

# **Evaluation Report for Category B, Subcategory 2.3, 2.4 Application**

Application Number:	2016-6543
Application:	New EP Product Chemistry - Identity and Proportion of
	Formulants
Product:	Pettit Unepoxy 45 Hard Antifouling Paint
<b>Registration Number:</b>	32961
Active ingredient (a.i.):	Copper (present as cuprous oxide)
<b>PMRA Document Numbe</b>	r : 2820415

#### **Purpose of Application**

The purpose of this application was to register the end-use product Pettit Unepoxy 45 Hard Antifouling Paint with three colour formulations.

#### **Chemistry Assessment**

Pettit Unepoxy 45 Hard Antifouling Paint is formulated as a suspension containing copper present as cuprous oxide and related copper compounds at a nominal concentration of 28.86%. This end-use product has a density of 1.66 - 1.83 kg/L. The required chemistry data for Pettit Unepoxy 45 Hard Antifouling Paint have been provided, reviewed and found to be acceptable.

#### **Health Assessments**

Pettit Unepoxy 45 Hard Antifouling Paint is of low acute toxicity to rats via the oral and dermal routes of exposure. It is not expected to pose an acute inhalation hazard. Pettit Unepoxy 45 Hard Antifouling Paint is mildly irritating to the eyes and moderately irritating to the skin of rabbits. It is not a dermal sensitizer in guinea pigs when tested using the Buehler method.

The use of Pettit Unepoxy 45 Hard Antifouling Paint is within the currently registered use patterns for the cuprous oxide active ingredient. Therefore, exposure to Pettit Unepoxy 45 Hard Antifouling Paint is not expected to increase over the exposure from the currently registered products.

A dietary exposure assessment was not required for this application.

#### **Environmental Assessment**

Leaching studies were provided in support of the three antifouling paint formulations. Based on study results, the use of Pettit Unepoxy 45 Hard Antifouling Paint is not expected to increase environmental risk when compared to other products registered for the same use pattern.



## Value Assessment

Data on the copper release rate was provided for each of the three antifouling paint formulations. The studies were scientifically valid and followed the ASTM Standard Test Method D 6442-06, *Standard Test Method for Determination of Copper Release Rate from Antifouling Coatings in Substitute Ocean Water*. All three formulations had average copper release rates greater than the  $10 \ \mu g/cm^2/day$  that has been established in the public literature to be effective at preventing the attachment of fouling organisms.

## Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information sufficient to support the registration of the end-use product Pettit Unepoxy 45 Hard Antifouling Paint.

#### References

PMRA Document	Reference
Number	
2690852	2013, Pettit Unepoxy 45 Hard Antifouling Paint - 830 Series Subgroup A,
	DACO: 3.2.1,3.2.2,3.2.3,3.4.1 CBI
2690853	2013, Pettit Unepoxy 45 Hard Antifouling Paint - Confidential Attachment to
	830 Series Subgroup A, DACO: 3.2.1,3.2.2,3.2.3,3.4.1 CBI
2690854	2013, Pettit Unepoxy 45 Hard Antifouling Paint - 830 Series Subgroup B,
	DACO: 3.5.1, 3.5.11, 3.5.12, 3.5.13, 3.5.14, 3.5.15, 3.5.2, 3.5.3, 3.5.6, 3.5.7,
	3.5.8, 3.5.9 CBI
2690855	2009, Storage Stability and Characteristics, DACO: 3.5.10 CBI
2726164	ASTM International, 2017, ASTM D283-84, DACO: 3.4.1
2726165	2017, Chemical Physical Properites, DACO: 3.5 CBI
2690856	2016, Tox Summary, DACO: 4.1
2690857	2014, Acute Oral Toxicity, DACO: 4.6.1
2690858	2014, Acute Dermal Toxicity, DACO: 4.6.2
2690859	2014, Acute Inhalation Waiver, DACO: 4.6.3
2690860	2014, Acute Eye Irritation, DACO: 4.6.4
2690861	2014, Acute Dermal Irritation, DACO: 4.6.5
2690863	2014, Delayed Contact Dermal Sensitization Test, DACO: 4.6.6
2690864	2014, Delayed Contact Dermal Sensitization Test - Appendix B - Positive
	Control, DACO: 4.6.6
2690866	2013, Leach Rate Determination of Pettit Unepoxy 45 Hard Antifouling
	Paint 1822 Black, DACO: 10.2.3.3(A),8.2.4.6
2690867	2013, Leach Rate Determination of Pettit Unepoxy 45 Hard Antifouling
	Paint 1222 Blue, DACO: 10.2.3.3(A),8.2.4.6
2690868	2013, Leach Rate Determination of Pettit Unepoxy 45 Hard Antifouling
	Paint 1622 Red, DACO: 10.2.3.3(A),8.2.4.6
2690866	2013, Leach Rate Determination of Pettit Unepoxy 45 Hard Antifouling Pain
	1822 Black, DACO: 8.2.4.6
2690867	2013, Leach Rate Determination of Pettit Unepoxy 45 Hard Antifouling Pain
	1222 Blue, DACO: 8.2.4.6
2690868	2013, Leach Rate Determination of Pettit Unepoxy 45 Hard Antifouling Pain
	1622 Red, DACO: 8.2.4.6

ISSN: 1911-8082

# © Her Majesty the Queen in Right of Canada, represented by the Minister of Public Works and Government Services Canada 2018

All rights reserved. No part of this information (publication or product) may be reproduced or transmitted in any form or by any means, electronic, mechanical photocopying, recording or otherwise, or stored in a retrieval system, without prior written permission of the Minister of Public Works and Government Services Canada, Ottawa, Ontario K1A 0S5.