



Confidential

ASTM D-4236 EVALUATION FOR CHALK

Intertek Job Number: SHAH0050305503

Company: Fujian Nanan Shangpin Craftwork Co., Ltd
Qing Lin Ge Industrial Area
Shishan Town Nanan City Fujian
China

Date: September 5, 2019

Details of Product: Description: yellow chalk; red chalk; blue chalk; green chalk; orange chalk; brown chalk; violet chalk; white chalk
Age grading on package, years: 3+
Physical form: Solid
Mass or volume: 216g

Ingredients and %w/w composition are listed in the appendix (subject to valid request).

The above named product, and the ingredients in the product formulation, were assessed for the following chronic hazards, and evaluated for compliance with the labeling requirements designated in the U.S. Consumer Product Safety Commission (CPSC) Regulations (16 CFR §1500.14; 57 FR 46626) and ASTM D-4236 (LHAMA Certification):

- Carcinogenicity
- Neurotoxicity
- Reproductive and developmental toxicity
- Sensitization
- General organ and tissue toxicities

Searches of medical and toxicological scientific databases were conducted to determine if any of the ingredients in the product, at the levels used, or as components of the final formulated product, are known to cause chronic adverse health effects to consumers when used as intended or under conditions of reasonable foreseeable misuse.

Conclusions: Based on the scientific literature available and the information provided to date, the *Chalk* would not be expected to pose any significant chronic adverse health effects to humans under normal use or reasonable foreseeable misuse.

Consequently, the *Chalk* conforms to the health requirements of ASTM D-4236 and requires no additional labeling in accordance with the Consumer Product Safety Commission's Regulations as mandated by the Labeling of Hazardous Art Materials Act (LHAMA). The *Chalk* must bear the following statement: "Conforms to ASTM D-4236."

The following conditions apply to this assessment:

- This product was not evaluated for heavy metal or lead content, which can affect the ability of manufacturers to label their products in compliance with ASTM D-4236.

- This product was not assessed for compliance with regulations, other than as described above.
- This product was not assessed for compliance with the California EPA, Proposition 65.
- This product has not been evaluated for potential physical injury such as choking hazard, aspiration risk, or mechanical irritation.
- It was assumed that the formulation given is accurate, all ingredients are disclosed and concentrations are correct, as listed in the appendix table, subject to valid request.
- It was assumed that neither this product, nor the ingredients used in the product, contained any impurities/contaminants that would cause toxicity in a consumer.

This evaluation is relevant solely to the conditions described herein. Any substitution of ingredients, increase in concentrations of use, or change of use pattern will necessitate a new evaluation. Should occurrences of significant adverse reactions amongst consumers (e.g. high number of undesirable effects) be reported for Chalk, the board certified toxicologist herein shall be informed and the necessity for a new evaluation will be determined.

This evaluation applies only to the formulation that has been provided in the corresponding confidential appendix to this report. This appendix is held on file at the Shanghai Intertek Office.

Signature of Board Certified Toxicologist:



Barry Lynch:
Diplomate, American Board of Toxicology
Intertek Scientific & Regulatory Consultancy

Sep. 5/19.
Date

END OF MAIN REPORT



NOT TO BE DISCLOSED WITH REPORT UNLESS VALID REQUEST

APPENDIX: SUMMARY OF CHALK FORMULA

Intertek Job Number: SHAH0050305503

Ingredient Name ¹	CAS #	Content of Product (%w/w)
Calcium sulfate hemihydrate	13397-24-5	47
Water	7732-18-5	45-53
2,2'-[(3,3'-dichloro[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[n-(2,4-dimethylphenyl)-3-oxobutyramide]	5102-83-0	5-8
Copper,[29h,31h-thalocyaninato(2-)-n29,n39,n31,n32]-,(sp-4-1)-	147-14-8	2-6
4-[(2,5-dichlorophenyl)azo]-3-hydroxy-n-phenylnaphthalene-2-carboxamide	6041-94-7	3-8
Phthalocyanine green	1328-53-6	0-8
Butanamide, 2,2'-[(3,3'-dichloro[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[n-(2-methylphenyl)-3-oxo-	5468-75-7	0-2
2-Naphthalenecarboxylicacid,4-[(5-chloro-4-methyl-2-sulfohenyl)azo]-3-hydroxy-, strontium salt(1:1)	15782-05-5	2-4

¹ Note: No independent testing of the formulation was conducted by the reviewer; thus, it is assumed that this formulation is accurate and complete. Furthermore, it is assumed that none of the ingredients contain impurities at levels that may cause harm to the consumer.

"Valid request" refers to request from formulation owner, which may not always be the report applicant.

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TOXICOLOGICAL RISK ASSESSMENT FOR CHALK

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Ingredients and %w/w composition are listed in the appendix (subject to valid request).

The above named product and the ingredients in the product formulation were assessed for the following toxicological potentials:

- acute oral toxicity
- corrosivity and skin and eye irritation
- strong sensitization
- chronic toxicity

as defined according to the following regulation:

- Title 16 of the United States *Code of Federal Regulations*, Section 1500.3 (16 CFR §1500.3) with consideration of Sections 16 CFR §1500.4, 1500.5, 1500.13, 1500.14 (excluding art materials), and 1500.135.

In completing this toxicological risk assessment, the following information was considered by the board certified toxicologist:

- the composition of the product;
- the characteristics of the product including nature, physical form and size;
- the safety data identified for each ingredient obtained during literature searches in medical and toxicology databases;
- potential for synergistic or unpredictable adverse effects and,
- the foreseeable conditions of use of the product.

No safety data have been generated by the sponsor with the final product. However, due to the nature of the individual ingredients, it is considered by the safety assessor that the safety of the final product can be adequately assessed by considering the toxicological profiles of the individual ingredients and their levels of use in the final product.

Conclusion: Based on the available data, *Chalk* is not considered to be an acute oral toxicant, eye irritant, skin irritant, corrosive agent, strong sensitizer, or chronic toxicant when used under normal and reasonably foreseeable conditions of use.


The following conditions apply to this assessment:

- This product was not evaluated for heavy metal or lead content.
- This product was not assessed for compliance with regulations, other than as described above.
- This product was not assessed for compliance with the California EPA, Proposition 65.
- This product has not been evaluated for potential physical injury such as choking hazard, aspiration risk, or mechanical irritation.
- It was assumed that the formulation given is accurate, all ingredients are disclosed and concentrations are correct, as listed in the appendix table, subject to valid request.
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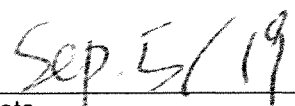
This evaluation is relevant solely to the conditions described herein. Any substitution of ingredients, increase in concentrations of use, or change of use pattern will necessitate a new evaluation. Should occurrences of significant adverse reactions amongst consumers (e.g. high number of undesirable effects) be reported for Chalk, the board certified toxicologist herein shall be informed and the necessity for a new evaluation will be determined.

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