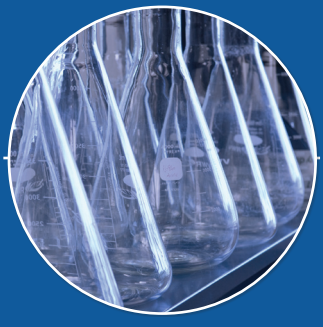
NSF International Standard /
Green Chemistry Institute /
American National Standard

NSF/GCI/ANSI 355 - 2011

Greener Chemicals and Processes Information



NSF International, an independent, not-for-profit, non-governmental organization, is dedicated to being the leading global provider of public health and safety-based risk management solutions while serving the interests of all stakeholders.

This Standard is subject to revision.
Contact NSF to confirm this revision is current.

Users of this Standard may request clarifications and interpretations, or propose revisions by contacting:

Chair, Joint Committee on Chemicals and Processes Information
c/o NSF International
789 North Dixboro Road, P. O. Box 130140
Ann Arbor, Michigan 48113-0140 USA
Phone: (734) 769-8010
Telex: 753215 NSF INTL
FAX: (734) 769-0109
E-mail: info@nsf.org
Web: http://www.nsf.org

NSF International Standard/
Green Chemistry Institute
American National Standard
for Greener Chemicals and Processes Information —

Greener Chemicals and Processes Information

Gate-to-gate information on chemical products and their manufacturing processes

Standard Developer

NSF International

NSF International Board of Directors

Designated as an ANSI Standard
August 16, 2011

American National Standards Institute

Prepared by
The NSF Joint Committee on Chemical and Processes Information

Recommended for Adoption by
The NSF Council of Public Health Consultants

Adopted
August 2011

Published by

NSF International
P.O. Box 130140, Ann Arbor, Michigan 48113-0140, USA

For ordering copies or for making inquiries with regard to this Standard, please reference the designation "NSF/GCI/ANSI 355 - 2011."

Disclaimers[1]

NSF, in performing its functions in accordance with its objectives, does not assume or undertake to discharge any responsibility of the manufacturer or any other party. The opinions and findings of NSF represent its professional judgment. NSF shall not be responsible to anyone for the use of or reliance upon this Standard by anyone. NSF shall not incur any obligation or liability for damages, including consequential damages, arising out of or in connection with the use, interpretation of, or reliance upon this Standard.

NSF Standards provide basic criteria to promote sanitation and protection of the public health. Provisions for mechanical and electrical safety have not been included in this Standard because governmental agencies or other national standards-setting organizations provide safety requirements.

Participation in NSF Standards development activities by regulatory agency representatives (federal, local, state) shall not constitute their agency's endorsement of NSF or any of its Standards.

Preference is given to the use of performance criteria measurable by examination or testing in NSF Standards development when such performance criteria may reasonably be used in lieu of design, materials, or construction criteria.

The illustrations, if provided, are intended to assist in understanding their adjacent standard requirements. The illustrations may not include *all* requirements for a specific product or unit, nor do they show the only method of fabricating such arrangements. Such partial drawings shall not be used to justify improper or incomplete design and construction.

Unless otherwise referenced, the annexes are not considered an integral part of NSF Standards. The annexes are provided as general guidelines to the manufacturer, regulatory agency, user, or certifying organization.

[1] The information contained in this Foreword is not part of this American National Standard (ANS) and has not been processed in accordance with ANSI's requirements for an ANS. Therefore, this Foreword may contain material that has not been subjected to public review or a consensus process. In addition, it does not contain requirements necessary for conformance to the Standard.

This page is intentionally left blank.

Contents

Foreword[2]

This American National Standard, NSF/GCI/ANSI 355 Greener Chemicals and Processes Information Standard, has been developed as part of the ongoing efforts of a number of interested parties to standardize information related to a chemical and its manufacturing processes in the molecular transformation phase of the chemical enterprise. Stakeholders involved in developing the Standard included chemical manufacturers, fabricators and formulators, end users, state and federal agencies, academics, and environmental non-governmental organizations.

The purpose of the Information Standard is to provide the chemical enterprise with a voluntary and standardized way to define and report environmental and human health hazards associated with a chemical product and its gate-to-gate manufacturing process impacts.

As used in this ANSI Standard, the term “should” indicates an optional reporting element where “shall” indicates a required reporting element.

Manufacturers of chemicals benefit by using NSF/GCI /ANSI 355 to develop one comprehensive report to satisfy many different requests for information from customers. This report serves as a basis for a normalized framework for business to business communication about chemicals throughout the supply chain.

Users of chemicals benefit by receiving a certified NSF/GCI /ANSI 355 report that contains complete, up-to-date, verified information from their suppliers and may be used as a foundation for informed decision making.

Comments on this Standard should be sent to NSF International, Standards Department, P.O. Box 130140, Ann Arbor, Michigan 48113-0140, USA or to standards@nsf.org.

[2] The information contained in this Foreword is not part of this American National Standard (ANS) and has not been processed in accordance with ANSI’s requirements for an ANS. Therefore, this Foreword may contain material that has not been subjected to public review or a consensus process. In addition, it does not contain requirements necessary for conformance to the Standard.

This page is intentionally left blank.

NSF International and Green Chemistry Institute
Standard for

Greener Chemicals and Processes Information

Gate-to-gate information on chemical products and their manufacturing processes

1 General

1.1 Purpose

The purpose of the Greener Chemicals and Processes Information Standard is to provide the chemical enterprise with a voluntary and standardized way to define and report the primary categories of information, their respective data elements, and data quality objectives pertaining to the relative greenness of a chemical product and its manufacturing process within one stage (i.e., gate-to-gate, as defined in 4) of its life cycle. This information shall be provided by suppliers to communicate clearly, with transparency and consistency, to help customers evaluate the relative greenness of a chemical product and process. The intent is for this information to be informative to life cycle assessments, but is not a life cycle assessment itself.

The Standard further stipulates reporting a minimum set of social responsibility criteria that are applied to the product and process claiming conformance.

For the purposes of this Standard, greener refers to the relative measure of ecosystem and human health impacts of a chemical and its process when compared to the same or similar chemical and its process.

1.2 Scope

This Standard applies to products and processes at facilities in any global location(s). Corporate-level aspects such as social responsibility apply irrespective of the location of the corporate headquarters, business incorporation, or facilities associated with the conforming product and process. Facility-level aspects are limited to only those facilities where the conforming product and process is located.

Each data element shall be addressed for both the conforming product and the process used to manufacture the product as specified by conformance pathways (optional or required) described in each section.

The scope of the Standard is limited to gate-to-gate (as defined in 4) or the molecular transformation phase of the chemical product and its processes and is depicted in 2.2.3 Establishing Process Boundaries.