

# Stability data

Version 3, 07.2020

# Beta-Carotene 10% DC

PRD no. 30061834

Manufacturing site: BASF A/S, Ballerup, Denmark

Stability study (no.) FS-000068

Storage conditions

Defined climatic conditions: 25°C ± 2°C/60% r.h. ± 5% r.h.

 $30^{\circ}\text{C} \pm 2^{\circ}\text{C}/65\% \text{ r.h.} \pm 5\% \text{ r.h.}$  $40^{\circ}\text{C} \pm 2^{\circ}\text{C}/75\% \text{ r.h.} \pm 5\% \text{ r.h.}$ 

# Packaging

The stability study has been performed in water-resistant aluminum foil bags, similar to the primary packaging material used for the storage and distribution of sales product.

#### Test attributes

The stability study includes testing of those attributes that are susceptible to change during storage and are likely to influence the quality, safety and/or efficacy.

Therefore, assay, as the most important measure for product quality and efficacy, is summarized below.

# Analytical methods

Beta-Carotene 10% DC assay: spectrophotometry [%]

# Long term stability results

Beta-Carotene 10% DC stored at 25°C ± 2°C/60% r.h. ± 5% r.h. (m: months)

Batch	Start of the study	Parameter	Specification	Start	9 m	12 m	18 m	24 m	36 m
73066264A0	2008	Assay	≥ 10.0 %	10.5	10.3	10.4	10.5	10.7	10.7
02062864A0	2008	Assay	≥ 10.0 %	10.3	10.7	10.6	10.4	10.4	10.6
20063164A0	2008	Assay	≥ 10.0 %	10.5	10.6	10.8	10.7	10.8	10.5

#### Intermediate stability results

Beta-Carotene 10% DC stored at 30°C ± 2°C/65% r.h. ± 5% r.h. (m: months)

Batch	Start of the study	Parameter	Specification	Start	9 m	12 m	18 m	24 m	36 m
73066264A0	2008	Assay	≥ 10.0 %	10.5	10.7	10.4	10.6	10.8	10.4
02062864A0	2008	Assay	≥ 10.0 %	10.3	10.5	10.5	10.4	10.4	10.6
20063164A0	2008	Assay	≥ 10.0 %	10.5	10.6	10.5	10.6	10.6	10.7

#### Accelerated stability results

Beta-Carotene 10% DC stored at 40°C ± 2°C/75% r.h. ± 5% r.h. (m: months)

Batch	Start of the study	Parameter	Specification	Start	3 m	6 m
73066264A0	2008	Assay	≥ 10.0 %	10.5	10.4	10.5
02062864A0	2008	Assay	≥ 10.0 %	10.3	10.3	10.4
20063164A0	2008	Assay	≥ 10.0 %	10.5	10.4	10.5

### Conclusion:

Based on the results listed above, Beta-Carotene 10% DC is stable for at least 36 months, when it is stored in the original unopened bag at max. 25°C.

Transport temperature: max. 50°C.

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