Safety Data Sheet



Section 1: Identification

Product identifier Product Name Synonyms	 Vet-Kem Ovitrol Plus Flea, Tick & Bot Spray 11360A; 68400E; EPA Reg. No.: 2724-404; Zoecon RF-322 Ovicidal Pump Spray
Product Description	Pale yellow transparent liquid.
Relevant identified uses	of the substance or mixture and uses advised against
Recommended use	Insect growth regulator.
Restrictions on use	• KEEP OUT OF THE REACH OF CHILDREN. Avoid contact with eyes, skin and clothing. Do not use or store near heat or open flame.
Details of the supplier of	the safety data sheet
Manufacturer	Wellmark International 1501 E. Woodfield Road 200W Schaumburg, IL 60173 United States
Emergency telephone n	umber
Manufacturer	• 1-800-248-7763
Manufacturer (Transportation) • 1-800-424-9300 - CHEMTREC
Manufacturer	• 1-888-914-2082

Section 2: Hazard Identification

United States (US) According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012	 Skin Sensitization 1 Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects Eye Mild Irritation 2B Flammable Liquids 3 Reproductive Toxicity 1B
Label elements	

OSHA HCS 2012

DANGER



Hazard statements •	May cause an allergic skin reaction May cause drowsiness or dizziness Flammable liquid and vapor. Causes eye irritation May damage fertility or the unborn child.
Precautionary statements	
	 Wash thoroughly after handling. Avoid breathing dust, fume, gas, mist, vapors and/or spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Keep away from heat, sparks, open flames and/or hot surfaces No smoking. Keep container tightly closed. Ground and/or bond container and receiving equipment. Use explosion-proof - electrical, ventilating and/or lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
Response •	 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 ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison control center or doctor if you feel unwell. In case of fire: Use appropriate media water fog, alcohol resistant foam, dry chemical or CO2 for extinction. IF exposed or concerned: Get medical advice/attention.
Storage/Disposal •	•
Other hazards	
OSHA HCS 2012 •	Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Section 3 - Composition/Information on Ingredients

Substances

• Material does not meet the criteria of a substance.

Mixtures

Composition		
Chemical Name	Identifiers	%
Pyrethrins	CAS:8003-34-7	0.2%

Piperonyl butoxide	CAS:51-03-6	0.46%
N-Octyl Bicyloheptene Dicarboximide	CAS:113-48-4	0.62%
(s)-Methoprene	CAS:65733-16-6	0.27%
2-Propanol, 1-methoxy	CAS:107-98-2	81.2% TO 82%
1-Propanol, 2-methoxy-	CAS:1589-47-5	< 0.41%
Other ingredients	NDA	Balance

Section 4: First-Aid Measures			
Description of first a	aid measures		
Inhalation	• IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or doctor for further treatment advice.		
Skin	 IF ON SKIN: Wash with plenty of soap and water. If irritation or rash occurs, get medical advice/attention. 		
Eye	 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. 		
Ingestion	 IF SWALLOWED: Call a POISON CONTROL center or doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting unless directed by medical personnel. 		

Most important symptoms and effects, both acute and delayed

May cause dizziness and/or drowsiness if inhaled, causes eye irritation, may cause an allergic skin reaction in individuals with a sensitivity to n-octyl bicycloheptene dicarboximide and/or piperonyl butoxide, may damage fertility or the unborn child. Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Notes to Physician • Treat symptomatically and supportively.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media		LARGE FIRES: Dry chemical, CO2, alcohol-resistant foam or water spray.
Unsuitable Extinguishing Media	•	Avoid heavy hose streams.
Firefighting Procedures	•	Do not allow fire fighting water to escape into waterways or sewers. LARGE FIRES: Dike fire control water for later disposal; do not scatter the material. LARGE FIRES: Move containers from fire area if you can do it without risk. Stay upwind. Ventilate closed spaces before entering. Do not breathe gas/fumes/vapor/spray.
Special hazards arising from the substance or mixture		

Unusual Fire and Explosion • Flammable liquid.

Hazards	Containers may explode when heated. Liquid will float and may re-ignite on surface of water.
Hazardous Combustion Products	 Decomposes upon heating and may produce toxic vapors/gases.
Advice for firefighters	• Wear positive pressure self-contained breathing apparatus (SCBA).
	• Wear positive pressure sen-contained breathing apparatus (SCBA).

Section 6 - Accidental Re	lease Measures
---------------------------	----------------

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Do not walk through spilled material. Ventilate enclosed areas. Wear appropriate personal protective equipment, avoid direct contact.

Emergency Procedures

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ventilate closed spaces before entering. Avoid release into the environment.

Environmental precautions

•	Avoid	run	off to	waterway	/s a	nd sewe	ers.
	710010		011 10	matorma	0 0		

Methods and material for containment and cleaning up

Containment/Clean-up	 Absorb spills with an inert material, clay granules or other inert absorbent material and
Measures	put in container for disposal. All equipment used when handling the product must be grounded. LARGE SPILLS: Dike far ahead of spill for later disposal. Stop leak if you can do it without risk.

Section 7 - Handling and Storage

Precautions for safe handling

Handling

Keep away from fire - No Smoking. Avoid breathing fumes. Use only in well ventilated areas. Wear appropriate personal protective equipment, avoid direct contact.

Conditions for safe storage, including any incompatibilities

Storage	 Store locked up. Store in a cool/low-temperature, well-ventilated dry place away from heat and ignition sources. Keep from freezing. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F Keep container tightly closed.
Incompatible Materials or Ignition Sources	Heat, sparks, open flame. Oxidizing agents.
Other Information	
	 See product label for additional information.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines • No data available.

Exposure Limits/Guidelines				
Res	esult	ACGIH	NIOSH	OSHA

Pyrethrins (8003-34-7)	TWAs	5 mg/m3 TWA	5 mg/m3 TWA	5 mg/m3 TWA
	STELs	100 ppm STEL	150 ppm STEL; 540 mg/m3 STEL	Not established
methoxy (107-98-2)	TWAs	50 ppm TWA	100 ppm TWA; 360 mg/m3 TWA	Not established

Exposure Limits Supplemental

ACĠIH

•Pyrethrins (8003-34-7): TLV Basis - Critical Effects: (liver damage; lower respiratory tract irritation)

•2-Propanol, 1-methoxy (107-98-2): TLV Basis - Critical Effects: (eye and upper respiratory tract irritation)

Exposure controls

Engineering Measures/Controls • Use adequate ventilation to remove vapors (fumes, dust, etc.)

Personal Protective Equipment

Pictograms



Respiratory	 In case of insufficient ventilation, wear suitable respiratory equipment. Not required with normal use. However, mixers, loaders, applicators and other handlers must wear respiratory protection with P or R filters.
Eye/Face Hands	Wear chemical splash safety goggles.Wear appropriate gloves.
Skin/Body	 If prolonged exposure is anticipated, it is recommended for handlers to wear appropriate clothing to prevent skin contact.
Environmental Exposure Controls	Refer to Section 13 - Disposal Considerations.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Pale yellow transparent liquid.
Color	Pale yellow.	Odor	Characteristic of alcohol.
Odor Threshold	No data available		
General Properties			-
Boiling Point	No data available	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	рН	5.5 to 7.5
Specific Gravity/Relative Density	0.88 g/ml (7.3 lb.gal)	Density	No data available
Water Solubility	No data available	Viscosity	< 100 Centipoise (cPs, cP) or mPas
Critical Temperature No data available			
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate No data available			
Flammability			
Flash Point	41 °C(105.8 °F)	UEL	No data available
LEL	No data available	Autoignition	No data available

Flammability (solid, gas)	No data available	
Environmental		
Octanol/Water Partition coefficient	No data available	

Section 10: Stability and Reactivity

Reactivity

• Non-reactive under normal handling and storage conditions.

Chemical stability

Stable

Possibility of hazardous reactions

• Hazardous polymerization will not occur.

Conditions to avoid

Direct sunlight. Do not freeze. Excessive heat >110°F. Heat, sparks, open flame, other ignition sources, and oxidizing conditions.

Incompatible materials

Store away from oxidizers.

Hazardous decomposition products

• Carbon dioxide and possibly carbon monoxide.

Section 11 - Toxicological Information

Information on toxicological effects

	CAS	
Vet-Kem Ovitrol Plus Flea, Tick & Bot Spray	NDA	Acute Toxicity: Ingestion/Oral-Rat LD50 • >5100 mg/kg; Skin-Rabbit LD50 • >2100 mg/kg; mg/kg; Irritation: Eye-Rabbit • Mild irritation; Skin-Rabbit • Essentially non-irritating

GHS Properties	Classification
Acute toxicity	OSHA HCS 2012 • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Classification criteria not met; Acute Toxicity - Oral - Classification criteria not met
Skin corrosion/Irritation	OSHA HCS 2012 • Classification criteria not met
Serious eye damage/Irritation	OSHA HCS 2012 • Eye Mild Irritation 2B
Skin sensitization	OSHA HCS 2012 • Skin Sensitizer 1
Respiratory sensitization	OSHA HCS 2012 • Classification criteria not met
Aspiration Hazard	OSHA HCS 2012 • Classification criteria not met
Carcinogenicity	OSHA HCS 2012 • Classification criteria not met
Germ Cell Mutagenicity	OSHA HCS 2012 • Not classified - data lacking
Toxicity for Reproduction	OSHA HCS 2012 • Toxic to Reproduction 1B
STOT-SE	OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects

STOT-RE	OSHA HCS 2012 • Classification criteria not met
Potential Health Effects	
Acute (Immediate)	 May cause drowsiness and dizziness.
Chronic (Delayed)	No data available
Skin	
Acute (Immediate)	 May cause an allergic reaction in individuals with a sensitivity to n-octyl bicycloheptene dicarboximide and/or piperonyl butoxide.
Chronic (Delayed)	No data available
Eye	
Acute (Immediate)	May cause moderate irritation.
Chronic (Delayed)	No data available
Ingestion	
Acute (Immediate)	 Under normal conditions of use, no health effects are expected.
Chronic (Delayed)	No data available
Mutagenic Effects	• Methoprene has been tested and found negative for mutagenicity potential. n-octyl bicycloheptene dicarboximide was concluded to be negative in the CHO chromosome aberration assay. Piperonyl butoxide was not mutagenic in a battery of tests. Pyrethrins were not found to be genotoxic and did not damage DNA in any study conducted which included: Ames assay, chromosome aberration in Chinese hamster ovaries (CHO) cells and in the unscheduled DNA synthesis (UDS) assay in cultured human liver cells.
Carcinogenic Effects	 No component in this product present at 0.1% or greater is listed by IARC, OSHA or NTP.
Reproductive Effects	• Methoprene is not a teratogenic compound. The NOEL for maternal and embryotoxicity in rabbits was 200 mg/kg/day. The NOEL for reproductive effects in rats was 500 ppm. n-octyl bicycloheptene dicarboximide has been tested and is not a reproductive toxin. Piperonyl butoxide did not produce any birth defects or adverse effects on reproductive parameters in tests with rats and rabbits. Pyrethrins did not produce any birth defects or adverse effects on reproductive toxin. 2-methoxy-1-propanol has been shown to produce developmental toxicity in animals.

Section 12 - Ecological Information

Toxicity

	Components		
Pyrethrins (0.2%)	8003-34-7	 Aquatic Toxicity-Fish: 96 Hour(s) LC50 Rainbow trout 0.0051 mg/L [Acute] NOEC Sheepshead minnow 0.0059 mg/L [estimated chronic] 96 Hour(s) LC50 Sheepshead minnow 0.016 mg/L [Acute] 96 Hour(s) NOEC Fathead minnow 0.0019 mg/L [Chronic] Aquatic Toxicity-Crustacea: 96 Hour(s) LC50 Mysid Shrimp 0.0014 mg/L [Acute] NOEC Daphnia magna 0.00086 mg/L [Chronic] NOEC Mysid shrimp 0.0001 mg/L [Estimated chronic] 48 Hour(s) LC50 Water Flea Daphnia magna 0.0116 mg/L [Acute] 	
		Aquatic Toxicity-Fish: LC50 Rainbow Trout 1.9 mg/L [Acute] LC50 Sheephead minnow 3.94 mg/L [Acute]	

Piperonyl butoxide (0.46%)		NOEC <i>Fathead minnow</i> 0.04 mg/L [Chronic] Aquatic Toxicity-Crustacea: LC50 <i>Gammarus fasciatus (amphipod)</i> 0.51 mg/L [Acute] LC50 <i>Mysid shrimp</i> 0.49 mg/L [Acute] NOEC <i>Daphnia magna</i> 0.03 mg/L [Chronic]
N-Octyl Bicyloheptene Dicarboximide (0.62%)	113-48-4	Aquatic Toxicity-Fish: LC50 1.4-2.4 mg/L [Acute] Aquatic Toxicity-Crustacea: 48 Hour(s) LC50 Daphnia magna 2.3 mg/L [Acute]
(s)-Methoprene (0.27%)		Aquatic Toxicity-Fish: 96 Hour(s) LC50 <i>Rainbow Trout</i> 0.76 mg/L [Acute] 96 Hour(s) LC50 <i>Blue Gill</i> >0.37 mg/L [Acute] NOEC <i>Fathead minnow</i> 0.048 mg/L [Chronic] Aquatic Toxicity-Crustacea: NOEC <i>Mysid shrimp</i> 0.014 mg/L [Chronic] 96 Hour(s) LC50 <i>Mysid shrimp</i> 0.11 mg/L [Acute] 48 Hour(s) LC50 Daphnia magna 0.36 mg/L [Acute]

Persistence and degradability

(s)-Methoprene degrades rapidly in sunlight, both in water and on inert surfaces. The pesticide also is metabolized rapidly in soil and does not leach. Thus, it should not persist in soil or contaminate ground water. Pyrethrins have low persistence in the environment due to rapid breakdown in presence of UV light.

Bioaccumulative potential

No data available.

Mobility in Soil

(s)-Methoprene: 10-14 days, rapidly hydrolyzed in soil. Pyrethrins are relatively immobile in soil.

Other adverse effects

Potential Environmental No data available. Effects

Section 13 - Disposal Considerations

Waste treatment methods

Product waste Dispose of content and/or container in accordance with local, regional, national, and/or • international regulations. Do not empty into drains.

Packaging waste

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. See product label for disposal instructions.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	UN3092	Packaging 500 gal. or greater: 1-Methoxy-2 -propanol solution	Comb. Liq.	III	RQ Pyrethrins = 1 lb.
IMO/IMDG	UN3092	1-Methoxy-2-propanol solution	3		Marine Pollutant
IATA/ICAO	UN3092	1-Methoxy-2-propanol solution	3	Ш	Not Applicable

Special precautions for user • None specified. No data available Transport in bulk according to Annex II of MARPOL 73/78

and the IBC Code Other information

DOT • Environmental Hazards: RQ (Pyrethrins = 1 lb). **IMO/IMDG** • No data available

IATA/ICAO • No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture SARA Hazard Classifications • SARA Title III Section 313, Acute

FIFRA – Pesticide Labeling

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

CAUTION

Precautionary Statements • KEEP OUT OF THE REACH OF CHILDREN.

Hazards to Humans and • Domestic Animals • HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION: Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing.

First Aid •

If in eyes: 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 Poison Control Center or doctor for treatment advice If swallowed: Immediately call a Poison Control Center or doctor. Do not give any liquid to the person. Do not induce vomiting unless told to by a Poison Control Center or doctor. Do not give anything by mouth to an unconscious person. If on skin or clothing: 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. NOTE TO PHYSICIAN: Contains petroleum distillate - vomiting may cause aspiration pneumonia.

Environmental Hazards •

This product is toxic to aquatic organisms, including fish and invertebrates. 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 Pollution 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.

Physical or Chemical • Do not use or store near heat or open flame Hazards

	Inventory			
Component	CAS	TSCA		
(s)-Methoprene	65733-16-6	No		
1-Propanol, 2- methoxy-	1589-47-5	Yes		

2-Propanol, 1- methoxy	107-98-2	Yes
N-Octyl Bicyloheptene Dicarboximide	113-48-4	Νο
Piperonyl butoxide	51-03-6	Yes
Pyrethrins	8003-34-7	No

United States

Environment		
J.S CERCLA/SARA - Hazardous Substances and their Reportable Quan		
 1-Propanol, 2-methoxy- 	1589-47-5	Not Listed
• (s)-Methoprene	65733-16-6	Not Listed
		1 lb final RQ (listed under
Pyrethrins	8003-34-7	Pyrethrins); 0.454 kg final RC
		(listed under Pyrethrins)
 2-Propanol, 1-methoxy 	107-98-2	Not Listed
N-Octyl Bicyloheptene Dicarboximide	113-48-4	Not Listed
Piperonyl butoxide	51-03-6	Not Listed
J.S CERCLA/SARA - Section 313 - Emission Reporting		
1-Propanol, 2-methoxy-	1589-47-5	Not Listed
(s)-Methoprene	65733-16-6	Not Listed
Pyrethrins	8003-34-7	Not Listed
 2-Propanol, 1-methoxy 	107-98-2	Not Listed
N-Octyl Bicyloheptene Dicarboximide	113-48-4	Not Listed
	= 4 00 0	1.0 % de minimis
Piperonyl butoxide	51-03-6	concentration

Section 16 - Other Information

Revision Date Last Revision Date Preparation Date	 17/March/2016 17/March/2016 17/March/2016
Disclaimer/Statement of Liability	• The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.