1. Identity of the substance

- Trade name: Exoquat PK37
- INCI name: Cocamidopropyl Betaine
- Product type: Amphoteric surfactant
- Manufacturing sites:

EOC Surfactants NV	**EOC Italia, Branch of EOC Belgium**
Durmakker 35	Via Famiglia Iona 25
9940 Evergem – Belgium	13100 Vercelli – Italy
Phone: +32 (0)55 23 58 58	Phone: +39 (0)161 39 46 95

2. Indicative composition

Indicative composition in view of cosmetic labelling:

INCI name	CAS number	Quantity (%)
Aqua	7732-18-5	Ca. 64
Cocamidopropyl Betaine	61789-40-0	Ca. 36
Total		100

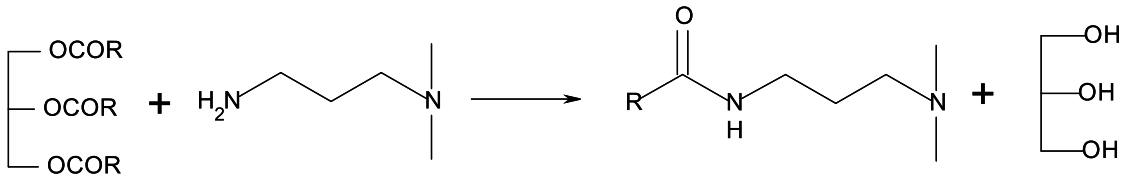
3. Information about the raw materials and manufacturing process

3.1 Origin of raw materials:

Vegetable origin	Yes *More info: see PRF*
Synthetic origin	Yes
Animal origin	No

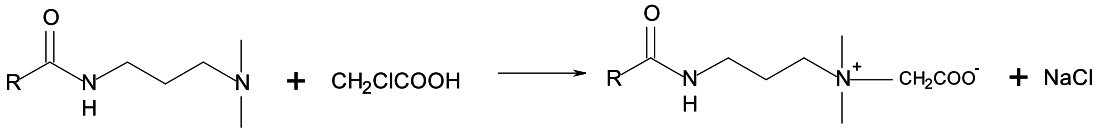
3.2 Description of the manufacturing process

3.2.1 Preparation of amido-amine:



with R= C_8-C_{18}

3.2.2 Preparation of betaine:



with R= C_8-C_{18}

3.3 Additives and processing aids

Preservative	Not intentionally added
Antioxidants	Not intentionally added
Solvents	Not intentionally added
Complexing agents	Not intentionally added

4. Microbiological specification

Bacteria (aerobic)	<100 CFU/g (dip slide TTC agar)
Yeasts and moulds	<100 CFU/g (dip slide malt agar)
Data on testing for pathogenic micro-organisms	Challenge tests [1] prove the self-preserving properties of Exoquat PK37 solutions against: • Staphylococcus aureus • Escherichia coli • Pseudomonas aeruginosa • Candida albicans • Aspergillus niger

5. By-products and impurities

Information about residues and by-products:

Substance	Type and concentration	Analytical method
Sodium chloride	See datasheet	Titration
Monochloroacetic acid (MCA)	See datasheet	Ion Chromatography
Dichloroacetic acid (DCA)	Max. 10 ppm *(BE)* - Ca. 15 ppm *(IT)*	Ion Chromatography
Sodium glycolate	Max. 6500 ppm	Ion Chromatography
Free fatty acid	Ca. 0.8%	HPLC
Glycerin	Ca. 2%	HPLC
Amido-amine	See datasheet	Titration
Dimethylaminopropylamine (DMAPA)[2]	Max. 10 ppm *(Results based on the analysis of similar products)*	LC – MS

Information about other contaminants:

Substance	Type and concentration
1.4 - dioxane	Not expected to be present due to raw materials/reaction process
Ethylene oxide	Not expected to be present due to raw materials/reaction process
Monomers	Not expected to be present due to raw materials/reaction process
Formaldehyde[3]	Ca. 5 ppm *(Technically unavoidable impurity)*
Nitrosamines[4]	< 50 ppb (LOQ) ATNC as NNO *(Results based on the analysis of similar products)*
Pesticides	Not expected to be present due to raw materials/reaction process
Polyaromatic hydrocarbons	Not expected to be present due to raw materials/reaction process
Heavy metals[5]	Results based on the analysis of similar products: • Pb < 1 ppm • Cd < 1 ppm • Hg < 1 ppm • As < 1 ppm • Co < 1 ppm • Cr < 1 ppm • Sb < 1 ppm • Ni < 1 ppm • Cu < 1 ppm

6. Toxicological data

See SDS + ECHA *https://echa.europa.eu/nl/registration-dossier/-/registered-dossier/16119*

7. Ecological data

See SDS + ECHA *https://echa.europa.eu/nl/registration-dossier/-/registered-dossier/16119*

Note: This document is also valid for the RSPO Mass Balance (MB) grade.

Disclaimer

All recommendations for use of our products whether given by us in writing, orally, or to be implied from data or test results obtained by us, are based on the current state of our knowledge at the time such recommendations are made. When additional information is obtained, these recommendations may be updated. They may also be influenced by circumstances outside our control. Notwithstanding such recommendations, the user is responsible to determine that the product as supplied by us, is suitable for the process or purpose he intends to use it. The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the product. Since we cannot control the application, use or processing of the products, we do not accept responsibility, therefore. The user shall ensure that the intended use of the products will not infringe in any party's intellectual property rights. This document replaces all previous versions.

References

[1] Test report QACS, 2022-4740 / 22 01 01363, 03/06/2022
[2] Test report RIC R2019.068, 4/4/2019
[3] Spectrophotometer
[4] Test report LGC (0001360578, 0001360579, 0001360580), ref. CP-22000277-201, 22/12/2022
The total amount of present nitrosamines, also called apparent total N-nitroso compounds (ATNC) content, is detected as released nitrous oxide (NNO) by a Thermal Energy Analyser and reported in terms of NNO per g.
[5] Test report Intertek Report 2022-LCM-2650EN, 10/10/2022