

Technical data sheet

ALBERDINGK® 12-HSA Flakes 51

Characteristic:

12-Hydroxy Stearic Acid (12-HSA) is a wax-like odourless substance usually used in form of cream-coloured or white flakes or powder. It is derived from Castor Oil (extracted from the seeds of "Ricinus communis L.") by hydrogenation and hydrolysis. The content of 12-HSA in the fatty acid of hydrogenated Castor oil is about 83-90%.

| Specification: | | | According to: |
|---------------------------|------------|----------|------------------------|
| Acid value | mg KOH/g | min. 175 | AOCS Cd 3d-63 |
| Gardner colour value | | max. 3 | AOCS Td 1a-64 |
| Iodine value acc. to Wijs | g Iod/100g | max. 3 | AOCS Cd 1d-92 |
| Hydroxyl value | mg KOH/g | min. 157 | AOCS Cd 13-60 |
| Melting point | °C | min. 73 | AOCS Cc 1-25 |
| Saponification value | mg KOH/g | min. 180 | AOCS Cd 3-25 |
| Nickel content | ppm | max. 1 | ISO 17294-2/ISO 11885 |
| 12-HSA content | % | min. 83 | calculated from OHV/AV |

Applications:

12-Hydroxy Stearic Acid is widely used in the production of glycerine-free multi-purpose calcium and lithium lubricating greases. Lubricating greases produced out of 12-HSA exhibit excellent resistance to oils and fats, water and solvents and they endue a long-life stability. Besides the application in the lubricating sector, 12-HSA is an important raw material in the production of thixotropic agents for solvent-based coating systems. The production of solvent or waterborne polyesters for paints and the manufacture of wax blends and hotmelt adhesives as well as the use as a processing aid for natural and synthetic rubber are further application fields. Another important field is the use of 12-HSA in cosmetics such as deodorants.

Latest update 29.11.2024

Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax +49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 1 of 2

Alberdingk Boley, Inc. | Greensboro, NC, USA | www.alberdingkusa.com Alberdingk Resins (Shenzhen) Co.Ltd. | Shenzhen City, P.R. China | www.alberdingkchina.com



Technical data sheet

ALBERDINGK® 12-HSA Flakes 51

Properties:

12-Hydroxy Stearic Acid is a saturated C18-fatty acid. It is suitable for various chemical derivatization due to the carboxyl as well as the hydroxyl functionality.

Storage:

When stored in tightly sealed packaging, protected from light and at temperatures from + 10 °C to + 30 °C, the specification parameters remain stable for at least 12 months from the production date.

Safety:

For further information on product safety please refer to the current safety data sheet.

Notice:

* General information - the values can not be considered as part of the product specification.

Latest update 29.11.2024

Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax +49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 2 of 2

Alberdingk Boley, Inc. | Greensboro, NC, USA | www.alberdingkusa.com Alberdingk Resins (Shenzhen) Co.Ltd. | Shenzhen City, P.R. China | www.alberdingkchina.com