CCCR and WHMIS Evaluation for DC315

Requested by: International Fireproof Technology, Inc.

Prepared by: Intertek Scientific & Regulatory Consultancy

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DC315
CCCR and WHMIS Evaulation Report

1.0 SCOPE OF WORK

International Fireproof Technology, Inc. (hereafter referred to as “Client”) retained the services of Intertek Scientific & Regulatory Consultancy (hereafter referred to as “Intertek”) to provide hazard classifications under the Consumer Chemicals and Containers Regulation 2001 (CCCR, 2001) and under the Workplace Hazardous Materials Information System (WHMIS), for their product referred to as DC315. The hazard classification is based on literature searches (using various information sources) to ascertain if any information was available pertaining to the hazards of the known ingredients of the product. The known ingredients are based on the formulation provided by the client.

2.0 LIMITATIONS

The assessment was conducted solely on the components identified in the Material Safety Data Sheet provided to Intertek by the Client. It was noted that the product contained titanium dioxide at >1%; however, the client has agreed to apply the Prop 65 philosophy in Appendix 1 that titanium dioxide in a coating would not be respirable; and therefore, would not be considered a carcinogen in such products.

3.0 SUMMARY

The hazard classifications of the product DC315, based upon the criteria under CCCR 2001 and WHMIS, were determined by reviewing information available in the literature for any components of the product which are present in the product at 1% or more (see Appendix 2 for formulation) for CCCR and 0.1% or more for WHMIS.

Based on the scope of our assessment as described above, Intertek has determined that DC315, is not classified under CCCR.

Based on the scope of our assessment as described above, Intertek has determined that DC315, is not classified under WHMIS.

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Appendix 1 – California Proposition 65 –Titanium Dioxide

Titanium Dioxide and California Proposition 65

October 5, 2011

On September 2, 2011, the state of California listed titanium dioxide (airborne, unbound particles of respirable size) as a carcinogen under Proposition 65 using the Labor Code mechanism. This will not require warnings on products containing titanium dioxide (TiO_2), such as paint, plastics, and paper, however, TiO_2-containing products sold in California that meet the listing criterion (airborne, unbound particles of respirable size) will require the warning beginning no later than September 1, 2012. Employee communications for those working with dry TiO_2 will also be required as of the same date.

The listing is based on the International Agency for Research on Cancer's (IARC), an arm of the World Health Organization, change of the classification of TiO_2 to possibly carcinogenic to humans (2B). This Monograph, No. 93, was published in November 2010. It can be accessed at http://monographs.iarc.fr/ENG/Monographs/vol93/index.php.

The IARC reclassification was based on two studies in which rats (a uniquely sensitive species to lung overload effects) were exposed to excessive concentrations of TiO_2 in a closed chamber for extended periods of time. The agency's classification system requires it to classify a material as carcinogenic based on the results of animal studies even though multiple real-world epidemiological studies found no association between TiO_2 and lung cancer in humans.

The Titanium Dioxide Stewardship Council's (TDSC) position on this issue is:

- TiO_2 is safe for the people who manufacture it when used with appropriate industrial hygiene practices.
- TiO_2 is safe for the people who work with it, as directed, in its intended uses as an ingredient in coatings, paper, and plastics.
- TiO_2 is safe for the people who use finished products containing it.
- There is no human evidence to suggest that TiO_2, in any form, is an occupational carcinogen.

As stated above, our position is based on real-world epidemiological studies done in our own industry. The researchers who conducted these studies followed some 20,000 people who worked in both European and U.S. TiO_2 manufacturing plants over a period of more than 40 years. These epidemiology studies did not show an increase in lung cancer in the TiO_2 workforce as a result of exposure to TiO_2 dust.

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January 21, 2013

California Proposition 65 Listing of Titanium Dioxide (airborne, unbound particles of respirable size)

California recently placed titanium dioxide (airborne, unbound particles of respirable size) on the Proposition 65 list. Attached you will find a web-link from the Titanium Dioxide Stewardship Council (TDSC), a U.S. trade association, of which the DuPont Titanium Technologies business is a member, explaining the background and implications of this listing:
http://tio2industry.org/docs/Position_Statement_Prop_65_Listing_of_TiO2.PDF

We have updated our Material Safety Data Sheets (MSDS) to reflect this change. Our updated MSDSs can be found at:
http://www2.dupont.com/Titanium_Technologies/en_US/msds/us_en.html

Ti-Pure® products may not be directly added to food, pharmaceuticals, cosmetics, or cigarette papers/filters for tobacco products. It is DuPont's policy that Ti-Pure® products may not be used in medical applications involving implantation in the human body.

If you should have any questions, please call me at (302) 999-2122.

Sincerely,

Brian R. Coleman

Brian R. Coleman
Product Stewardship and
Regulatory Program Manager

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Appendix 2 – Formulation for DC315

Formulation as provided by the client in Material Safety Data Sheet:

Compound	CAS Number	Weight % (w/w)
Ammonium Polyphosphate	68333-79-9	25-45%
Melamine	108-78-1	10-25%
Pentaerythritol	115-77-5	10-25%
PVAC Resin	9003-20-7	5-30%
Titanium dioxide	13463-67-7	5-10%
Water		20-40%

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