



**SCOURGE® INSECTICIDE WITH RESMETHRIN /
PIPERONYL BUTOXIDE 4% + 12% MF FORMULA II**

Version 3.0 / USA
102000004837

1/12
Revision Date: 07/29/2015
Print Date: 08/11/2015

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

Product identifier

Trade name SCOURGE® INSECTICIDE WITH RESMETHRIN / PIPERONYL
BUTOXIDE 4% + 12% MF FORMULA II

Product code (UVP) 05952158

SDS Number 102000004837

EPA Registration No. 432-716

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
Carcinogenicity: Category 2



Signal word: Warning

Hazard statements

Suspected of causing cancer.

Precautionary statements

Obtain special instructions before use.



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Do not handle until all safety precautions have been read and understood.
Wear protective gloves/ protective clothing/ eye protection/ face protection.
IF exposed or concerned: Get medical advice/ attention.
Store locked up.
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
Piperonyl butoxide	51-03-6	12.42
Resmethrin	10453-86-8	4.14
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	77.7
Solvent Naphtha (petroleum), heavy aromatic	64742-94-5	5.0
Naphthalene	91-20-3	0.57

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 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	The following symptoms may occur:., Headache, Nausea, Diarrhoea, Drowsiness, Vomiting
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Indication of any immediate medical attention and special treatment needed



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Risks	Contains hydrocarbon solvents. May pose an aspiration pneumonia hazard. This product contains a pyrethroid. Pyrethroid poisoning should not be confused with carbamate or organophosphate poisoning.
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	Carbon dioxide (CO ₂), Dry chemical, Foam, Water
Unsuitable	None known.

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

Special protective equipment for fire-fighters	Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.
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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.
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Flash point	> 93.4 °C
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Explosivity	not applicable

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.
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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.
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Additional advice	Use personal protective equipment. Do not allow to enter soil,
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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 Handle and open container in a manner as to prevent spillage. Use only in area provided with appropriate exhaust ventilation.

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. Before removing gloves clean them with soap and water. 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 a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Piperonyl butoxide	51-03-6	500 ppm (TWA)		OES BCS*
Resmethrin	10453-86-8	6.1 mg/m3 (TWA)		OES BCS*
Distillates (petroleum), hydrotreated light paraffinic (Inhalable fraction.)	64742-55-8	5 mg/m3 (TWA)	03 2014	ACGIH
Distillates (petroleum), hydrotreated light paraffinic (Mist.)	64742-55-8	5 mg/m3 (REL)	2010	NIOSH
Distillates (petroleum), hydrotreated light paraffinic (Mist.)	64742-55-8	10 mg/m3 (STEL)	2010	NIOSH
Distillates (petroleum), hydrotreated light paraffinic (Mist.)	64742-55-8	5 mg/m3 (PEL)	02 2006	OSHA Z1



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Distillates (petroleum), hydrotreated light paraffinic (Mist.)	64742-55-8	5 mg/m3 (TWA)	1989	OSHA Z1A
Distillates (petroleum), hydrotreated light paraffinic (Mist.)	64742-55-8	5 mg/m3 (TWA)	06 2008	TN OEL
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	1000ug/m3 (ST ESL)	07 2011	TX ESL
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	100ug/m3 (AN ESL)	07 2011	TX ESL
Distillates (petroleum), hydrotreated light paraffinic (Mist.)	64742-55-8	5 mg/m3 (TWA PEL)	08 2010	US CA OEL
Solvent Naphtha (petroleum), heavy aromatic	64742-94-5	2560ug/m3 (ST ESL)	07 2011	TX ESL
Solvent Naphtha (petroleum), heavy aromatic	64742-94-5	460ppb (ST ESL)	07 2011	TX ESL
Solvent Naphtha (petroleum), heavy aromatic	64742-94-5	256ug/m3 (AN ESL)	07 2011	TX ESL
Solvent Naphtha (petroleum), heavy aromatic	64742-94-5	46ppb (AN ESL)	07 2011	TX ESL
Solvent Naphtha (petroleum), heavy aromatic	64742-94-5	1,600 mg/m3/400 ppm (TWA PEL)	08 2010	US CA OEL
Naphthalene	91-20-3	10 ppm (TWA)	02 2012	ACGIH
Naphthalene	91-20-3	50 mg/m3/10 ppm (REL)	2010	NIOSH
Naphthalene	91-20-3	75 mg/m3/15 ppm (STEL)	2010	NIOSH
Naphthalene	91-20-3	50 mg/m3/10 ppm (PEL)	02 2006	OSHA Z1
Naphthalene	91-20-3	75 mg/m3/15 ppm (STEL)	1989	OSHA Z1A
Naphthalene	91-20-3	50 mg/m3/10 ppm (TWA)	1989	OSHA Z1A
Naphthalene	91-20-3	50 mg/m3/10 ppm (TWA)	06 2008	TN OEL
Naphthalene	91-20-3	75 mg/m3/15 ppm (STEL)	06 2008	TN OEL
Naphthalene	91-20-3	50ug/m3 (AN ESL)	07 2011	TX ESL
Naphthalene	91-20-3	200ug/m3 (ST ESL)	02 2013	TX ESL
Naphthalene	91-20-3	38ppb (ST ESL)	02 2013	TX ESL
Naphthalene	91-20-3	10ppb (AN ESL)	07 2011	TX ESL



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Naphthalene	91-20-3	0.5 mg/m ³ /0.1 ppm (TWA PEL)	10 2014	US CA OEL
Naphthalene	91-20-3	10 ppm (TWA)		OES BCS*

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

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

Safety glasses with side-shields

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	yellow to brown
Physical State	Liquid
Odor	mild solvent-like
Odour Threshold	no data available
pH	no data available
Vapor Pressure	no data available
Vapor Density (Air = 1)	no data available
Density	ca. 0.87 g/cm ³ at 20 °C
Evaporation rate	no data available
Boiling Point	no data available
Melting / Freezing Point	no data available
Water solubility	insoluble
Minimum Ignition Energy	not applicable



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Decomposition temperature	no data available
Partition coefficient: n-octanol/water	not applicable
Viscosity	34.3 mPa.s at 21 °C
Flash point	> 93.4 °C
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Explosivity	not applicable

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition	no data available
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Extremes of temperature and direct sunlight.
Incompatible materials	Strong reducing agents, Strong oxidizing agents
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Ingestion, Skin Absorption, Eye contact, Inhalation
Immediate Effects	
Eye	Moderate eye irritation.
Skin	May cause slight irritation. Harmful if absorbed through skin.
Ingestion	Harmful if swallowed.

Information on toxicological effects

Acute oral toxicity	LD50 (rat) > 2,700 mg/kg
Acute inhalation toxicity	LC50 (male/female combined rat) > 2.6 mg/l Exposure time: 4 h Determined in the form of liquid aerosol.



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	Highest attainable concentration. No deaths
Acute dermal toxicity	LD50 (rabbit) > 2,000 mg/kg
Skin irritation	Slight irritation (rabbit)
Eye irritation	Minimally irritating. (rabbit)
Sensitisation	Non-sensitizing. (guinea pig)

Assessment repeated dose toxicity

Piperonyl butoxide did not cause specific target organ toxicity in experimental animal studies.
Resmethrin did not cause specific target organ toxicity in experimental animal studies.

Assessment mutagenicity

Piperonyl butoxide was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.
Resmethrin was not genotoxic in a battery of in vitro tests.

Assessment carcinogenicity

Piperonyl butoxide was not carcinogenic in lifetime feeding studies in rats and mice.
Resmethrin was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH

Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	Group A4
Naphthalene	91-20-3	Group A3

NTP

Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	1980
Naphthalene	91-20-3	

IARC

Piperonyl butoxide	51-03-6	Overall evaluation: 3
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	Overall evaluation: 3
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	Overall evaluation: 1
Naphthalene	91-20-3	Overall evaluation: 2B

OSHA

None.

Assessment toxicity to reproduction

Piperonyl butoxide did not cause reproductive toxicity in a two-generation study in rats.
Resmethrin caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals.

Assessment developmental toxicity

Piperonyl butoxide did not cause developmental toxicity in rats and rabbits.



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Resmethrin caused developmental toxicity only at dose levels toxic to the dams.

Further information

Acute toxicity studies have been bridged from a similar formulation(s).
The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

Biodegradability	Piperonyl butoxide: not rapidly biodegradable Resmethrin: not rapidly biodegradable
Koc	Piperonyl butoxide: Koc: 399 - 830 Resmethrin: Koc: 100000
Bioaccumulation	Piperonyl butoxide: Potential bioaccumulation Resmethrin: Bioconcentration factor (BCF) 68 Does not bioaccumulate.
Mobility in soil	Piperonyl butoxide: Moderately mobile in soils Resmethrin: Immobile in soil
Environmental precautions	Do not allow to get into surface water, drains and ground water. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. Apply this product as specified on the label.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Pesticide, spray mixture or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility. Dispose in accordance with all local, state/provincial and federal regulations.
Contaminated packaging	Do not re-use empty containers. Triple rinse containers.



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Puncture container to avoid re-use.
Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning.
If burned, stay out of smoke.
Follow advice on product label and/or leaflet.

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. (NAPHTHALENE)
RQ	Reportable Quantity is reached with 17,543 lb of product.

IMDG

UN number	3082
Class	9
Packaging group	III
Marine pollutant	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (RESMETHRIN SOLUTION)

IATA

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

Freight Classification: INSECTICIDES OR FUNGICIDES, N.O.I., OTHER THAN POISON



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SECTION 15: REGULATORY INFORMATION

EPA Registration No. 432-716

US Federal Regulations

TSCA list

Piperonyl butoxide	51-03-6
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8
Solvent Naphtha (petroleum), heavy aromatic	64742-94-5
Naphthalene	91-20-3

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

Piperonyl butoxide	51-03-6	1.0%
Resmethrin	10453-86-8	1.0%
Naphthalene	91-20-3	

US States Regulatory Reporting

CA Prop65

This product contains a chemical known to the State of California to cause cancer.

Resmethrin	10453-86-8
Naphthalene	91-20-3

This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Resmethrin	10453-86-8	Developmental toxin.
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US State Right-To-Know Ingredients

Piperonyl butoxide	51-03-6	NJ, RI
Resmethrin	10453-86-8	NJ, RI
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	CA, MN
Naphthalene	91-20-3	CA, CT, IL, MN, NJ, RI

Canadian Regulations

Canadian Domestic Substance List

None.

Environmental

CERCLA

Naphthalene	91-20-3	100 lbs
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Clean Water Section 307 Priority Pollutants

Naphthalene	91-20-3
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Safe Drinking Water Act Maximum Contaminant Levels

Naphthalene	91-20-3
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EPA/FIFRA Information:



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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: Harmful if swallowed or absorbed through skin.
Moderate eye irritation.
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 - 1 Flammability - 1 Instability - 0 Others - none

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

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

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

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

Revision Date: 07/29/2015

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