Exova, Inc. 9240 Santa Fe Springs Road Santa Fe Springs California USA 90670

T:+1 (562) 948-2225 F:+1 (562) 948-5850 E: info400@exova.com W: www.exovachemist.com



## **Certificate of Analysis**

Testing. Advising. Assuring.

June 18, 2013

Cezanne Professional Products

55 SE 2nd Ave

Delray Beach, FL 33444

Attn: Edward Knudsen

Exova Job No: 148932

Purchase Order: COD Project Name: Demand Brands C2

Samples Received: One (1) Sample(s) Date Received:

06/12/2013

**AMM** 

**Analysis** Page

Formaldehyde by SOP 4010, Rev 9

2

Michael Shelton **Technical Director**  Senior Chemist



## Formaldehyde by SOP 4010, Rev 9 High Performance Liquid Chromatography-Ultraviolet/Visible Absorption Spectroscopy

Sample preparation: About 1 g of the sample was accurately weighed in duplicate and mixed with water at a dilution factor of 20 by shaking for 15 minutes. A one mL aliquot was removed, mixed with 7 mL water, 1 mL acetonitrile, and derivatized with 1 mL of 2,4-dinitrophenylhydrazine (DNPH) reagent. A matrix spike and laboratory fortified blank (LFB) were treated in the same manner. After being permitted to react for 1 hour, the solutions were analyzed by HPLC with detection at 360 nm. At this dilution factor (200) the matrix spike was not recoverable. The extraction was repeated twice more at successive dilutions but, at a final dilution of 4000, the matrix spike was still not sufficiently recovered. The extraction diluent was switched from water to acetonitrile, and the extractions repeated at dilutions of 25 and 5000. Blanks and LFB's for all extractions were prepared similarly. Acceptable recovery of spike was finally obtained using acetonitrile for extraction at a final dilution factor of 5000. The detection limit is adjusted for the final dilution required for the analysis.

Parts Per Million (mg/kg)

Sample IDResultDemand Brands C2NDDemand Brands C2 DuplicateND

Method Blank ND

Detection Limit 30

Date Derivatized: 06-14-13 Date Analyzed: 06-14-13

**Quality Control Summary** 

Sample ID:

Demand Brands C2

Spike Spike Sample Spike Spike Sample RPD Result % Rec\* Conc Analyte Result Conc 4900 4250 87 Formaldehyde ND ND NA

NA - RPD not applicable for results less than ten times the detection limit.

\* Based on first sample result (sample spiked)

QC Guidelines

Analyte% RecoveryRPD LimitFormaldehyde39-15325

Sample ID: Method Blank

Sample Spike Spike Spike

Analyte Result Conc Result % Rec
Formaldehyde ND 5000 4760 95

QC Guidelines

Analyte % Recovery Formaldehyde 80-115

## Exova 🏢

## ANALYTICAL REQUEST FORM 9240 Santa Fe Springs Road, Santa Fe Springs, CA 90670 562.948.2225 Fax 562.948.5850

ISO/IEC	
17025	64 mg
Cot. 3248 01	ACCREDITED

		chemist.com		Cot 324801 ACCREDITED	
Send Repor	t To		Send Invo		
Contact: Edward Knudsen		AP Contact Lita Kaufman			
Company: Demand Brands		Address: Demand Brands			
Address: 55 SE 2nd Ave		55 SE 2nd Ave			
Delray Beach, FL 33444		Delray Beach, FL 33444			
		Project: Formaldehyde Testing			
Email: tknudsen@demandbrandsllc.com		Purchase Order:			
Phone : 917-520-6268 Fax:		Phone : 1-888-316-6250 Fax: 1-888-316-6250			
Turnaround Time (business days):  Date Data Due:  Normal 10 days (routine analyses)  Rush 5 days  Rush 6ees  Rush 3 days  Rush 6ees  Product/Raw Material R		rements Required bmitted to FDA) to FDA*	Storage Protect from light Room Temp 2 to 8° C	Reporting Options  Report Only  + Spectra/Chromatogram  + QA Data Pkg (extra fee	
Rush 1 day will apply	Product/Raw Material Re	egulated by FDA		Send by Mail	
DEA Controlled Substance/Ch	Other	adinactive Mate	-70 to -90° C	la Casail	
Sample Identification for Report	Matrix/Product	,	Analysis(es) and S	pecifications*	
101 Kepott		* Specifications are required for all FDA cGMP work.			
Demand Brands C2		Formaldehyde by SOP 4010, Revision 9			
ADG-1213 CT: Sample oc Ceranine	FF Trentwent.				