Fresh'in Green+

I- GENERAL INFORMATION

Trade name: **Fresh'in Green+**
INCI name: Pentylene Glycol and Methyl Diisopropyl Propionamide
Minasolve Code: PFS0030/G
Function: Cooling agent

Supplier: Minasolve S.A.S
145, Chemin des Lilas
59310 Beuvry-la-Forêt, France
Tel. +33 3 20 64 3001

II- REGULATORY INFORMATION

1- Compliance with cosmetic regulation

	Pentylene Glycol	Methyl Diisopropyl Propionamide
EUROPE (European Cosmetic Regulation (EC) No 1223/2009)	Approved	Approved
U.S.A. (FD&C Act— 21 CFR 700 to 740)	Approved	Approved
CANADA (Food and Drugs Act and Cosmetic Regulations)	Approved	Approved
AUSTRALIA (Notification & Assessment Act 1989, as amended—TGA)	Approved	Approved
JAPAN (Pharmaceutical Affairs Law - regulations for cosmetics)	Approved	Approved
KOREA (Cosmetics Law - Korea Food & Drug Administration KFDA)	Approved	Approved
CHINA (IECIC 2015)	Approved	Approved

2- Chemical inventory status

	EU (EINECS)	USA (TSCA)	CANADA (DSL/NDSL/ R-ICL)	AUSTRALIA (AICS)	CHINA (IECSC)	JAPAN (ENCS)	KOREA (KECI/ECL)	NEW ZEALAND (NZIoC)
Pentylene Glycol	Listed	Listed	NDSL + R-ICL	Listed	Listed	Listed	Listed	Listed
Methyl Diisopropyl Propionamide	Listed	Not listed	NDSL + R-ICL	Not listed	Listed	Not listed	Not listed	Not listed

3- Natural certification status

Ingredient Ecocert certified: YES ☐ NO ☒
Ingredient COSMOS approved: YES ☐ NO ☒
Ingredient compliant with Natrue: YES ☐ NO ☒
USDA certified biobased product: YES ☐ NO ☒

III- PRODUCT COMPOSITION

Substance	%	INCI name	CAS n°	EC n°
1	50-65	Pentylene Glycol	5343-92-0	226-285-3
2	35-50	Methyl Diisopropyl Propionamide	51115-67-4	256-974-4

The above information is accurate to the best of our knowledge. Customers are advised to make their own studies on the usefulness of any ingredient for a particular application. Recommended usage information is only provided as indication and should not be considered as recommendations to use Minasolve SAS's products in violation of any laws, patents, or official regulations dealing with manufacture, composition, local procedures, product design, or end usage.

Fresh'in Green+

IV- TOXICOLOGICAL DATA

1- Toxicological data

TESTS	DATA	
	Pentylene Glycol	**Methyl Diisopropyl Propionamide**
Acute Toxicity	**Oral** (OECD 401, rat): **LD_{50}** > *5000mg/kg bw* **Inhalation** (OECD 403, rat, 4h): **LC_{50}** *>7015 mg/m³ air* **Dermal** (OECD 402, rat, 24 h): **LD_{50}** *> 2000 mg/kg*	**Oral** (rat) **LD_{50}** = *500-1000 mg/kg bw*
Skin penetration	*No data available*	*No data available*
Irritation eye/skin	**Eye** (OECD 405): *Irritating* **Skin** (OECD 404): *Not irritating*	**Eye** (OECD 405, rabbits): *Not irritating (0.1% Fresh'in in 1% ethanol)* **Skin** (rabbits): *Not irritating (0.1% Fresh'in in 1% ethanol)*
Skin sensitization	**HRIPT** (tested material: undiluted Fresh'in+, identical composition as Fresh'in Green+). Repeated applications under occlusive patch (9 consecutive applications within 30 days, Finn Chamber, 20 µl per patch) on a panel of 50 subjects – 18 of which with sensitive skin – induced no irritative and no allergic skin reaction. Conclusion: very good skin compatibility was demonstrated.	
Mutagenicity	**AMES test:** *Negative* **Chromosome aberration:** *Negative*	**AMES test**: *Negative* **Forward Mutation Mouse lymphoma (L5178Y cells):** at concentration of 0.01 to 1,000 µg/ml: *Negative*
Repeated dose toxicity	**Oral** (OECD 422, rat): **NOAEL** = *1000 mg/kg bw/day* **Dermal** (OECD 411, rat) **NOAEL** rat = *700 mg/kg bw/day*	**The NOEL** was *5 mg/kg bw/day*, on the basis of histopathological lesions in the kidneys of male rats in the 14-week study.
Reproductive toxicity	*No effects on reproduction* *No effects on development*	A study of **reproductive and teratogenic toxicity** in rats at a dose of 0, 10, 50 or 100 mg/kg bw showed *no reproductive effects or fetal abnormalities.*
Phototoxicity	*No data available*	*No data available*

2- Ecotoxicological data

TESTS	DATA	
	Pentylene Glycol	**Methyl Diisopropyl Propionamide**
Bioaccumulative potential	**Log P =** 0.06 at 25°C *=> Accumulation in organisms is not expected*	**Log P**= 2.7 at 25 °C *=> Not expected to bio-accumulate in the environment*
Solubility in water	Fresh'in Green+ is soluble in water, 2.2 wt.-% at 20 °C	
Acute aquatic ecotoxicity	**OECD 203** (96 hours, Zebra fish): **LC_{50}** >1096 mg/L **EU Directive 79/831/EWG Appendix V** (48 hours, Daphnia magna): **EC_{50}** > 500 mg/L	**Acute Toxicity to Fish** (96 hours): **LC_{50}** = 35 mg/L **Acute Toxicity to Daphnia Magna** (48 hours, OECD 202): **EC_{50}/LC_{50}** > 100 mg/L
Biodegradation	**OECD 301E:** *Readily biodegradable, but failing 10-day window*	**OECD 301 B:** *20 % degradation after 28 days*
Volatization from water	**Henrys Law Constant (25 deg C):** **Bond Method :** 3.06E-007 atm-m³/mole **Group Method:** 2.62E-010 atm-m³/mole *Predicted by software HENRYWIN v3.10)*	**Henry LC:** 1.78E-007 atm-m3/mole (estimated by Bond SAR Method) **Half-Life from Model River:** 4306 hours (179.4 days) **Half-Life from Model Lake:** 4.709E+004 hours (1962 days), *Predicted by software*
Mobility in soil	**Adsorption coefficient:** **Koc =** 1 *=> Adsorption in soil is not expected* *(Predicted by software EPIWin)*	**Soil Adsorption Coefficient:** (PCKOCWIN v1.66) **Koc=** 348.7 **Log Koc=** 2.542 *Predicted by software*

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