SAFETY DATA SHEET



Revision Date 07-Dec-2015

Version 1

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name Pettit Horizons Ablative Antifouling Bottom Paint 1350 Green

Product code 1135000

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

Recommended Use Paint

Restrictions on use Read label instructions and SDS

1.3 Details of the supplier of the safety data sheet

Supplier Kop-Coat, Inc.

Marine Group 36 Pine Street Rockaway, NJ 07866 1-800-221-4466

1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA

Chemtrec: 1-800-424-9300 USA

2. Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Acute toxicity - Oral	Category 4
Skin sensitization	Category 1
Carcinogenicity	Category 2
Flammable liquids	Category 3

2.2 Label elements

Signal Word

Warning

Hazard Statements

Harmful if swallowed
May cause an allergic skin reaction
Suspected of causing cancer
Flammable liquid and vapor



Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves/protective clothing/eye protection/face protection

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing must not be allowed out of the workplace

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep container tightly closed

Ground/Bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention

If skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

Rinse mouth

In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

2.3. Other Hazards Hazards not otherwise classified (HNOC)

Not Applicable

2.4 Other information

Not Applicable

Unknown Acute Toxicity

< 1% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/Information on Ingredients

Substance

Not applicable

<u>Mixture</u>

Chemical Name	CAS-No	Weight %
Cuprous oxide	1317-39-1	40 - 50
Resin acids	Proprietary	10 - 20
Nepheline Syenite (Particulates not otherwise classified)	37244-96-5	10 - 20
Heavy aromatic naphtha	64742-94-5	5 - 10
Titanium dioxide	13463-67-7	1 - 5
Xylene	1330-20-7	1 - 5
Ethylene glycol monobutyl ether	111-76-2	1 - 5
C.I. Pigment Green 7	1328-53-6	1 - 5
Cupric Oxide	1317-38-0	1 - 5
Ethylbenzene	100-41-4	< 1

The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures

4.1 Description of first-aid measures

General advice For further assistance, contact your local Poison Control Center.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

continue flushing for at least 15 minutes. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Call a poison control center or doctor for treatment advice.

Skin contact Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated

clothing and shoes. Wash contaminated clothing before reuse. Call a poison control center

or doctor for treatment advice.

Inhalation Move victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult,

give oxygen. Call a poison control center or doctor for treatment advice.

Ingestion Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center

immediately. If a person vomits when lying on his back, place him in the recovery position.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms See Section 2.2, Label Elements and/or Section 11, Toxicological effects.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician There is no specific antidote for effects from overexposure to this material. Treat

symptomatically.

5. Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Foam. Carbon dioxide (CO₂). Dry chemical. Water spray or fog. Water may be used to cool and prevent the rupture of containers that are exposed to the heat from a fire.

Unsuitable Extinguishing Media Water may be unsuitable for extinguishing fires.

5.2 Special hazards arising from the substance or mixture

Special Hazard

Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks) Vapors may travel to areas away from work site before igniting/flashing back to vapor source Thermal decomposition can lead to release of irritating gases and vapors

Hazardous Combustion Products Possible formation of carbon oxides, nitrogen oxides, and hazardous organic compounds.

Explosion Data

Sensitivity to Mechanical Impact Not sensitive. Sensitivity to Static Discharge Yes.

5.3 Advice for firefighters

Evacuate personnel to safe areas. Move non-burning material, as feasible, to a safe location as soon as possible. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers with flooding quantities of water until well after fire is out. Thoroughly decontaminate all protective equipment after use. DO NOT extinguish a fire resulting from the flow of flammable liquid until the flow of the liquid is effectively shut off. This precaution will help prevent the accumulation of an explosive vapor-air mixture after the initial fire is extinguished.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. Refer to protective measures listed in sections 7 and 8. Avoid exceeding of the given occupational exposure limits (see section 8). Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

6.2 Environmental precautions

Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological information.

6.3 Methods and materials for containment and cleaning up

Methods for ContainmentDike far ahead of liquid spill for later disposal. Absorb with earth, sand or other

non-combustible material and transfer to containers for later disposal. Prevent further

leakage or spillage if safe to do so.

Methods for cleaning up

Use a non-combustible material like vermiculite, sand or earth to soak up the product and

place into a container for later disposal. Ground and bond containers when transferring

material. Take precautionary measures against static discharges.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Ground and bond containers when transferring material.

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not eat, drink or smoke when using this product. Use according to package label instructions. Empty containers may retain product residue or vapor. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose container to heat, flame, sparks, static electricity, or other sources of ignition. No

smoking.

Hygiene measures Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before

re-use. Do not eat, drink or smoke when using this product. Wash hands before breaks and

immediately after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep away from heat, hot

surfaces, sparks, open flames and other ignition sources. No smoking. Keep in properly labeled containers. Keep away from food, drink and animal feedingstuffs. Store in

accordance with local regulations.

Materials to Avoid

No materials to be especially mentioned.

8. Exposure controls/personal protection

8.1 Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
Cuprous oxide 1317-39-1	TWA: 1 mg/m³ Cu dust and mist	-				
Nepheline Syenite (Particulates not otherwise classified) 37244-96-5	-	-				TWA: 10 mg/m ³
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust	TWA: 10 mg/m ³ TWA: 3 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³
Xylene 1330-20-7	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m ³	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm TWA: 434 mg/m ³ STEL: 150 ppm STEL: 651 mg/m ³	TWA: 100 ppm TWA: 434 mg/m ³ STEL: 150 ppm STEL: 651 mg/m ³	TWA: 100 ppm STEL: 150 ppm
Ethylene glycol monobutyl ether 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ S*	TWA: 20 ppm	TWA: 20 ppm TWA: 97 mg/m ³	TWA: 20 ppm TWA: 97 mg/m ³	TWA: 20 ppm
C.I. Pigment Green 7 1328-53-6	TWA: 1 mg/m³ Cu dust and mist	-				
Cupric Oxide 1317-38-0	TWA: 1 mg/m³ Cu dust and mist	-				
Ethylbenzene 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m ³	TWA: 20 ppm	TWA: 100 ppm TWA: 434 mg/m³ STEL: 125 ppm STEL: 543 mg/m³	TWA: 100 ppm TWA: 434 mg/m ³ STEL: 125 ppm STEL: 543 mg/m ³	TWA: 20 ppm

8.2 Appropriate engineering controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

8.3 Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields. If splashes are likely to occur, wear:. Tightly fitting safety

goggles. Face-shield.

Skin and body protection Solvent-resistant gloves. Nitrile rubber. Neoprene gloves. Impervious butyl rubber gloves.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. Remove and wash contaminated clothing before re-use. Long sleeved clothing. Protective shoes or

boots.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Respiratory protection must be provided in

accordance with current local regulations.

Hygiene measures See section 7 for more information

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Liquid Physical state

Appearance No information available

Color Green

Hvdrocarbon-like Odor **Odor Threshold** No information available

Property Values Remarks • Methods

Hq No information available Melting/freezing point No information available

No information available Boiling point/boiling range

Flash Point 43 °C / 109 °F

Evaporation rate No information available Flammability (solid, gas) No information available

Flammability Limits in Air

upper flammability limit No information available lower flammability limit No information available No information available Vapor pressure Vapor density No information available

Specific Gravity No information available Water solubility No information available Solubility in other solvents No information available **Partition coefficient** No information available **Autoignition temperature** No information available No information available

Decomposition temperature

Viscosity, kinematic > 22 mm2/s

No information available Viscosity, dynamic

Explosive properties No information available **Oxidizing Properties** No information available

9.2 Other information

Volatile organic compounds (VOC) 330 g/L

content

17.00 lb/gal Density

10. Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to Avoid

Keep away from heat, sparks and flames.

10.5 Incompatible Materials

No materials to be especially mentioned.

10.6 Hazardous Decomposition Products

None under normal use conditions. Thermal decomposition can lead to release of irritating gases and vapors.

11. Toxicological information

11.1 Acute toxicity

Numerical measures of toxicity: Product Information

The following values are calculated based on chapter 3.1 of the GHS document

Unknown Acute Toxicity < 1% of the mixture consists of ingredient(s) of unknown toxicity

 Oral LD50
 1,042.00 mg/kg

 Dermal LD50
 37,617.00 mg/kg

 LC50 (Vapor)
 114.00 mg/l

Numerical measures of toxicity: Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Cuprous oxide 1317-39-1	470 mg/kg (Rat)	> 2000 mg/kg (Rat)	= 5 mg/L (Rat) 4 h
Heavy aromatic naphtha 64742-94-5	5000 mg/kg (Rat)	> 2 mL/kg(Rabbit)	> 590 mg/m³ (Rat) 4 h
Titanium dioxide 13463-67-7	10000 mg/kg (Rat)	-	-
Xylene 1330-20-7	3500 mg/kg (Rat)	> 4350 mg/kg (Rabbit)	= 29.08 mg/L (Rat) 4 h
Ethylene glycol monobutyl ether 111-76-2	470 mg/kg (Rat)	= 2000 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h
C.I. Pigment Green 7 1328-53-6	> 5000 mg/kg (Rat)	-	-
Ethylbenzene 100-41-4	3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.2 mg/L (Rat) 4 h

11.2 Information on toxicological effects

Skin corrosion/irritation

Product Information

- · No information available
- Component Information
- No information available

Eye damage/irritation

Product Information

- No information available
- Component Information
- · No information available

Respiratory or skin sensitization

Product Information

- No information available
- Component Information
- No information available

Germ cell mutagenicity

Product Information

- No information available
- Component Information
- No information available

Carcinogenicity

1135000 - Pettit Horizons Ablative Antifouling Bottom Paint 1350

Green

Product Information

- The table below indicates whether each agency has listed any ingredient as a carcinogen Component Information
- · Contains a known or suspected carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide 13463-67-7	-	Group 2B	-	
Ethylbenzene 100-41-4	-	Group 2B	-	

Reproductive toxicity

Product Information

- No information available **Component Information**
- · No information available

STOT - single exposure

No information available

STOT - repeated exposure

• No information available

Other adverse effects

Product Information

- No information available Component Information
- · No information available

Aspiration hazard

Product Information

- · No information available
- Component Information
- No information available

12. Ecological information

12.1 Toxicity

Ecotoxicity

No information available

13.591895 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Ecotoxicity effects

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Cuprous oxide 1317-39-1	EC50: 96 h Desmodesmus subspicatus 65 mg/L EC50: 96 h Pseudokirchneriella subcapitata 0.021 - 0.037 mg/L EC50: 96 h Pseudokirchneriella subcapitata 0.055 - 0.076 mg/L static	-	EC50: 48 h Daphnia magna 0.51 mg/L
Heavy aromatic naphtha 64742-94-5	-	LC50: 96 h Pimephales promelas 19 mg/L static LC50: 96 h Oncorhynchus mykiss 2.34 mg/L LC50: 96 h Lepomis macrochirus 1740 mg/L static LC50: 96 h Pimephales promelas 45 mg/L flow-through LC50: 96 h Pimephales promelas 41 mg/L	EC50: 48 h Daphnia magna 0.95 mg/L
Xylene	-	LC50: 96 h Pimephales promelas	EC50: 48 h water flea 3.82 mg/L

1330-20-7		23.53 - 29.97 mg/L static LC50: 96	LC50: 48 h Gammarus lacustris 0.6
		h Cyprinus carpio 780 mg/L	mg/L
		semi-static LC50: 96 h Cyprinus	3
		carpio 780 mg/L LC50: 96 h Poecilia	
		reticulata 30.26 - 40.75 mg/L static	
		LC50: 96 h Pimephales promelas	
		13.4 mg/L flow-through LC50: 96 h	
		Oncorhynchus mykiss 2.661 - 4.093	
		mg/L static LC50: 96 h	
		Oncorhynchus mykiss 13.5 - 17.3	
		mg/L LC50: 96 h Lepomis	
		macrochirus 13.1 - 16.5 mg/L	
		flow-through LC50: 96 h Lepomis	
		macrochirus 19 mg/L LC50: 96 h	
		Lepomis macrochirus 7.711 - 9.591	
		mg/L static	
Ethylene glycol monobutyl ether	-	LC50: 96 h Lepomis macrochirus	EC50: 48 h Daphnia magna 1000
111-76-2		1490 mg/L static LC50: 96 h	mg/L
		Lepomis macrochirus 2950 mg/L	
C.I. Pigment Green 7	-	LC50: 96 h Lepomis macrochirus	-
1328-53-6		752.4 mg/L static	
Ethylbenzene	EC50: 72 h Pseudokirchneriella	LC50: 96 h Oncorhynchus mykiss	EC50: 48 h Daphnia magna 1.8 -
100-41-4	subcapitata 4.6 mg/L EC50: 96 h	11.0 - 18.0 mg/L static LC50: 96 h	2.4 mg/L
	Pseudokirchneriella subcapitata 438	Oncorhynchus mykiss 4.2 mg/L	
	mg/L EC50: 72 h	semi-static LC50: 96 h Pimephales	
	Pseudokirchneriella subcapitata 2.6		
	- 11.3 mg/L static EC50: 96 h	flow-through LC50: 96 h Lepomis	
	Pseudokirchneriella subcapitata 1.7	macrochirus 32 mg/L static LC50:	
	- 7.6 mg/L static	96 h Pimephales promelas 9.1 -	
		15.6 mg/L static LC50: 96 h Poecilia	
		reticulata 9.6 mg/L static	

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Discharge into the environment must be avoided

Chemical Name	log Pow
Heavy aromatic naphtha 64742-94-5	6.1
Xylene 1330-20-7	3.15
Ethylene glycol monobutyl ether 111-76-2	0.81
Ethylbenzene 100-41-4	3.118

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1 Waste treatment methods

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport Information

Green

Note DOT Ground - "Non-bulk shipments may be non-regulated per 49CFR 173.150(f)(2)"

DOT Not regulated (If shipped in NON BULK packaging by ground transport)

MEX no data available

IMDG

Proper shipping name UN1263, Paint, 3, III

IATA

Proper shipping name UN1263, Paint, 3, III

15. Regulatory information

15.1 International Inventories

TSCA Complies

DSL EINECS/ELINCS ENCS IECSC KECL PICCS AICS NZIOC -

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL - Canadian Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

15.2 U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	SARA 313 - Threshold Values %
Cuprous oxide 1317-39-1	1.0
Xylene 1330-20-7	1.0
Ethylene glycol monobutyl ether 111-76-2	1.0
C.I. Pigment Green 7 1328-53-6	1.0
Cupric Oxide 1317-38-0	1.0
Ethylbenzene 100-41-4	0.1

15.3 Pesticide Information

U.S. EPA Pesticide Information

EPA Pesticide Registration Number 60061-14

EPA Statement

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 as required on the pesticide label:

EPA Pesticide Label

WARNING. Causes eye irritation. Harmful if absorbed through skin. May be fatal if swallowed or inhaled. Flammable liquid and vapor.

15.4 U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
Titanium dioxide - 13463-67-7	Carcinogen
Ethylbenzene - 100-41-4	Carcinogen
Toluene - 108-88-3	Developmental Female Reproductive
Crystalline silica (Quartz) (Respirable) - 14808-60-7	Carcinogen
Naphthalene - 91-20-3	Carcinogen
CUMENE - 98-82-8	Carcinogen
Benzene - 71-43-2	Carcinogen Developmental Male Reproductive

16. Other information

NFPA_	Health Hazard 2	Flammability 2	Instability 0	Physical and chemical hazards -
<u>HMIS</u>	Health Hazard 2*	Flammability 2	Physical Hazard 0	Personal protection X

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)

Ceiling (C)

DOT (Department of Transportation)

EPA (Environmental Protection Agency)

IARC (International Agency for Research on Cancer)

International Air Transport Association (IATA)

International Maritime Dangerous Goods (IMDG)

NIOSH (National Institute for Occupational Safety and Health)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEL (Permissible Exposure Limit)

Reportable Quantity (RQ)

Skin designation (S*)

STEL (Short Term Exposure Limit)

TLV® (Threshold Limit Value)

TWA (time-weighted average)

Revision Date 07-Dec-2015

Revision Note

No information available

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet