KICKER®

MSDS Version 2.1

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name	KICKER®
Chemical Name	
Synonym	
MSDS Number	91
Chemical Family	Mixture
Chemical Formulation	Mixture
EPA Registration No.	432-1145
Canadian Registrat. No.	

Bayer Environmental Science
95 Chestnut Ridge Road
Montvale, NJ 07645
USA

For Product Use Information: (800)331-2867 Monday through Friday(CRLF) 8:00AM-4:30PM(CRLF) For Medical Emergency contact DART: (800) 334-7577 24 Hours/Day(CRLF) For Transportation Emergency CHEMTREC: (800) 424-9300 24 Hours/Day

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS No.	Concentration % by Weight	
		Minimum	Maximum
Pyrethrin	8003-34-7	6.0000	
Piperonyl butoxide	51-03-6	60.0000	
Isoparaffinic Petroleum Solvent	64742-47-8	> 20.0000	

SECTION 3. HAZARDS IDENTIFICATION

NOTE: Please refer to Section 11 for detailed toxicological information.

Emergency Overview	Caution. Hazard to humans and domestic animals. Harmful if swallowed. Do not get in eyes. Do not breathe spray mist.
Physical State	liquid slightly viscous
Odor	Slightly sweet
Appearance	Medium to dark amber

Routes of Exposure	Inhalation and ingestion. Eye and skin contact.
Immediate Effects	
Eye	Moderately irritating
Skin	Causes moderate skin irritation.
Ingestion	Harmful if swallowed.
Inhalation	Harmful if inhaled.
Chronic or Delayed Long-Term	See Section 11 for carcinogenic/oncogenic information on piperonyl butoxide.
Medical Conditions Aggravated by Exposure	None known
Signs and Symptoms	May cause gastrointestinal effects such as nausea, vomiting and diarrhea. Ingestion of large quantities can result in nervous system effects such as dizziness, loss of coordination, tremors and loss of consciousness. Symptoms usually regress with no long lasting effects.

SECTION 4. FIRST AID MEASURES

Eye	Flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.
Skin	Remove contaminated clothing. Wash with plenty of soap and water. Get medical attention immediately if irritation persists.
Ingestion	Call a physician or Poison Control Center. Do not induce vomiting unless told to do so by a poison control center or doctor. Contains petroleum distillates. Vomiting may cause aspiration pneumonia.
Inhalation	Remove victim to fresh air. Apply artificial respiration if indicated.
Note to Physician	This product contains a pyrethroid and a petroleum solvent. If ingested and vomiting has not occurred, emesis should be induced with supervision. If symptoms such as loss of gag reflex, convulsions or unconsciousness occur before emesis, gastric lavage using a cuffed endotracheal tube should be considered. Do not administer milk, cream or other substances containing vegetable or animal fats. These only enhance absorption of lipophilic substances.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point	62 °C / 144 °F

	Method: Tagliabue Closed Cup
Suitable Extinguishing Media	carbon dioxide (CO2), dry chemical, foam, water
Fire Fighting Instructions	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

General and Disposal	Soak up with an absorbent material such as sand, sawdust, earth, fuller's earth, etc. Dispose of with chemical waste.

SECTION 7. HANDLING AND STORAGE

Handling Procedures	Avoid breathing spray mist. Do not get in eyes. Avoid getting material on clothing. All food processing surfaces should be removed or covered during treatment, or thoroughly cleaned before using. When using this product in these areas, apply only when facility is not in operation.
Storing Procedures	For Containers Larger than one Gallon: Store upright at room temperature. Avoid exposure to extreme temperatures. Do not use or store near heat or open flame. Container One Gallon and Smaller: Store in original container. Keep in a dry, cool place. Keep out of reach of children and domestic animals.
Work/Hygienic Procedures	Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. When using in an enclosed area, do not remain in treated area. Ventilate the area after treatment is completed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye/Face Protection	splash goggles or face-shield
Body Protection	Chemical-resistant gloves such as barrier laminate, butyl rubber >/= 14 mils, nitrile rubber >/= 14 mils, neoprene rubber >/= 14 mils, or polyvinyl chloride (PVC) >/= 14 mils, or Viton >/= 14 mils Long-sleeved shirt and long pants shoes plus socks
Respiratory Protection	Wear mask or respirator of a type recommended by the U.S. Bureau of Mines to

give adequate protection against this material.

Exposure Limits

Pyrethrin	8003-34-7	ACGIH	TWA	5 mg/m3
		NIOSH	REL	5 mg/m3
		OSHA Z1	PEL	5 mg/m3
		OSHA Z1A	TWA	5 mg/m3
		US CA OEL	TWA PEL	5 mg/m3
Isoparaffinic Petroleum Solvent	64742-47-8	ACGIH NIC	TWA	200 mg/m3

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Medium to dark amber
Physical State	liquid slightly viscous
Odor	Slightly sweet
Specific Gravity	0.977
Bulk Density	8.14 lb/gal
Solubility (in water)	emulsifiable

Other Information	PERCENT VOLATILES: 25

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Conditions to Avoid	extreme temperatures
Incompatibility	strong acids oxidizers
Hazardous Polymerization (Conditions to avoid)	Will not occur

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	Male Rat: LD50: 4,500 mg/kg Female Rat: LD50: 4,900 mg/kg
Acute Dermal Toxicity	LD50: > 2,000 mg/kg
Acute Inhalation Toxicity	LC50: > 5 mg/l 4 h LC50: > 20 mg/l 1 h for DOT purposes
Skin Irritation	Moderately irritating
Eye Irritation	Irritating Non-corrossive.
Sensitization	Negative

The acute toxicity data is taken from Pyrenone Crop Spray (432-1033); which contains 6% Pyrethrins and 60% Piperonyl Butoxide.

Chronic Toxicity	In a recent study, marginally higher incidences of benign thyroid, parathyroid, ovary, and liver tumors were observed in rats and in lungs of mice following lifetime high doses exposures to pyrethrum. Marginally higher incidences of benign liver tumors in mice were observed in mice following lifetime high dose exposures to piperonyl butoxide. The significance of these observations is questionable and under review. The doses at which tumors were observed for both pyrethrum and piperonyl butoxide greatly exceeded potential human exposure from labeled uses.

Assessment Carcinogenicity

ACGIH		
Pyrethrin	8003-34-7	Group A4
NTP		
None		
IARC		
Piperonyl butoxide	51-03-6	3
OSHA		
None		

Teratogenicity

There were no birth defects or adverse effects on reproductive parameters in tests with rats or rabbits for either pyrethrum or piperonyl butoxide. They are not considered to be teratogenic.

Mutagenicity

Pyrethrum was not found to be genotoxic and did not damage DNA in any study conducted (Ames mutagenicity assay, chromosome aberration in Chinese hamster ovaries (CHO) cells, and in the unscheduled DNA synthesis (UDS) assay incultured human liver cells.

PBO was not genotoxic in several tests including the Ames mutagenicity assay, chromosome aberration in Chinese hamster ovary (CHO) cells, CHO/HGPRT assay with S9 activation, and in the unscheduled DNA systhesis (UDS) assay in cultured human liver cells.

SECTION 12. ECOLOGICAL INFORMATION

Environmental Precautions

This pesticide is extremely toxic to fish and other aquatic organisms, including crab and shrimp. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Shrimp and crab may be killed at application rates recommended on this label. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance	Do not contaminate water, food, or feed by storage or disposal. Pesticide Disposal: Pesticide, spray mixture or rinse water that cannot be used according to label instructions may be disposed of at an approved waste disposal facility.
Container Disposal	Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.
RCRA Classification	Not Regulated under this Statute

SECTION 14. TRANSPORT INFORMATION

PROPER SHIPPING NAME: Environmentally Hazardous Substance, n.o.s. (Pyrethrins)

HAZARD CLASS: 9, PG III
DOT IDENTIFICATION NUMBER: UN3082
DOT SHIPPING LABEL: Class 9

ADDITIONAL SHIPPING PAPER DESCRIPTIONRQ (Pyrethrins)

NOTE: This product is not regulated by DOT in quantities less than 2 gallons.

SECTION 15. REGULATORY INFORMATION

US Federal

EPA Registration No. 432-1145

TSCA list

Piperonyl butoxide	51-03-6
Isoparaffinic Petroleum Solvent	64742-47-8

TSCA 12b export notification

None

SARA Title III - section 302 - notification and information

None

SARA Title III - section 313 - toxic chemical release reporting

Piperonyl butoxide	51-03-6	1.0%

US States Regulatory

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

Pyrethrin	8003-34-7	CA, CT, IL, MN, NJ, PA, RI
Piperonyl butoxide	51-03-6	NJ

Canadian Regulations

Canadian Registrat. No.

Canadian Domestic Substance List

Pyrethrin	8003-34-7
Piperonyl butoxide	51-03-6
Isoparaffinic Petroleum Solvent	64742-47-8

Environmental

CERCLA

Pyrethrin	8003-34-7	1 lbs

Clean Water Section 307 Priority Pollutants

None

Safe Drinking Water Act Maximum Contaminant Levels

None

International Regulations

EU Classification

None

European Inventory of Existing Commercial Substances (EINECS)

Pyrethrin	8003-34-7
Piperonyl butoxide	51-03-6
Isoparaffinic Petroleum Solvent	64742-47-8

SECTION 16. OTHER INFORMATION

	Health	Flammability	Reactivity	Others
HMIS	1	2	0	B
NFPA	1	2	0	

REVISED SECTIONS:
MSDS REVISION INDICATOR: Company name change.

Print Date: 12/09/2002
Supersedes MSDS, which is older than: 12/04/2002

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