MANAGEMENT SYSTEM CERTIFICATE

Certificate No: 124113-2012-AE-SWE-RvA Initial certification date: 19 December 2012

Valid: 30 September 2018 - 30 September 2021

This is to certify that the management system of

Akzo Nobel Functional Chemicals AB, Ethylene Amines

Uddevallavägen 17, 444 85, STENUNGSUND, Sweden

has been found to conform to the Energy Management System standard:

ISO 50001:2011

This certificate is valid for the following scope:

Manufacturing of ethylene amines, ethanol amines,
ethylene oxide and glycols.

Surface Chemistry: Manufacturing of anionic, cationic, nonionic and
amphoteric surfactants including specialties as feed additives.

Place and date:

Barendrecht, 21 August 2018





For the issuing office:

DNV GL - Business Assurance

Zwolseweg 1, 2994 LB, Barendrecht,
Netherlands

Erie Koek

Management Representative