



HARMONIX™ INSECT SPRAY

Version 2.0 / USA
102000021951

1/11
Revision Date: 07/10/2015
Print Date: 08/19/2015

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name HARMONIX™ INSECT SPRAY

Product code (UVP) 80994761

SDS Number 102000021951

EPA Registration No. 432-1526

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

Use Insecticide

Restrictions on use See product label for restrictions.

Information on supplier

Supplier Bayer Environmental Science
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
United States

Responsible Department Email: SDSINFO.BCS-NA@bayer.com

Emergency telephone no.

Emergency Telephone Number (24hr/ 7 days) 1-800-334-7577

Product Information Telephone Number 1-800-331-2867

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Skin irritation : Category 2

Eye irritation : Category 2B

Skin sensitisation : Category 1

Acute toxicity (Inhalation): Category 4



Signal word: Warning

Hazard statements

Causes skin and eye irritation.

May cause an allergic skin reaction.

Harmful if inhaled.



HARMONIX™ INSECT SPRAY

Version 2.0 / USA
102000021951

2/11
Revision Date: 07/10/2015
Print Date: 08/19/2015

Precautionary statements

Wash thoroughly after handling.
Wear protective gloves.
Avoid breathing mist and spray.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
IF ON SKIN: Wash with plenty of water/soap.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation or rash occurs: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER/doctor/physician if you feel unwell.
Dispose of contents/container in accordance with local regulation.

Other hazards

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Concentration % by weight
Pyrethrins including cinerins	8003-34-7	6.0
Trade Secret Ingredient(s)		30.0

Identity and specific percent composition of one or more Trade Secret materials is being withheld.

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
Inhalation	Move 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 physician or poison control center immediately.
Skin contact	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
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 eye. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless



HARMONIX™ INSECT SPRAY

Version 2.0 / USA
102000021951

3/11
Revision Date: 07/10/2015
Print Date: 08/19/2015

directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Most important symptoms and effects, both acute and delayed

Symptoms To date no symptoms are known.

Indication of any immediate medical attention and special treatment needed

Treatment Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Water spray, Carbon dioxide (CO₂), Dry chemical, Foam

Unsuitable High volume water jet

Special hazards arising from the substance or mixture Dangerous gases are evolved in the event of a fire.

Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

Further information Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Flash point > 93.3 °C

Autoignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Explosivity Not explosive



HARMONIX™ INSECT SPRAY

Version 2.0 / USA
102000021951

4/11
Revision Date: 07/10/2015
Print Date: 08/19/2015

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal.

Reference to other sections Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation. Handle and open container in a manner as to prevent spillage.

Hygiene measures Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.
Remove Personal Protective Equipment (PPE) immediately after handling this product. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Store in original container and out of the reach of children, preferably in a locked storage area. Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Protect from freezing.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Pyrethrins including cinerins	8003-34-7	5 mg/m ³ (TWA)	02 2012	ACGIH
Pyrethrins including cinerins	8003-34-7	5 mg/m ³	2010	NIOSH



HARMONIX™ INSECT SPRAY

Version 2.0 / USA
102000021951

5/11
Revision Date: 07/10/2015
Print Date: 08/19/2015

		(REL)		
Pyrethrins including cinerins	8003-34-7	5 mg/m3 (PEL)	02 2006	OSHA Z1
Pyrethrins including cinerins	8003-34-7	5 mg/m3 (TWA)	1989	OSHA Z1A
Pyrethrins including cinerins	8003-34-7	5 mg/m3 (TWA)	06 2008	TN OEL
Pyrethrins including cinerins	8003-34-7	5ug/m3 (AN ESL)	07 2011	TX ESL
Pyrethrins including cinerins	8003-34-7	50ug/m3 (ST ESL)	07 2011	TX ESL
Pyrethrins including cinerins	8003-34-7	5 mg/m3 (TWA PEL)	08 2010	US CA OEL
Pyrethrins including cinerins	8003-34-7	5 mg/m3 (TWA)		OES BCS*

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

Additional advice

This product contains material which are Trade Secret and may have Occupational Exposure Limits. If more information is required, call the product information number listed in Section 1.

Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection

When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

Hand protection

Chemical resistant nitrile rubber gloves

Eye protection

Tightly fitting safety goggles

Skin and body protection

Wear long-sleeved shirt and long pants and shoes plus socks.

General protective measures

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water.
Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	dark yellowish red
Physical State	Liquid clear
Odor	solvent-like
Odour Threshold	no data available
pH	ca. 10.1



HARMONIX™ INSECT SPRAY

Version 2.0 / USA
102000021951

6/11
Revision Date: 07/10/2015
Print Date: 08/19/2015

Vapor Pressure	no data available
Vapor Density (Air = 1)	no data available
Density	0.94 g/cm ³
Evaporation rate	no data available
Boiling Point	no data available
Melting / Freezing Point	no data available
Water solubility	no data available
Minimum Ignition Energy	no data available
Decomposition temperature	no data available
Partition coefficient: n-octanol/water	no data available
Viscosity	23 mPa.s
Flash point	> 93.3 °C
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Explosivity	Not explosive

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition	no data available
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	freezing
Incompatible materials	no data available
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Skin contact, Eye contact, Inhalation, Ingestion
Immediate Effects	



HARMONIX™ INSECT SPRAY

Version 2.0 / USA
102000021951

7/11
Revision Date: 07/10/2015
Print Date: 08/19/2015

Eye May cause eye irritation.
Skin May cause skin irritation. May cause sensitisation by skin contact.
Inhalation May be harmful if inhaled.

Information on toxicological effects

Acute oral toxicity LD50 (rat) > 5,000 mg/kg
Acute inhalation toxicity LC50 (rat) > 2.07 mg/l
Exposure time: 4 h
Determined in the form of liquid aerosol.
LC50 (rat) > 8.28 mg/l
Exposure time: 1 h
Determined in the form of liquid aerosol.
Extrapolated from the 4 hr LC50.
Acute dermal toxicity LD50 (rat) > 5,000 mg/kg
Skin irritation Moderate skin irritation. (rabbit)
Eye irritation Moderate eye irritation. (rabbit)
Sensitisation Sensitising (guinea pig)

Assessment repeated dose toxicity

Pyrethrin did not cause specific target organ toxicity in experimental animal studies.

Assessment mutagenicity

Pyrethrin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Pyrethrin was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH

Pyrethrins including cinerins 8003-34-7 Group A4

NTP

None.

IARC

None.

OSHA

None.

Assessment toxicity to reproduction

Pyrethrin did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Pyrethrin did not cause developmental toxicity in rats and rabbits.

Further information



HARMONIX™ INSECT SPRAY

Version 2.0 / USA
102000021951

8/11
Revision Date: 07/10/2015
Print Date: 08/19/2015

Only acute toxicity studies have been performed on the formulated product.
The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) 0.0052 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient pyrethrin.
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) 0.012 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient pyrethrin.
Environmental precautions	Do not allow to get into surface water, drains and ground water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Dispose in accordance with all local, state/provincial and federal regulations. Never place unused product down any indoor or outdoor drain.
Contaminated packaging	Consult state and local regulations regarding the proper disposal of container.
RCRA Information	Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

49CFR

UN number	3082
Class	9
Packaging group	III
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (PYRETHRINS)
RQ	Reportable Quantity is reached with 16 lb of product.

IMDG

UN number	3082
Class	9
Packaging group	III



HARMONIX™ INSECT SPRAY

Version 2.0 / USA
102000021951

9/11
Revision Date: 07/10/2015
Print Date: 08/19/2015

Marine pollutant YES
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.
(PYRETHRINS SOLUTION)

IATA

UN number **3082**
Class 9
Packaging group III
Environm. Hazardous Mark YES
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.
(PYRETHRINS SOLUTION)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

SECTION 15: REGULATORY INFORMATION

This product contains material(s) which are Trade Secret and are on various Regulatory Lists. These material(s) are not listed below. If more information is required, call the product information number listed in Section 1.

EPA Registration No. 432-1526

US Federal Regulations

TSCA list

None.

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

None.

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

Pyrethrins including cinerins 8003-34-7 CA, CT, IL, MN, NJ, RI

Canadian Regulations

Canadian Domestic Substance List

None.

Environmental



HARMONIX™ INSECT SPRAY

Version 2.0 / USA
102000021951

10/11
Revision Date: 07/10/2015
Print Date: 08/19/2015

CERCLA

Pyrethrins including cinerins 8003-34-7 1 lbs

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

EPA/FIFRA Information:

This chemical is a pesticide product registered by the 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

Signal word: Caution!

Hazard statements: May be harmful by inhalation, ingestion, skin absorption.
May cause skin irritation.
May cause eye irritation.
May cause sensitization by skin contact.
Avoid contact with skin, eyes and clothing.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

49CFR	Code of Federal Regulations, Title 49
ACGIH	US. ACGIH Threshold Limit Values
CAS-Nr.	Chemical Abstracts Service number
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
IARC	US. IARC Monographs on Occupational Exposures to Chemical Agents
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
N.O.S.	Not otherwise specified
NTP	US. National Toxicology Program (NTP) Report on Carcinogens
OECD	Organization for Economic Co-operation and Development
TDG	Transportation of Dangerous Goods
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

NFPA 704 (National Fire Protection Association):

Health - 2 Flammability - 1 Instability - 0 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 2 Flammability - 1 Physical Hazard - 0 PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Bayer Environmental Science
SAFETY DATA SHEET



HARMONIX™ INSECT SPRAY

Version 2.0 / USA
102000021951

11/11
Revision Date: 07/10/2015
Print Date: 08/19/2015

Reason for Revision: Revised according to the current OSHA Hazard Communication Standard (29CFR1910.1200)

Revision Date: 07/10/2015

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.