

Product information

Printed at 13.05.2023
Valid until 12.05.2024



EHS-Nr.: 000000023503
Internal code: 16980Q5
Revision: 1.3, 07.03.2023

NACOL 16-98 RSPO-MB

Page 1 of 9

1. Composition

INCI-Name: Cetyl Alcohol
Origin: vegetable
CAS-No. (s): 36653-82-4 ()
EC Number: (s): 253-149-0 (hexadecan-1-ol)
REACH No.(s): 01-2119485905-24-0000

2. Product data (specification)

Property		Value	Analytical method	with reference to
Appearance		colourless after melting		
Odour		typical		
nC 16 OH	min.	98.5 wt. %	600-12	-
Water	max.	0.1 wt. %	600-37	DIN 51777
Colour	max.	10 Hazen	600-40	EN ISO 6271
Ester value	max.	0.2 mg KOH/g	600-33	DIN EN 14104 / DIN 51559
Iodine value	max.	0.25 mg I/100mg	600-39	DIN EN 14111
Acid value	max.	0.05 mg KOH/g	600-31	DIN EN 14104

3. General product description

Property		Value	Analytical method	with reference to
Hydroxyl value		226 - 235 mg KOH/g	600-30	DIN 53240
Saponification value	max.	0.25 mg KOH/g	600-32	DIN 51559
Solidification point		48 - 50 °C	600-22b	DIN 53175
melting temperature		48 - 52 °C	600-22c	Ph. Eur. 2.2.14
Boiling Range		305 - 320 °C	600-21	DIN EN ISO 3405
Flash point	approx.	172 °C	600-26	ISO 2592
Density at 60 °C		0.810 - 0.814 g/ml	600-25	ASTM D 7042
Refractive index		1.4350 nD60	600-24	DIN 51423
Viscosity at 60 °C	approx.	8.0 mPas	600-25	ASTM D 7042

Sasol Germany GmbH · Anckelmannsplatz 1 · 20537 Hamburg

Telefon +49 4063684-1000 · Fax +49 40 63684-3700 · E-Mail: info@de.sasol.com
Gschf: Dr. Jens Straatmann · Judith Hübner · Vorsitzender des Aufsichtsrates: Christian Schindler
Sitz der Gesellschaft: Hamburg · Registergericht: Amtsgericht Hamburg HRB 78475

Product information



Printed at 13.05.2023
Valid until 12.05.2024

EHS-Nr.: 000000023503
Internal code: 16980Q5
Revision: 1.3, 07.03.2023

NACOL 16-98 RSPO-MB

Page 2 of 9

Property		Value	Analytical method	with reference to
Molecular weight		240 - 242 g/mol	600-19	-

4. Pesticide residues

Pesticide	Value (mg/kg)
Aldrin	<= 0.10
Bifenthrin	<= 0.20
Bromophos-ethyl	<= 0.20
Bromophos-methyl	<= 0.20
Chlordane alpha	<= 0.10
Chlordane gamma	<= 0.10
Chlorfenvinphos	<= 0.20
Chlorpyrifos-ethyl	<= 0.20
Chlorpyrifos-methyl	<= 0.20
Chlorthion	<= 0.20
Cyfluthrin	<= 0.20
Cypermethrin	<= 0.20
Deltamethrin (cis-Deltamethrin)	<= 0.20
Diazinon	<= 0.20
Dichlorvos	<= 0.20
Dieldrin	<= 0.10
Dimethoate	<= 0.20
Endosulfan alpha	<= 0.10
Endosulfan beta	<= 0.10
Endosulfansulphate	<= 0.10
Endrin	<= 0.10
Ethion	<= 0.20
Fenitrothion	<= 0.20
Fenpropathrin	<= 0.20
Fenthion	<= 0.20
Fenvalerate	<= 0.20
HCB (Hexachlorobenzene)	<= 0.10
HCH-alpha	<= 0.10
HCH-beta	<= 0.10
HCH-delta	<= 0.10
HCH-epsilon (Hexachlorocyclohexane)	<= 0.10
HCH-gamma (Lindane)	<= 0.10
Heptachlor	<= 0.10
Heptachlorepoxyde-cis	<= 0.10
Heptachlorepoxyde-trans	<= 0.10
Lambda-Cyhalothrin	<= 0.20

Sasol Germany GmbH · Anckelmannsplatz 1 · 20537 Hamburg

Telefon +49 4063684-1000 · Fax +49 40 63684-3700 · E-Mail: info@de.sasol.com
Gschf: Dr. Jens Straatmann · Judith Hübner · Vorsitzender des Aufsichtsrates: Christian Schindler
Sitz der Gesellschaft: Hamburg · Registergericht: Amtsgericht Hamburg HRB 78475

Product information

Printed at 13.05.2023
Valid until 12.05.2024



EHS-Nr.: 000000023503
Internal code: 16980Q5
Revision: 1.3, 07.03.2023

NACOL 16-98 RSPO-MB

Page 3 of 9

Pesticide	Value (mg/kg)
Malathion	<= 0.20
Mecarbam	<= 0.20
Methidathion	<= 0.20
Methoxychlor	<= 0.10
Nitrofen	<= 0.10
o,p-DDD	<= 0.10
o,p-DDE	<= 0.10
o,p-DDT	<= 0.10
Oxychlorane	<= 0.10
Parathion-ethyl	<= 0.20
Parathion-methyl	<= 0.20
Permethrin	<= 0.20
Pyrimiphos-ethyl	<= 0.20
Pyrimiphos-methyl	<= 0.20
p,p-DDD	<= 0.10
p,p-DDE	<= 0.10
p,p-DDT	<= 0.10
Prothiofos	<= 0.20
Quintozene	<= 0.10
Sulfotep	<= 0.20
Tecnazene	<= 0.10
Tetradifon	<= 0.10

Test Methods according to DIN EN 12393-2 : 2014-03 (mod.) / DIN EN 12393-3 : 2014-01 (mod.)

Pesticide load is determined periodically.

5. Microbiological status

Microorganism	Value	Unit	Substance
Total of aerobic bacteria plus fungi	<= 100	cfu/g	Original substance
Enterobacteria and Gram-negative bacteria	<= 10	cfu/g	Original substance

Test Method according to Ph. Eur. 5.1.4 Category 2.
Microbiological status is determined periodically.

Sasol Germany GmbH · Anckelmannsplatz 1 · 20537 Hamburg

Telefon +49 4063684-1000 · Fax +49 40 63684-3700 · E-Mail: info@de.sasol.com
Gschf: Dr. Jens Straatmann · Judith Hübner · Vorsitzender des Aufsichtsrates: Christian Schindler
Sitz der Gesellschaft: Hamburg · Registergericht: Amtsgericht Hamburg HRB 78475

Product information

Printed at 13.05.2023
Valid until 12.05.2024



EHS-Nr.: 000000023503
Internal code: 16980Q5
Revision: 1.3, 07.03.2023

NACOL 16-98 RSPO-MB

Page 4 of 9

6. Aflatoxins

Aflatoxins	Value (µg/kg)	Analytical method
Aflatoxin B1	≤ 1.0	QMP_504_KI_52_151 : 2017-12 (LC-MSMS)
Aflatoxin B2	≤ 0.5	QMP_504_KI_52_151 : 2017-12 (LC-MSMS)
Aflatoxin G1	≤ 0.5	QMP_504_KI_52_151 : 2017-12 (LC-MSMS)
Aflatoxin G2	≤ 0.5	QMP_504_KI_52_151 : 2017-12 (LC-MSMS)

This product meets the requirements of the Aflatoxin VerbotsV dated 19. July 2000

7. Heavy metals

Element	Class	Value (µg/g)	Analytical method
Cadmium	1	≤ 0.2	Ph. Eur. 2.2.58 / ICH Q3D
Lead	1	≤ 0.5	Ph. Eur. 2.2.58 / ICH Q3D
Arsenic	1	≤ 0.2	Ph. Eur. 2.2.58 / ICH Q3D
Mercury	1	≤ 0.1	Ph. Eur. 2.2.58 / ICH Q3D
			.
Cobalt	2a	≤ 0.3	Ph. Eur. 2.2.58 / ICH Q3D
Vanadium	2a	≤ 0.1	Ph. Eur. 2.2.58 / ICH Q3D
Nickel	2a	≤ 0.5	Ph. Eur. 2.2.58 / ICH Q3D
			.
Thallium	2b	≤ 0.8	Ph. Eur. 2.2.58 / ICH Q3D
Gold	2b	≤ 0.1	Ph. Eur. 2.2.58 / ICH Q3D
Palladium	2b	≤ 0.1	Ph. Eur. 2.2.58 / ICH Q3D
Iridium	2b	≤ 0.1	Ph. Eur. 2.2.58 / ICH Q3D
Rhodium	2b	≤ 0.1	Ph. Eur. 2.2.58 / ICH Q3D
Ruthenium	2b	≤ 0.1	Ph. Eur. 2.2.58 / ICH Q3D
Selenium	2b	≤ 13	Ph. Eur. 2.2.58 / ICH Q3D
Silver	2b	≤ 0.7	Ph. Eur. 2.2.58 / ICH Q3D
Platinum	2b	≤ 0.1	Ph. Eur. 2.2.58 / ICH Q3D
			.
Lithium	3	≤ 2.5	Ph. Eur. 2.2.58 / ICH Q3D
Antimony	3	≤ 2	Ph. Eur. 2.2.58 / ICH Q3D

Sasol Germany GmbH · Anckelmannsplatz 1 · 20537 Hamburg

Telefon +49 4063684-1000 · Fax +49 40 63684-3700 · E-Mail: info@de.sasol.com
Gschf: Dr. Jens Straatmann · Judith Hübner · Vorsitzender des Aufsichtsrates: Christian Schindler
Sitz der Gesellschaft: Hamburg · Registergericht: Amtsgericht Hamburg HRB 78475

Product information

Printed at 13.05.2023
Valid until 12.05.2024



EHS-Nr.: 000000023503
Internal code: 16980Q5
Revision: 1.3, 07.03.2023

NACOL 16-98 RSPO-MB

Page 5 of 9

Element	Class	Value (µg/g)	Analytical method
Barium	3	<= 30	Ph. Eur. 2.2.58 / ICH Q3D
Molybdenum	3	<= 1	Ph. Eur. 2.2.58 / ICH Q3D
Copper	3	<= 3	Ph. Eur. 2.2.58 / ICH Q3D
Tin	3	<= 6	Ph. Eur. 2.2.58 / ICH Q3D
Chromium	3	<= 0.3	Ph. Eur. 2.2.58 / ICH Q3D

Heavy metals are determined periodically.

This product meets the requirements of the ICH guideline Q3D (R1) on elemental impurities.
(Inhalation concentration)

8. Polycyclic Aromatic Hydrocarbons (PAH)

Substance	Value (µg/kg)	Analytical method
Benzo[a]pyrene	<= 1.0	PAH - 0397 , BDF02
Dibenzo[a,h]anthracene	<= 1.0	PAH - 0397 , BDF02
Dibenzo[a,e]pyrene	<= 1.0	PAH - 0397 , BDF02
Dibenzo[a,l]pyrene	<= 0.1	PAH - 0397 , BDF02
Dibenzo[a,i]pyrene	<= 0.1	PAH - 0397 , BDF02
Dibenzo[a,h]pyrene	<= 0.1	PAH - 0397 , BDF02
Sum I PAHs	<= 5	PAH - 0397 , BDF02
Sum II PAHs	<= 20	PAH - 0397 , BDF02
Sum III PAHs	<= 100	PAH - 0397 , BDF02

Sum I PAHs:

List of analyzed and summed PAHs:

Anthanthrene, Benzo[b]fluoranthene, Benzo[j]fluoranthene,
Benzo[k]fluoranthene, Cyclopenta[cd]pyrene, Indeno[1,2,3-cd]pyrene

Sum II PAHs:

List of analyzed and summed PAHs:

Benzo[a]anthracene, Benzo[c]fluorene, Benzo[b]naphto[2,1-d]thiopene, Benzo[ghi]perylene,
Chrysene, 5-Methylchrysene

Sum III PAHs:

List of analyzed and summed PAHs:

Anthracene, Benzo[ghi]fluoranthene, Benzo[c]phenanthrene, Benzo[e]pyrene, Coronene,
Fluoranthene, Perylene, Phenanthrene, Pyrene, Triphenylene

Polycyclic aromatic hydrocarbons are determined periodically.

Sasol Germany GmbH · Anckelmannsplatz 1 · 20537 Hamburg

Telefon +49 4063684-1000 · Fax +49 40 63684-3700 · E-Mail: info@de.sasol.com
Gschf: Dr. Jens Straatmann · Judith Hübner · Vorsitzender des Aufsichtsrates: Christian Schindler
Sitz der Gesellschaft: Hamburg · Registergericht: Amtsgericht Hamburg HRB 78475

Product information

Printed at 13.05.2023
Valid until 12.05.2024



EHS-Nr.: 000000023503
Internal code: 16980Q5
Revision: 1.3, 07.03.2023

NACOL 16-98 RSPO-MB

Page 6 of 9

9. Stabilizing additives

Not added

10. Preservatives

Not added

11. Antioxidants

Not added

12. Solvents

Our products are in accordance with the requirements of the CPMP/ICH/283/95.

CPMP = Committee for Proprietary Medicinal Products

ICH = International Conference of Harmonisation

Depending on production process the following components listed in the guideline may be produced during synthesis:

- Hexane ($\text{CH}_3(\text{CH}_2)_4\text{CH}_3$) = Class II solvent, Limit \leq 20 ppm according ICH Guideline
- Methanol (CH_3OH) = Class II solvent, Limit \leq 20 ppm detection limit
- 1-Butanol ($\text{CH}_3(\text{CH}_2)_3\text{OH}$) = Class III solvent, Limit \leq 20 ppm detection limit
- 2-Propanol ($(\text{CH}_3)_2\text{CHOH}$) = Class III solvent, Limit \leq 20 ppm detection limit
- Ethanol ($\text{CH}_3\text{CH}_2\text{OH}$) = Class III solvent, Limit \leq 20 ppm detection limit
- Heptane ($\text{CH}_3(\text{CH}_2)_5\text{CH}_3$) = Class III solvent, Limit \leq 20 ppm detection limit

Product information

Printed at 13.05.2023
Valid until 12.05.2024



EHS-Nr.: 000000023503
Internal code: 16980Q5
Revision: 1.3, 07.03.2023

NACOL 16-98 RSPO-MB

Page 7 of 9

13. Allergene

NACOL 16 - 98 RSPO-MB is conform to the EU Cosmetics Regulation 1223/2009/EC.

Due to the manufacturing process we do not expect that **NACOL 16 - 98 RSPO-MB** contains the listed allergens reference in annex III of the EU Cosmetics Regulation.

14. CMR (Carcinogen, Mutagen, Reprotoxic)

NACOL 16 - 98 RSPO-MB is not listed in Annex I, II or Annex III of the Regulation 1223/2009/EC but contains n-Hexane (< 20ppm according to the CPMP/ICH/283/95 guideline) as an impurity which is listed in Annex II of the European Cosmetics Regulation 1223/2009/EC.

Sasol Germany GmbH has Standard Operation Procedures in place to control the compliance with the limits as listed in the a.m. guideline.

15. TSE (Transmissible Spongiform Encephalopathy)

No animal products are used in the processing or handling of **NACOL 16 - 98 RSPO-MB**.

16. GMO (Genetically Modified Organism)

The raw materials used to produce **NACOL 16 - 98 RSPO-MB** do not originate from genetically modified organisms.

17. Transport and packaging

NACOL 16 - 98 RSPO-MB is available in pellet form and is packaged in polyethylene bags with welded filler tube that are suitable for food contact.

Capacity: 20 kg/bag

3 bags are arranged in 8 layers on a heat treated CP 5 wooden pallet and secured by stretched sheeting.

Special packaging sizes are available upon request.

Sasol Germany GmbH · Anckelmannsplatz 1 · 20537 Hamburg

Telefon +49 4063684-1000 · Fax +49 40 63684-3700 · E-Mail: info@de.sasol.com
Gschf: Dr. Jens Straatmann · Judith Hübner · Vorsitzender des Aufsichtsrates: Christian Schindler
Sitz der Gesellschaft: Hamburg · Registergericht: Amtsgericht Hamburg HRB 78475

Product information



Printed at 13.05.2023
Valid until 12.05.2024

EHS-Nr.: 000000023503
Internal code: 16980Q5
Revision: 1.3, 07.03.2023

NACOL 16-98 RSPO-MB

Page 8 of 9

18. Storage

The storage temperature should be kept at temperatures between 5 and 30°C.

Pallets should not be doubled stacked during transportation or storage.

Precaution should be taken to protect the product free from moisture and from sunlight.

19. Shelf life

NACOL 16 - 98 RSPO-MB has a shelf life of 48 months from the date of manufacturing when properly stored and handled.

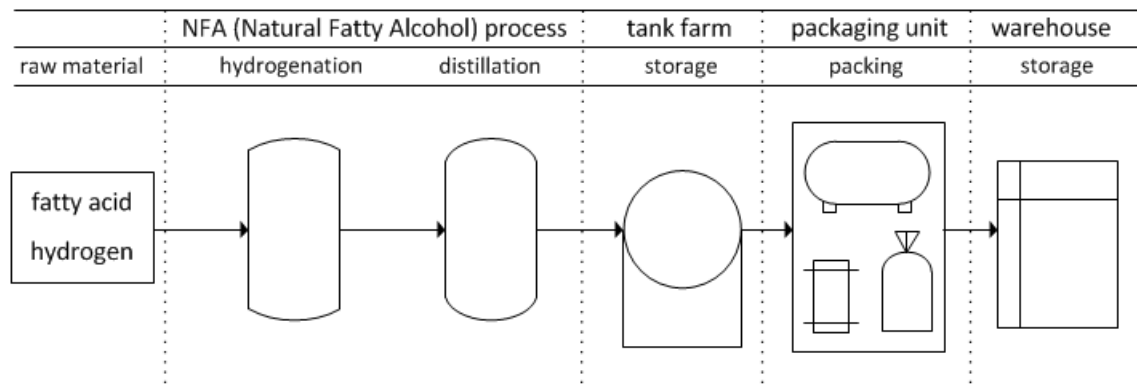
Product delivered as pellets tend to become pasty.

20. Packaging compatibility

No data available

21. Information on production process

Process Flow Chart



Product information

Printed at 13.05.2023
Valid until 12.05.2024



EHS-Nr.: 000000023503
Internal code: 16980Q5
Revision: 1.3, 07.03.2023

NACOL 16-98 RSPO-MB

Page 9 of 9

Please refer to the material safety data sheet for information on safety, transportation classification, registration status, toxicology and biodegradability.

This information is based on our present knowledge and experience. We reserve the right to make any changes as a result of technological progress or developments. This information implies no liability or other legal responsibility on our part, including with regard to existing third party patent rights. In particular, no guarantee or warranty of properties in the legal sense is implied. The customer is not exempted from the obligation to conduct careful inspection and testing of incoming goods. Reference to trademarks used by other companies is neither recommendation, nor should it give the impression that products of other companies cannot be used. All our business transactions are governed exclusively by our General Business Conditions.