AT-1407

TEST REPORT

Test Report #	17B-001251	Date of Report Issue:	September 5, 2017
Date of Sample Received:	August 21, 2017	Pages:	Page 1 of 7

CLIENT INFORMATION:

Company:	EXHEED Inc.
Recipient:	EXHEED Inc. / Tape King
Recipient Email:	support@tapeking.com

SAMPLE INFORMATION:

Description:	Tape King BOPP Clear Packing Tape		
Assortment:	-	UPC No.:	755702025270
SKU/Style No.:	TK-011/B01K0Z9QYK	Toy Co./Agency:	-
Factory/Supplier/Vendor:	-	Country of Origin:	China
Country of Distribution:	USA	Labeled Age Grade:	-
Quantity Submitted:	2 Rolls	Recommended Age Grade:	-
Testing Period:	8/22/17 – 9/5/17	Tested Age Grade:	-

OVERALL RESULT: **PASS**

Refer to page 2 for test result summary and appropriate notes.

ANSECO GROUP, LLC

David Ennis
Manager, Chemical Laboratory

TEST RESULT SUMMARY:

At the request of the client, the following tests were conducted:

CONCLUSION	TEST(S) CONDUCTED
PASS	CPSIA Section 101, Children's Products Containing Lead (Substrates)
PASS	CPSIA Section 106 & ASTM F963-16 Section 4.3.5.2, Soluble Heavy Metals Content in Substrates
PASS	CPSIA Section 108, Phthalate Content, Mouthable (6)
PASS	Client Requirement, California Proposition 65, Phthalate Content (6)
PASS	16 CFR 1500, Toxicological Risk Assessment (TRA)

Note: Refer to Appendix I for TRA Evaluation from MJN Associates, LLC.

DETAILED RESULTS:

CPSIA Section 101, Children's Products Containing Lead (Substrates)
CPSIA Section 106 & ASTM F963-16 Section 4.3.5.2, Soluble Heavy Metals Content in Substrates

Analytical determination by ICP-OES
(Method: CPSC-CH-E1001-08.1, Metals and/or CPSC-CH-E1002-08.1 Non-Metals)

	Specimen No.						
	1	-	-	-	-	-	
	Total Result	Total Result	Total Result	Total Result	Total Result	Total Result	
Lead (Pb)	LT 5	-	-	-	-	-	**CPSIA Total Limit** 100 ppm
	Total Result	Total Result	Total Result	Total Result	Total Result	Total Result	**ASTM F963 Soluble Limits**
Antimony (Sb)	LT 5	-	-	-	-	-	60 ppm
Arsenic (As)	LT 5	-	-	-	-	-	25 ppm
Barium (Ba)	LT 5	-	-	-	-	-	1000 ppm
Cadmium (Cd)	LT 5	-	-	-	-	-	75 ppm
Chromium (Cr)	LT 5	-	-	-	-	-	60 ppm
Lead (Pb)	LT 5	-	-	-	-	-	90 ppm
Mercury (Hg)	LT 5	-	-	-	-	-	60 ppm
Selenium (Se)	LT 12	-	-	-	-	-	500 ppm
Conclusion	PASS	-	-	-	-	-	

LT = Less Than
Results are reported in parts per million (ppm)

Note: The total heavy metals results do not exceed the soluble heavy metals limits; therefore, further soluble analyses were not conducted.

DETAILED RESULTS:

CPSIA Section 108, Phthalate Content, Mouthable (6)
Client Requirement, California Proposition 65, Phthalate Content (6)

Analytical determination by GC/MS (Method: CPSC-CH-C1001-09.3)

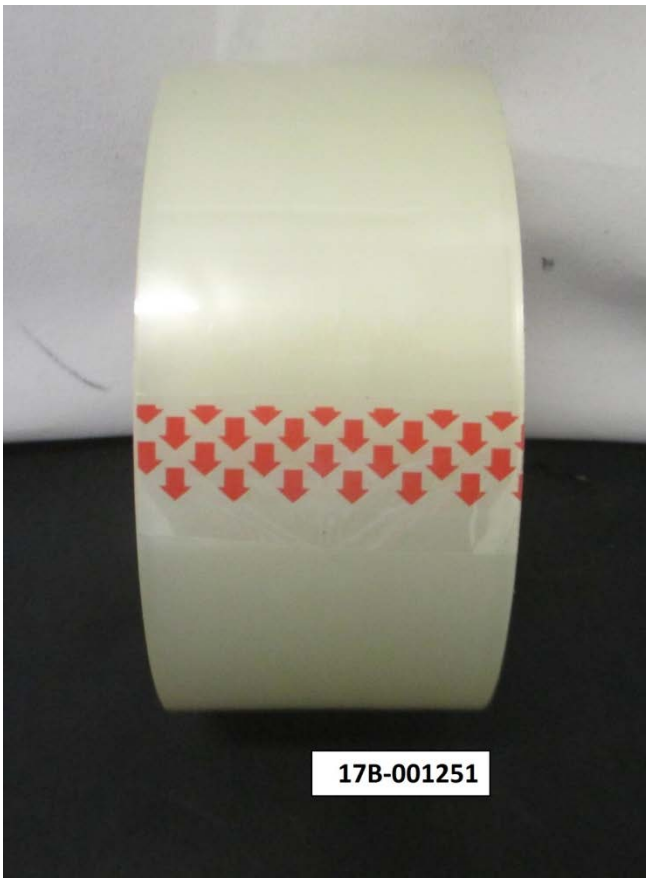
	Specimen No.						
Phthalate	1	-	-	-	-	**CPSIA Limits (%)**	**Client Limits (%)**
Dibutyl Phthalate (DBP)	LT 0.01	-	-	-	-	0.1	0.1
Benzyl Butyl Phthalate (BBP)	LT 0.01	-	-	-	-	0.1	0.1
Di-(2-ethylhexyl) Phthalate (DEHP)	LT 0.01	-	-	-	-	0.1	0.1
Di-n-hexyl Phthalate (DnHP)	LT 0.01	-	-	-	-	-	0.1
Di-n-octyl Phthalate (DnOP)	LT 0.01	-	-	-	-	0.1	-
Diisononyl Phthalate (DINP)	LT 0.02	-	-	-	-	0.1	0.1
Diisodecyl Phthalate (DIDP)	LT 0.02	-	-	-	-	0.1	0.1
Conclusion	PASS	-	-	-	-		

LT = Less Than
Results reported as percent by weight

SPECIMEN DESCRIPTION:

Specimen No.	Specimen Description (Color)	Location
1	Clear Plastic with Adhesive	Tape

SAMPLE PHOTO:



Appendix I:

16 CFR 1500, Toxicological Risk Assessment (TRA) from MJN Associates, LLC.

-End Report-

MJN Associates, LLC
4449 Country View Drive
Doylestown, PA 18902
mnorvell1@verizon.net

Toxicological Risk Assessment (U.S. Regulations) Evaluation for **"Tape King BOPP Clear Packing Tape" ANSECO Project # 17B-001251**

Background

A quantitative list of the ingredients (polypropylene film and butyl acrylate polymer) in this packing tape was submitted for review. A single roll of this tape weighs 7 ounces. It is assumed that these ingredients contain no contaminants or monomers/dimers of polymers at concentrations that would be toxic or corrosive to an exposed consumer. In the opinion of this toxicologist, all the information needed to evaluate this tape has been submitted. This tape is intended to be used by consumers ages 18 years and older. ANSECO Group, LLC has requested that this tape be evaluated for potential acute and chronic toxicity via dermal contact, inhalation and ingestion as well as corrosive/irritation potential and sensitization (allergic reactions) potential as defined in the U.S. Federal Hazardous Substance Act (FHSA) Regulations (16 CFR Parts 1500.3, 1500.4, 1500.5, 1500.12, 1500.13, 1500.17, 1500.40, 1500.41, 1500.42, 1500.129 and 1500.135). This evaluation was done by subjecting the ingredients in this clear packing tape to a Toxicological Risk Assessment (TRA).

A TRA is a procedure that was originally recommended by the U.S. National Academy of Sciences and has been used for decades by the Environmental Protection Agency (EPA) to estimate risks from exposures to hazardous substances found in toxic waste sites. This TRA procedure has also been modified to evaluate risks of exposures to hazardous chemicals found in or released from consumer products. A TRA for a chemical of concern is intended to estimate the potential health risks from exposures to that chemical to an individual. One of the key assumptions behind this concept is that health risks from a chemical are a function of exposures to that chemical and the toxicity of that chemical. If exposures do not occur or a chemical is practically nontoxic, the potential health risks from that chemical are toxicologically insignificant. A TRA for a given consumer product is generated by calculating hypothetical worst-case exposure scenario values for the chemicals of concern in or released from that product (Exposure Assessment). These hypothetical worst case exposure values are then divided by appropriate regulatory agency-established toxicity exposure threshold values (Toxicity Assessment) to derive quantitative estimates of potential health risks (Risk Assessment) from the chemicals of concern in or released from that product. The primary assumption throughout this risk assessment process is that the magnitude of the health risk to a chemical depends on the exposures to that chemical and the toxicity of that chemical.

Exposure Assessment

An exposure assessment scenario for a given chemical of concern to a potential consumer consists of creating a series of logical pathways and events whereby that chemical could reasonably be expected to contact that consumer. For this assessment, as much as 7 ounces of this clear packing tape in a single roll of tape may be expected to contact the skin of a consumer as frequent multiple exposure events and/or smaller (milligram) amounts of tape residues may occasionally be ingested (via various hand-to-

mouth activities) and/or may rarely contact the eyes (via finger-to-eye contacts) as single exposure events. Residues that evaporate from this tape are expected to be diluted at least 100-fold with fresh ambient air before they are inhaled.

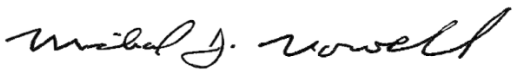
Toxicity Assessment

Searches of the National Library of Medicine's toxicological databases and information from other sources provided no data to indicate that exposures to the two polymer ingredients in this clear packing tape as described above would be expected to cause significant acute or chronic toxicity via dermal contact, inhalation or ingestion or be corrosive or irritating to the skin or the eyes of consumers who may contact them as described above. None of the ingredients in this tape have been designated a "strong sensitizer" under the regulations cited above.

Risk Assessment/Conclusions

The potential risk from a chemical substance to an individual is a function of both the exposure to and the toxicity of that chemical. Since exposures to the ingredients in this tape would not be expected to cause significant acute or chronic toxicity via dermal contact, inhalation or ingestion or be corrosive or irritating to the skin or eyes of consumers who may be exposed as described above, it is reasonable to conclude that these types of adverse health risks from exposures to them are expected to be toxicologically insignificant. Although the ingredients in this tape would not be expected to cause a sensitization (allergic) reaction in the vast majority of exposed individuals, a remote possibility exists that one or more individuals in the general population who are allergic to one or more of them could exhibit a sensitization (allergic) reaction on contact. Such an event, while expected to be extremely rare, cannot be absolutely ruled out. The ingredients in this tape are not restricted or prohibited from use in consumer products sold in the U.S.

Based on a review of all the available information provided to date and provided the assumptions mentioned above are correct, it is this toxicologist's opinion that this **"Tape King BOPP Clear Packing Tape"** product would not be expected to cause acute or chronic toxicity as described above or be corrosive or irritating to the skin or the eyes of a consumer when used as intended or under circumstances involving reasonable foreseeable misuse.



August 24, 2017

Michael J. Norvell, Ph.D, DABT, M, RSB
Toxicologist (Retired)
Diplomate, American Board of Toxicology, Inc. (DABT) 1981-2016
Member, Royal Society of Biology (M, RSB - UK)

Date