

September 7, 2023

To whom it may concern

Product information of ADEKA NOL EHG eco(Trial)

We always appreciate for your business with ADEKA products. We describe about product information of ADEKA NOL EHG eco (Trial) below.

1. Composition

INCI name	China INCI	CAS RN	EC No.	Composition (wt%)
Ethylhexylglycerin	乙基己基甘油	70445-33-9	408-080-2	99.9
Tocopherol	生育酚 (维生素E)	1406-18-4	215-798-8	0.1

2. Specification

	Specification	Test method
Appearance	Clear - light yellowish liquid with mild odor	Visual
Purify (%)	≥ 99.0	Gas Chromatography
Moisture (%)	≤ 0.50	Karl Fischer's method
Density (20°C)	0.950 - 0.960	Hydrometer method
Refractive index (20°C)	1.449 - 1.453	Refractometer
Hydroxyl value(mgKOH/g)*1	510 - 560	Acetylation method
Ignition residue(%)*1,2	≤ 0.10	JSQI*3
IR*1	The spectra of a specimen exhibit at the same wave numbers specified in the JSQI.	JSQI*3
Heavy metal content (ppm)*1	≤ 20	JSQI*3
Arsenic content (ppm)*1	≤ 2	JSQI*3

*1 Certified Value

*2 Detection Limit ≤0.1%

*3 The Japanese Standards of Quasi-Drug Ingredients

3. Certification of origin

INCI name	Composition (wt%)	Origin (Country of origin)
Ethylhexylglycerin	99.9	Sugar cane (India) Palm (Indonesia, Malaysia, Philippines) Soya (Argentina)
Tocopherol	0.1	Soya (China, India)

4. Animal testing

We are conducting the animal test with Ethylhexylglycerin derived from petroleum, and the last is in April 2007.

5. Animal derive

Any animal-derived substances are not intentionally used in this product

6. Allergen

This product does not contain the 26 allergenic substances listed in The Cosmetics Regulation 1223/2009 annex III.

7. CMR

This product does not contain CMR substances.

CMR substance

- Substance classified as CMR category 1 and 2 in Table 3.1 or CMR category 1,2 and 3 in Table 3.2 of Annex VI to Regulation EC No. 1272 / 2008(CLP Regulation) as amended.

8. GMO

This product does not contain Genetically Modified Organisms. One of the raw material is confirmed non-GMO by the raw material manufacturer's analysis.

9. Microplastic

This product does not contain microplastics intentionally.

The definition of microplastics is proposed by EU-ECHA as follow.

‘Microplastic’ means a material consisting of solid polymer-containing particles, to which additives or other substances may have been added, and where $\geq 1\%$ w/w of particles have (i) all dimensions $1\text{ nm} \leq x \leq 5\text{ mm}$, or (ii), for fibres, a length of $3\text{ nm} \leq x \leq 15\text{ mm}$ and length to diameter ratio of >3 .

Polymers that occur in nature that have not been chemically modified (other than by hydrolysis) are excluded, as are polymers that are (bio) degradable.

10. Nanomaterial

This product does not contain nanoparticles which are 100 nm below intentionally.

The definition of nanomaterial is proposed by EU-ECHA as follow.

‘Nanomaterial’ means an insoluble or biopersistent and intentionally manufactured material with one or more external dimensions, or an internal structure, on the scale from 1 to 100 nm.

11. Heavy metal

(1) Test sample

Lot.03173, Lot.00183

(2) Testing method

Heavy metals : Al, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Mo, Pd, Cd, Sn, Sb, Ba, Hg, Pb

Testing method: ICP-MS

Testing process: 1. Added mixed acid ($\text{HNO}_3 + \text{H}_2\text{SO}_4$).
2. Dissolved completely in a sealed vessel by device a microwave digestion.
3. Fixed quantity.
4. Analyzed with an ICP-MS.

(3) Result

EHG eco Lot.	Lot.03173	Lot.00183
Al* ¹	N.D.	N.D.
V* ¹	N.D.	N.D.
Cr* ¹	N.D.	N.D.
Mn* ¹	N.D.	N.D.
Fe* ¹	N.D.	N.D.
Co* ¹	N.D.	N.D.
Ni* ¹	N.D.	N.D.
Cu* ¹	N.D.	N.D.
Zn* ¹	N.D.	N.D.
As* ²	N.D.	N.D.
Se* ¹	N.D.	N.D.
Mo* ¹	N.D.	N.D.
Pd* ¹	N.D.	N.D.
Cd* ³	N.D.	N.D.
Sn* ¹	N.D.	N.D.
Sb* ²	N.D.	N.D.
Ba* ¹	N.D.	N.D.
Hg* ³	N.D.	N.D.
Pb* ¹	N.D.	N.D.

*¹ Detection Limit (Al, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Se, Mo, Pd, Sn, Ba, Pb) < 1ppm

*² Detection Limit (As, Sb) < 0.5ppm

*³ Detection Limit (Cd, Hg) < 0.1ppm

12. BSE

This product does not used BSE related materials.

BSE means "bovine spongiform encephalopathy": a brain disease in cattle (= male and female cows) that causes the death of the animal.

13. Phthalates

This product is not intentionally manufactured or formulated with phthalate esters; however, we do not analyze for these specific substances or compounds.

14. VOC

This product does not apply to the VOC definition.
The boiling point of this product is over 250°C at 101.3 kPa.

VOC is an abbreviation for Volatile Organic Compounds, a generic term for volatile organic compounds that become gaseous in the atmosphere.

The definition of VOC is "any organic compound having an initial boiling point less than or equal to 250 °C (482 °F) measured at a standard atmospheric pressure of 101.3 kPa."

15. Residual solvent

This product does not detect residual solvent by gas chromatography.

Analysis condition

-Analytical equipment: GC-2014(Shimadzu Corporation)

Measuring condition

-Column: DB-17, 0.25φ×30m×0.25μm, 60°C→20°C /min→280°C (19min)

-Carrier gas: He

-INJ/DET temp.: 280°C

-Diluting solvent: Acetone (10 fold dilution)

16. Impurities

As a result of the investigation of this product, we hereby confirmed that the product does not contain the above-mentioned substance. The threshold is 0.1%.

Impurities	Note
Nitroamines	
Free amines	
Amidoamines	
Acrylamides	
Dioxane	
Arsenic	
Free ethylene oxide	

Pesticides / Insecticides	
Abietic acid	
Tetracyclomethicone	
Formaldehyde	Formaldehyde is not used intentionally as a raw material or manufacturing process of this product. However, there is a possibility to occur formaldehyde by oxidative degradation due to sunlight or high temperature. Therefore, this product might contain the formaldehyde less than tens of ppm by the storage condition.
Residual monomers	
Acetaldehyde	Acetaldehyde is not used intentionally as a raw material or manufacturing process of this product. However, there is a possibility to occur acetaldehyde by oxidative degradation due to sunlight or high temperature. Therefore, this product might contain the acetaldehyde less than tens of ppm by the storage condition.
Other residual solvents	
Phtalates: Diethylphtalate Dibutylphtalate Diethylhexylphtalate Other	Please see the section 12.
Asbestos	
Other CMR cat.1,2,3	

17. Paraben

This product does not contain parabens intentionally.

18. Ethanol

This product may contain ethanol <100 ppm.

19. Gluten

This product does not contain gluten intentionally.

20. Preservatives

This product does not contain any preservatives intentionally.

21. Glycol ethers

This product is not intentionally formulated with the following glycol ethers; however, we do not analyze for these specific substances or compounds.

[Glycol ethers]

Common name	Abbreviation	Chemical name
Ethylene glycol monomethyl ether	EGME	2-methoxyethanol
Ethylene glycol monomethyl ether acetate	EGMEA	2-methoxyethyl acetate
Ethylene glycol monoethyl ether	EGEE	2-ethoxyethanol
Ethylene glycol monoethyl ether acetate	EGEEA	2-ethoxyethyl acetate
Ethylene glycol monopropyl ether	EGPE	2-propoxyethanol
Ethylene glycol monobutyl ether	EGBE	2-butoxyethanol
Ethylene glycol dimethyl ether	EGDME	1,2-dimethoxyethane
Ethylene glycol diethyl ether	EGDEE	1,2-diethoxyethane
Diethylene glycol	DEG	
Diethylene glycol monomethyl ether	DEGME	2-(2-methoxyethoxy) ethanol
Diethylene glycol monoethyl ether	DEGEE	2-(2-ethoxyethoxy)ethanol
Diethylene glycol monobutyl ether	DEGBE	2-(2-butoxyethoxy) ethanol
Diethylene glycol dimethyl ether	DEGDME	bis(2-methoxyethyl)ether
Triethylene glycol dimethyl ether	TEGDME	
Propylene glycol monomethyl ether	PGME	1-methoxy-2-propanol
Propylene glycol monomethyl ether acetate	PGMEA	
Dipropylene glycol monomethyl ether	DPGME	

22. Global inventories

Country	Inventory	Status	Regulatory availability for cosmetics
USA	TSCA	Not listed	Available ^{*)}
EU	REACH	Complied	Available
Korea	KECL	Listed	Available
Japan	ENCS	Listed	Available
Canada	DSL	Listed	Available
Australia	AICS	Listed	Available
China	IECSC IECIC	Listed Listed	Available
Philippines	PICCS	Not listed	Not available
Taiwan	TCSI	Listed	Available

^{*)} Cosmetics and their ingredients are exempted from registration for inventory.

23. US-California Proposition 65

The ingredient of this product is not listed in Proposition 65.

24. EU-REACH status

Ingredient	CAS No.	EC No.	Registration	
			Registration No.	Tonnage band
3-(2-Ethylhexyloxy) propane-1,2-diol	70445-33-9	408-080-2	01-0000015745-65	100 - 1,000 t/y
Tocopherol	1406-18-4	215-798-8	Exempted	-

25. EU-SVHC

This product does not contain SVHC.

SVHC means "substances of very high concern."

It is specified as a substance to be registered for approval under Article 57 of the REACH Regulation.

It is also called "approved candidate substance".

26. IFRA list

The components of this product are not listed on the Transparency list.

Transparency list was issued from the IFRA Use Survey and it contains fragrance ingredients used by International Fragrance Association (IFRA) affiliated members around the world.

27. CITES

Any materials on the CITES list are not contained in this product.

CITES is an abbreviation of the Washington Convention

28. ISO 16128

(1) General Principles

ISO 16128 presents guidelines on technical definitions and criteria for natural and organic cosmetic ingredients and products. These standards are based on a consensus developed by a panel of international experts to respond to cosmetic market's needs.

ISO 16128 is divided in two parts:

Part 1: Definitions for ingredients (edited in February 2016)

Part 2: Criteria for ingredients and products (edited in September 2017)

(2) Categories and indexes of each component of above mentioned product

<u>INGREDIENTS</u> (INCI Name)	<u>CAS RN</u>	<u>Category of ingredient</u>	<u>Natural index</u>	<u>Natural origin index</u>	<u>Organic index</u>	<u>Organic origin index</u>	<u>% Content</u>
Ethylhexylglycerin	70445-33-9	Main ingredient	0	1	0	0	99.9
Tocopherol	1406-18-4	Antioxidant	1	1	0	0	0.1

(3) Content calculations of above mentioned product (%)

	<u>% Natural Content</u>	<u>% Natural Origin Content</u>	<u>% Organic Content</u>	<u>% Organic Origin Content</u>
Content calculated by including formulation water as an ingredient	0.1	100	0	0
Content calculated by excluding formulation water as an ingredient	0.1	100	0	0

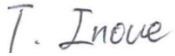
29. Toxicological information

Please contact us.

***This report is intended to provide information to your company as a reference and any description in this report does not guarantee a legal safeguard to your company or that we make any warranty and bear compensation and indemnification liability.**

Best regards,

ADEKA CORPORATION

 Signature	Takahiro Inoue Printed name	 General manager Title
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Surface Specialties Department
 Functional Chemicals Development Laboratory