



Material Safety Data Sheet

PERMANONE® 40 CONCENTRATE FOR MILITARY SPECS

MSDS Version: 1.0

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name	PERMANONE® 40 CONCENTRATE FOR MILITARY SPECS
Chemical Name	
Common Name	
MSDS Number	2182
Chemical Family	
Chemical Formulation	
EPA Registration No.	432-1386
Product Use	An Insecticide for manufacturing/formulating use only.

Bayer Environmental Science
 2 T.W Alexander Drive
 Research Triangle PK, NC 27709
 USA

For MEDICAL, TRANSPORTATION or Other EMERGENCY call 1-800-334-7577 24 hours/day
 For Product Information call 1-800-331-2867

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Component Name</u>	<u>CAS No.</u>	<u>Concentration % by Weight</u>	
		<u>Minimum</u>	<u>Maximum</u>
Permethrin	52645-53-1	38.8000	41.2000
Solvent naphtha (petroleum) light arom.	64742-95-6	47.5000	50.5000

SECTION 3. HAZARDS IDENTIFICATION

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

<u>Emergency Overview</u>	Danger! Corrosive - causes irreversible eye damage. Do not get in eyes or on clothing. Avoid contact with skin. Harmful if swallowed.
Physical State	Liquid
Odor	Aromatic
Appearance	Medium to Dark Amber
Routes of Exposure	Ingestion, Eye contact, Skin contact
Immediate Effects	
Eye	Corrosive - causes irreversible eye damage. Do not get in eyes.

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Skin	Avoid contact with skin. Moderate skin irritation
Ingestion	Harmful if swallowed. Do not take internally.

SECTION 4. FIRST AID MEASURES

Eye	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Get medical attention immediately.
Skin	Wash off with soap and plenty of water. Get medical attention if irritation develops and persists.
Ingestion	Call a poison control center or doctor immediately for treatment advice. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Do not give liquids to drink. Never give anything by mouth to an unconscious person.

Notes to Physician

Hazards	This product contains a synthetic pyrethroid. Contains petroleum distillates. May pose an aspiration pneumonia hazard.
Treatment	Consult an eye specialist immediately, the product can cause severe eye damage. Probable mucosal damage may contradictate the use of gastric lavage.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point	46 °C / 115 °F Method: Tagliabue Closed Cup
Suitable Extinguishing Media	Water, Foam, Carbon dioxide (CO2), Dry chemical
Fire Fighting Instructions	Isolate hazard area. Stay upwind. Keep out of smoke. Do not breathe gas/fumes/vapour/spray. Hose down gases, fumes and/or dust with water. Cool containers with water from the farthest possible distance away. Extinguish only if flow can be stopped. Move containers from fire area if without risk. 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	Keep unnecessary people away, isolate hazard area and deny entry. Avoid contact with spilled product or contaminated surfaces. Take all necessary action to prevent and to remedy the effects of the spill.
Land Spill or Leaks	Remove all sources of ignition. Avoid breathing vapors and avoid skin contact. Use personal protective equipment. Dike contaminated area with absorbent

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granules, soil, sand, etc. Carefully sweep up absorbed spilled material. Place in covered container for reuse or disposal. Scrub contaminated area with soap and water. Rinse with water. Use dry absorbent material such as clay granules to absorb and collect wash solution for proper disposal. Contaminated soil may have to be removed and disposed. Do not allow material to enter streams, sewers, or other waterways or contact vegetation.

SECTION 7. HANDLING AND STORAGE

Handling Procedures	Do not get in eyes, on skin, or on clothing.
Storing Procedures	Keep away from open flames, hot surfaces and sources of ignition. Do not contaminate water, food, or feed by storage or disposal. Store upright at room temperature. Protect against extreme heat and cold
Work/Hygienic Procedures	Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before re-use.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls	Use only with adequate ventilation/personal protection. Control airborne concentrations below the exposure guidelines.
Eye/Face Protection	Goggles
Hand Protection	Suitable chemical resistant gloves
Body Protection	Wear long-sleeved shirt and long pants and shoes plus socks.
Respiratory Protection	Ensure adequate ventilation. If not adequate, use a chemical cartridge-type respirator approved by the National Institute of Occupational Health and Safety.
General Protection	Eye wash facility and safety shower should be available.
Exposure Limits	None known.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Medium to Dark Amber
Physical State	Liquid
Odor	Aromatic
pH	6.5 - 7.5 Neutral
Specific Gravity	1.01

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Viscosity 5.2 mPa.s

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions.
Conditions to Avoid	Extreme temperatures
Incompatibility	Strong oxidizing agents
Hazardous Polymerization (Conditions to Avoid)	Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity data provided is bridged from a similar formulation, Permanone 40 Mfg Concentrate. The non-acute information pertains to the active ingredient, permethrin.

Acute Oral Toxicity	Male Rat: LD50: 1,790 mg/kg Slightly toxic. Female Rat: LD50: 1,290 mg/kg Slightly toxic. Male/Female Rat: LD50: 1,490 mg/kg Slightly toxic.
Acute Dermal Toxicity	Rat: LD50: > 5,000 mg/kg absorption / desorption Practically non-toxic.
Acute Inhalation Toxicity	LC50: > 2.31 mg/l 4 h Practically non-toxic.
Skin Irritation	Rabbit: moderately irritant
Eye Irritation	Rabbit: Corrosive
Sensitization	Guinea pig: non-sensitizing
Chronic Toxicity	A statistically significant increase in the incidence of lung and liver tumors was observed in female mice receiving diets containing 375 and 750 mg/kg/day of permethrin over 85 weeks.

Assessment Carcinogenicity

ACGIH
None

NTP
None

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IARC
Permethrin 52645-53-1
OSHA
None

Teratogenicity Permethrin is not considered to be teratogenic based on rat studies.

Mutagenicity Permethrin did not produce any mutagenic effects when tested in the Ames test.

SECTION 12. ECOLOGICAL INFORMATION

Environmental Precautions This product is extremely toxic to fish and other aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other water 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 CONSIDERATIONS

General Disposal Guidance Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal Triple rinse containers. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

RCRA Classification Not Regulated under this Statute

SECTION 14. TRANSPORT INFORMATION

TRANSPORTATION CLASSIFICATION FOR ALL MODES :
Flammable Liquids, N.O.S.(Petroleum Distillates) // 3 // UN1993 // PG III //

FREIGHT CLASSIFICATION:
Insecticides or Fungicides, N.O.I., other than poison

SECTION 15. REGULATORY INFORMATION

EPA Registration No. 432-1386

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US Federal Regulations

TSCA list

Solvent naphtha (petroleum) light arom. 64742-95-6

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

Permethrin 52645-53-1 1.0%

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

Permethrin 52645-53-1 NJ

Canadian Regulations

Canadian Domestic Substance List

Solvent naphtha (petroleum) light arom. 64742-95-6

Environmental

CERCLA

None

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)

Permethrin 52645-53-1
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SECTION 16. OTHER INFORMATION

	Health	Flammability	Reactivity	Others
NFPA	3	2	1	None

MSDS REVISION INDICATOR: Company address change.

Revision Date: 06/06/2006

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