



## REPORT

CUSTOMER'S REF NO.:  
ALS THAILAND REF NO.: ATT/ELP/14/4252-DB  
DATE: 13 March 2015  
COMPANY: NHK Spring (Thailand) Co., Ltd.  
115 Moo 5 Bangna Trad Rd. T.Bangsamak  
A.Bangpakong Chachoengsao 24180 Thailand

DATE SAMPLE RECEIVED: 10 March 2015  
DATE ANALYZED: 12 March 2015  
DATE TEST COMPLETED: 13 March 2015

SAMPLE DESCRIPTION: One lot of sample was received with references:  
Description: Suspension  
Model: Iris v.11.3.1 Nagasaki BP  
Surface Area: 1.59 cm<sup>2</sup>  
Remark: Special test

### METHOD/PROCEDURE:

Analysis	Procedure No	Sample Size	Sampling Time
DHS	20800020-001 Rev K	20 pieces	3hrs



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**RESULTS :**

The Specification is based on Seagate's Doc 20800010-190 Rev.BE for Head Gimbal Assembly (HGA) - 3 Hr Sampling

Compound	Maximum Allowable Amount, (ng/part)	Results, (ng/part)
Acetophenone & Derivatives	-	Not Detected
Alcohols	-	2.16
Aliphatic Hydrocarbon	-	39.37
Aliphatic & Aromatic Esters	-	0.66
Alkylacrylate	-	Not Detected
Amines & Amides	-	Not Detected
Aromatic Hydrocarbon	-	1.20
Benzoic Acid & Derivatives	-	Not Detected
Organic Acid	-	Not Detected
Organic Sulfur	-	Not Detected
BHT	-	Not Detected
Halogen Containing Hydrocarbons	-	Not Detected
Phenols & Derivatievs	-	0.18
Siloxanes	-	Not Detected
Styrene	-	Not Detected
Ethyl Hexanol	-	Not Detected
Others & Unknowns	-	12.79
Trace Gimbal Assembly (TGA) Circuit	300	56.37

ALS Testing Services  
(Thailand) Co.,Ltd.

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