIFIC GRAVITY:	No information available
PARTITION COEFFICIENT; n-octanol/water:	No information available
AUTO-IGNITION TEMPERATURE:	No information available
DECOMPOSITION TEMPERATURE:	No information available
KINEMATIC VISCOSITY:	No information available
DYNAMIC VISCOSITY:	154 @ 20°C; 65.6 @ 40°C cPs
REFRACTIVE INDEX:	No information available

9.3. OTHER INFORMATION:

DENSITY:	1.010 g/cm ³ @ 22.0°C
VOC CONTENT (%):	0

9.4. MISCIBILITY / SOLUBILITY:

WATER:	Miscible
ALCOHOL:	No information available
PETROLEUM DISTILLATES:	No information available
AROMATIC SOLVENTS:	No information available

SECTION 10 – STABILITY AND REACTION

10.1. REACTIVITY:	No data available
10.2. CHEMICAL STABILITY:	Stable under recommended storage conditions.
10.3. POSSIBILITY OF HAZARDOUS REACTIONS:	None under normal processing.
HAZARDOUS POLYMERIZATION:	Hazardous polymerization does not occur.
10.4. CONDITIONS TO AVOID:	Heat, flames and sparks.
10.5. INCOMPATIBLE MATERIALS:	Incompatible with strong acids and bases. Incompatible with oxidizing agents.
10.6. HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide, Carbon dioxide (CO ₂)

SECTION 11 – TOXICOLOGICAL INFORMATION

11.1. NUMERICAL MEASURES OF TOXICITY – PRODUCT INFORMATION:

ORAL LD50:	1,750 mg/kg (rat)
DERMAL LD50:	>2,000 mg/kg (rabbit)
INHALATION LC50:	>2.02 mg/L (rat; 4 hours)
EYE CONTACT:	Causes substantial but temporary eye injury.
SKIN CONTACT:	Moderate irritation at 72 hours.
SENSITIZATION:	Sensitizer; skin.

PIPERONYL BUTOXIDE: Marginally higher incidences of benign liver tumors in mice were observed following lifetime high dose exposures to PBO. The significance of these observations is questionable and under review. The doses at which tumors were observed for PBO greatly exceeded potential human exposure from labeled uses. Doses at which these effects were observed greatly exceeded anticipated human dietary intake. At anticipated dietary exposure levels, it is highly unlikely that this product will result in carcinogenic effects.

CARCINOGENICITY: This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

CHEMICAL NAME	ACGIH	IARC	NTP	OSHA
Permethrin 52645-53-1	-	Group 3	-	-
Piperonyl Butoxide (PBO) 51-03-6	-	Group 3	-	-
BHT (Butylated hydroxytoluene) 128-37-0	-	Group 3	-	-

IARC (International Agency for Research on Cancer):

Not classifiable as a human carcinogen.

Reproductive toxicity:	No information available.
Developmental Toxicity:	No information available.
Teratogenicity:	No information available.
STOT - single exposure:	No information available.
STOT - repeated exposure:	No information available.
Chronic toxicity:	Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.
Neurological effects:	No information available.
Target Organ Effects:	Eyes, Skin.

SECTION 12 – ECOLOGICAL INFORMATION

12.1. ECOTOXICITY: This product is toxic to aquatic organisms, including fish and invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. This product may contaminate water through runoff. This product has a potential for runoff for several weeks after application. Poorly draining soils and

soils with shallow water tables are more prone to produce runoff that contains this product.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

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 wash waters or rinsate.

12.2. PERSISTENCE AND DEGRADABILITY: No information available.

12.3. BIOACCUMULATION: No information available.

CHEMICAL NAME	PARTITION COEFFICIENT; n-OCTANOL/ WATER:
Permethrin 52645-53-1	6.5
BHT (Butylated hydroxytoluene) 128-37-0	4.17

Other adverse effects: No information available

12.4. ENVIRONMENTAL HAZARDS (EPA): Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

SECTION 13 – DISPOSAL CONSIDERATION

13.1. WASTE TREATMENT METHODS:

DISPOSAL OF WASTES: Disposal should be in accordance with applicable regional, national and local laws and regulations. For more information, see product label.

CONTAMINATED PACKAGING: For more information, see product label.

SECTION 14 – TRANSPORTATION INFORMATION

14.1. DOT (DEPARTMENT OF TRANSPORTATION):

PROPER SHIPPING NAME: Insecticides, Insect or Animal Repellent, Liquid

HAZARD CLASS: Non-Hazardous

OTHER SHIPPING INFORMATION: This material is **not** regulated by the DOT as a hazardous material when shipped in Non-Bulk quantities (*i.e.*, less-than 119 Gallons / 450 Liters).

14.2. AIR (IATA/ ICAO):

PROPER SHIPPING NAME: Insecticides, Insect or Animal Repellent, Liquid

HAZARD CLASS: Non-Hazardous
NOTE: Not considered hazardous by IATA/ ICAO regulations for transportation via air.

14.3. VESSEL (IMO/ IMDG): Not available

SECTION 15 – REGULATORY INFORMATION

15.1. US FEDERAL REGULATIONS:

SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CHEMICAL NAME	SARA 313 – THRESHOLD VALUES %
Permethrin - 52645-53-1	1.0
Piperonyl Butoxide (PBO) - 51-03-6	1.0

SARA 311/312 HAZARD:

ACUTE HAZARD: Yes
CHRONIC HEALTH HAZARD: No
FIRE HAZARD: Yes
SUDDEN RELEASE OF PRESSURE: No
REACTIVITE HAZARD: No

CWA (CLEAN WATER ACT): This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA: This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

15.2. US STATE REGULATIONS:

CALIFORNIA PROPOSITION 65: This product does not contain any Proposition 65 chemicals

U.S. EPA LABEL INFORMATION: **EPA Registration Number:** 1021-2767

DIFFERENCE BETWEEN SDS AND EPA (FIFRA) PESTICIDE LABEL:

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 pesticide label also includes other important information, including directions for use. The hazard information required on the pesticide label is reproduced below:

SIGNAL WORD:

CAUTION

PRECAUTIONARY STATEMENTS:

Harmful if swallowed.
 Causes moderate eye irritation.
 Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

15.3. INTERNATIONAL:

TSCA	Does not comply
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Does not comply
AICS	Does not comply

15.4. LEGEND:

TSCA	United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL	Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS	European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS	Japan Existing and New Chemical Substances
IECSC	China Inventory of Existing Chemical Substances
KECL	Korean Existing and Evaluated Chemical Substances
PICCS	Philippines Inventory of Chemicals and Chemical Substances
AICS	Australian Inventory of Chemical Substances

SECTION 16 – OTHER INFORMATION

16.1. REVISION SUMMARY: Version #1, GHS – Classification.

16.2. COMMENTS: This information is furnished without warranty, expressed or implied, except that it is accurate to the best of the knowledge of Pyranha, Inc. and is based on sound expert opinion. The data in this document relates only to the specific material designed herein and does not relate to use in combination with any other material or in any process. Pyranha, Inc. assumes no legal responsibility for use or reliance upon this data. This information herein is provided solely for your consideration, investigation and verification.

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