

# **Dow Silicones Global Management System**

#### Dear Customer,

As a business unit within the Dow Consumer Solutions business, Dow Silicones is a global supplier of silicon-based materials with sites in the Americas, Europe, and Asia Pacific. The organization's management system supports our global registrations to ISO9001 and ISO14001. Our global ISO9001 certificate which includes a list of our registered sites is available on our website, <u>consumer.dow.com</u>. Additional information about our locations, financial results, and how our products and technology help customers meet their needs can be also found on our website as well as on <u>dow.com</u>.

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# **Dow Silicones at a Glance**

Dow Silicones was established in 1943 as *Dow Corning Corporation* specifically to explore the potential of silicones. It was created as a joint venture between Corning Glass Works (now Corning, Incorporated) and The Dow Chemical Company. Today, Dow Silicones is a wholly owned subsidiary of the Dow Chemical Company.

Dow Silicones provides performance-enhancing solutions to serve the diverse needs of more than 25,000 customers worldwide. A global leader in silicon-based technology and innovation, offering more than 7,000 products and services, more than half of Dow Silicones' annual sales are outside the United States.

Financial information can be found on Dow's website, <u>http://www.dow-dupont.com/investors/default.aspx</u>

Industry Expertise		
Automotive	Paints & Inks	
Beauty & Personal Care	Paper	
Chemical Manufacturing	Power & Utility	
Construction	Pressure Sensitive	
Electronics	Rubber Fabrication	
Food & Beverage	Solar	
Healthcare	Semiconductor	
Household & Cleaning	Textiles, Leather & Nonwovens	
Imaging		

# **Dow Silicones Vision and Mission Statements**



# **Dow Code of Business Conduct**

The Diamond Standard, Dow's Code of Business Conduct, summarizes many of the ethical principles and policies created to deal with issues such as bribery, political contributions, equal employment opportunity, and environment, health and safety. All of us at Dow, no matter where we happen to live, are expected to apply these principles in the daily performance of our job responsibilities.

A copy can be downloaded at <u>https://www.dow.com/en-us/about-dow/our-</u> company/codes-of-conduct/code-of-business-conduct

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**Dow Quality Policy** 



The Dow Chemical Company

# The Dow Chemical Company Quality Policy

Quality Performance is a commitment to excellence by each Dow employee. It is achieved through teamwork and continual improvement.

We are dedicated to being a leader in providing quality products and services that meet or exceed the requirements of our customers and all of our key stakeholders.

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# **Dow Silicones Management System**

The Dow Silicones global management system is supported by our business processes. This document explains how the eight quality management principles defined in ISO9001 are addressed and how we address the requirements of the standard.

#### The eight quality management principles

The eight quality management principles are an integral part of our company culture.

#### **Customer Focus**

Customers are one of our values, and we are focused on understanding their current and future needs, and meeting those needs exactly.

#### Leadership

Establishing unity of purpose in all Dow Silicones businesses, our management is committed to create and maintain an internal environment that enables people to become involved in achieving our objectives.

#### **Involvement of People**

All Dow Silicones employees are encouraged to participate in problem resolution and generation of new ideas (innovation) for business. An internal award system recognizes the best contributors.

#### **Process Approach**

Dow Silicones introduced Business Processes in 1996. Our process approach has allowed Dow Silicones to become more effective in transforming customer requirements in solutions that meet expectations exactly.

#### **Continual Improvement**

Through our continual investment in quality, Dow Silicones has developed an integrated management system and has achieved a global ISO9001 registration under a single certificate, providing customers with a consistent solution wherever they operate in the world.

#### **Factual Approach to Decision Making**

Dow Silicones has many sources of data. We use SAP (Enterprise Resources Planning), internal websites (including statistical techniques and tools) and we assure that effective decisions are based on factual data.

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#### **Mutually Beneficial Supplier Relationships**

Viewing all of us (suppliers, Dow Silicones and customers) as a global supply chain, we develop strong relationships with our suppliers to better satisfy customer needs and achieve benefits for all.

#### System Approach to Management

The processes and tools to achieve Operational Excellence are available in our Operating Discipline Management System (ODMS) documentation which is based on the Plan-Do-Check-Act (PDCA) cycle.

**Dow Silicones Operating Discipline Management System (ODMS)** 

# POLICY & LEADERSHIP PLAN ACT DO CHECK

From Dow Silicones internal Operating Discipline Management System (ODMS), employees can link to the procedures and tools that allow them to effectively contribute to customer satisfaction, sustainability and Responsible Care®.

# **Policy and Leadership**

Top management establishes a Vision and a Strategy for Dow Silicones, taking into account the inputs from stakeholders. Policies are defined to implement the Vision and the Strategy, with due consideration of Dow Silicones' Values.

### Inputs and stakeholders' expectations

Inputs and stakeholders include shareholders, customers, employees, neighbors, commercial partners, as well as legal, regulatory, and other requirements.

### **Customer Requirements**

Several processes allow us to collect data on customer requirements:

- Customer Relationship Management tool
- Customer Specification Process
- Product Development Process

# Plan

Dow Silicones Corporation Version 22, 26Feb2018 Page 8 of 20 Aligned with our Vision, Values, Strategy and stakeholder expectations, global objectives and key performance indicators are developed and cascaded in the organization. Goals and programs consider customer requirements, hazards and risks associated with products and processes, as well as applicable legal requirements.

#### **Goals and Results**

Goals and performance are reported to and reviewed by management, including:

- Environmental, Health, and Safety performance improvement goals
- Quality goals
- Customer satisfaction index
- Employee satisfaction

#### **Strategy Deployment**

To address stakeholder expectations and implement the Vision, Key Strategic Priorities are defined and supported by performance measures. Global objectives are developed and cascaded through the organization.

#### Legal, regulatory and other references

External and internal references are reviewed to ensure compliance with the appropriate standards, such as automotive standards or Dow Silicones corporate test methods.

#### Do

To achieve the objectives and meet stakeholder expectations, Dow Silicones manages, operates, monitors and improves our processes. Implementation includes developing and maintaining systems and procedures to meet customer requirements and control identified hazards, while providing for emergency preparedness and communication with employees and other stakeholders.

#### **Customer Relationship Management**

Processes associated with managing customer information and developing stronger customer relationships are included in Customer Relationship Management.

#### **Opportunity Development**

Opportunity Development starts with the identification of and support for a new or modified product/market/process opportunity that represents a customer/market need or has a potential cost reduction or technological advantage for Dow Silicones. It ends with the successful realization of the opportunity by achieving implementation of the process improvement or New in Year Sales.

#### **Customer Order & Product Fulfillment**

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This is the process that transforms customer requirements into products and services that meet customer expectations exactly. The process contains the following examples of sub-processes:

- Customer Order Fulfillment
- Customer Financial Services
- Customer Feedback Management
- Planning, Scheduling & Management of Inventory
- Production, Product Costing
- Customs
- Packaging, Labeling, Transportation, and Regulatory Compliance

- Plant Maintenance
- Procurement
- Quality Management
- Inventory and Delivery Execution
- Facilities Design and Asset Management
- Intellectual Asset Protection
- Safety Management

#### **Roles, Responsibilities, and Management of Resources**

Several processes exist to make sure that employees have the right competency for the job they perform and have access to training they need to improve their skills:

- Performance Improvement Process
- Learning and Development Process
- Job Posting Site
- Employee Qualification Guideline

Resources in general are taken into account via several processes, including the Dow Silicones business project management processes, product development process, improvement processes, and capital planning process.

# Check

Dow Silicones regularly measures and evaluates performance including customer satisfaction and compliance to regulatory and other requirements. Internal audits, compliance evaluations, and the monitoring of customer feedback and operational controls are conducted.

#### **Verification and Measurement**

Process effectiveness is measured at different levels. The data are analyzed, trends identified, and corrective actions are defined to continually improve effectiveness of the processes and the overall system.

- The global quality objectives contain measures on our key processes. They are related to customer requirements.
- Process managers monitor health measures to assess effectiveness of processes and sub-processes.

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• Supply Chains monitor process capability for key manufacturing processes.

# **Customer Satisfaction / Distinction**

We have several sources of information to assess satisfaction of our customers:

- Our customer feedback management process allows us to document positive feedback as well as customer complaints.
- Customer Surveys include data on perceived quality which are input to the Customer Satisfaction Index (CSI). The CSI is analyzed for trends and follow-up actions toward overall performance improvement.

# Act

Senior management periodically reviews the continuing suitability, adequacy and effectiveness of the management system. When necessary, changes are made to address the root cause of issues identified, to enhance performance and to continually improve. The objective of this process is to deliver the results to meet stakeholder expectations and achieve satisfaction of the interested parties.

# **Output/results**

The system will deliver the desired results to meet the stakeholder expectations and achieve satisfaction of the interested parties. This last element of the Dow Silicones Management System includes Feedback and Reporting.

### **Continual Improvement**

Continual improvement is a key output of Dow Silicones' Operating Discipline Management System and the Plan-Do-Check-Act (PDCA) cycle. Analysis of performance data and audit results lead to continual improvement of our processes and overall management system.

# How Dow Silicones addresses the ISO9001:2015 requirements

## 4. Context of the Organization

# The Dow Silicones Operating Discipline Management System (ODMS) documents how Dow Silicones...

- Determines and understands external and internal issues that affect our ability to achieve our goals and execute our strategy through various means. Inputs come directly from interested parties such as Dow corporate leadership, customers, regulators, suppliers, employees, and others. These inputs are built into our strategic goals and directions.
- Has identified its processes and their application throughout the organization, their sequences and their interactions. These are described in global Operating Discipline Management System (ODMS) documents.
- Has identified criteria and methods that ensure that both the operation and control of these processes are effective.
- Ensures availability of resources and information necessary to support the operation and monitoring of these processes.
- Monitors, measures and analyzes these processes.
- Implements necessary actions to achieve planned results and continual improvement of the processes.

Local process maps describe processes that apply locally, as well as interactions with other processes. When appropriate, local measures are defined.

# 5. Leadership

# 5.1 Leadership – Leadership & Commitment

• Top management communicates to the organization regularly about Dow Silicones' commitment to meet customer requirements, exactly.

# 5.1 Leadership – Customer Focus

• Top management demonstrates commitment and support to customer focus by providing resources for improvement projects, product development projects, customer surveys and deployment of tools to better understand customer requirements (Customer Relationship Management).

## **5.2 Quality Policy**

The global Dow Quality policy has been deployed in all locations and employees understand how they contribute to customer satisfaction.



# 6 Planning and Objectives

Every year, Dow Silicones defines global quality objectives that are deployed in the organization. These can include product and process capability measures, lead-time, effectiveness of product development process, customer satisfaction, etc. Local quality objectives are aligned to global objectives.

### 5.5 Roles and Responsibilities, Communication

- A Roles and Authority grid defines how each function contributes to the Quality Management System.
- Communication is provided via several channels, for example, intranet websites, global quality professionals' network, and employee forums.
- There are Quality Associates, Quality Systems Specialists and Quality Coordinators for the QMS at global and local levels.

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# 7. Support

# 7.1 Support – Resources

- Resources needed to continually improve the effectiveness of the system are determined during management reviews.
- Main processes for resource prioritization are product development process, project management process, capital and expense management.

# 7.1 Support – People

Competency of job performance and training effectiveness is indicated by any of the following:

- The employee's ability to meet personal performance objectives is reviewed via a Performance Improvement Process (PIP).
- Completed training/awareness checklist and/or quizzes.
- Compliance to mandated requirements, as specified within the compliance management process.
- Via the collective unit's ability to meet objectives.

The Performance Improvement Process also includes personal profile and development plans.

# 7.1 – Support – Infrastructure

- Dow Silicones uses SAP (Enterprise Resources Planning) for almost all transactional activities.
- Our Global Operating Discipline Management System documentation is available on Dow Silicones' intranet.
- Computer-based system is used to capture customer requirements and manage the portfolio of projects.
- Global Network of quality professionals exists to share opportunities for improvement and best practices.
- Common IT hardware is utilized at all sites to support Outlook and Windows software suites.

# 7.1 Support – Work Environment

Dow Silicones provides a safe and ethical work environment to all employees through the development and deployment of the Operating Discipline Management System which addresses the elements of environment, health, safety, security and Responsible Care®.

Employee surveys are conducted regularly to seek employee input in an effort to define improvement opportunities.

# 7.5 Documentation Requirements

Dow Silicones developed a web-based global Operating Discipline Management System (ODMS) manual that provides policies, standards, and guidelines to how we accomplish our work.

The ODMS manual also supports Environment, Health, Safety, and Security (EHSS) and Responsible Care® commitments in compliance with ISO14001 in addition to ISO9001.

Contents include:

- The scope of the Quality Management System, including details of, and justifications for, any exclusions.
- Links to the documented procedures and other necessary documents.
- Process maps describing interactions between processes.

# 8. Operation

# 8.1 Operational Planning & Control

- Product realization planning is done within the product development process and in the documentation of quality objectives and requirements for the product.
- Responsibility & Authority are defined and documented.

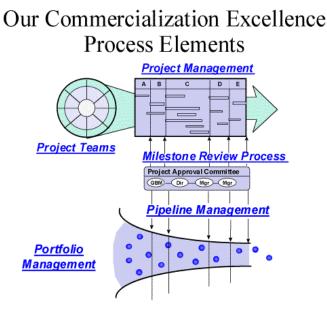
# 8.2 Requirements for Products and Services

- Customer Service web site & global processes.
- Product development process, including identification of customer needs.
- Customer Relationship Management process and tools.
- Global procedures for:
  - Customer specification process
  - Product change control and notification to customers

# 8.3 Design and Development

Commercialization Excellence is Dow Silicones' product development process:

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# 8.4 Control of Externally Provided Processes, Products, & Service

Procurement is organized at a global level and provides support for all sites on the following processes:

- Global Procurement process
- Vendor feedback system: allows Dow Silicones employees to provide feedback on purchased materials or vendors
- Vendor Evaluation and Re-evaluation: system to assess vendor performance
- Outsourced manufacturing process

### 8.5 Production & Service Provision

All production planning is supported by SAP and the following processes:

- Planning, Scheduling & Management of Inventory
- Production, Product Costing
- Plant Maintenance
- Quality Management
- Customs
- Inventory and Delivery Execution

#### 8.6 Release of Products and Services

Release of materials is managed through our global SAP-based ERP system.

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# 8.7 Control of Nonconforming Outputs

Dow Silicones has defined global processes for managing non-conforming products and retrieving products at the customer including:

- Management of Non-Conforming Product: Describes the control of nonconforming products manufactured by Dow Silicones as well as purchased raw materials or packaging components.
- Corrective and Preventive Actions: Describes management of corrective and preventive actions.

### **9** Performance Evaluation

### 9.1 Monitoring, Measurement, Analysis and Evaluation

- Many continual improvement initiatives exist at all levels of the organization.
- SAP is used to document and manage Quality preventive and corrective actions.

#### 9.1.2 Customer Satisfaction

- The Customer Relationship Management tool allows the capture and follow-up on customer requirements.
- Customer satisfaction (and/or dissatisfaction) is measured through several processes: customer feedback management system, customer surveys, and customer audits.

### 9.2 Internal Audit

- Dow Silicones conducts process-oriented internal audits.
- Global and local Quality audit process and programs are in place.
- Auditors are trained to assess process effectiveness through site assessments conducted globally.
- Assessment tools exist globally to provide consistency across sites.
- Audit plans are based on previous audit results.

### 9.3 Management Review

A global management review team, including the Chief Executive Officer of the company, Global Executive Directors and Global Quality System Leaders is in place to review the effectiveness of the Global Quality Management System

#### **10 Improvement**

#### **10.2 Nonconformity and Corrective Action**

SAP and E&AT (Event & Action Tool) are used to document and follow-up on corrective actions from customer complaints, audits, and employee reporting.

#### **10.3 Continual Improvement**

Continual improvement actions and projects are determine based on consideration of the results of analysis and evaluation, and with the outputs from management review. Risks and opportunities are addressed as part of continual improvement.

# **REACh – Registration, Evaluation, Authorization of Chemicals**

**REACh** (Registration, Evaluation and Authorisation of Chemicals), the most significant change in the European Union's (EU) chemical management history, went into effect in June 2007. While REACh is a EU regulation, it applies to materials coming into the region from around the world, making the law a global compliance matter. Visit <u>www.consumer.dow.com</u> for additional information.

# Environmental, Health, and Safety

# **Product Stewardship, Product Risk Characterization, Management and Communication**

#### Characterization

Dow Silicones has a Product Documentation Management (PDM) system that is the basis for directing the production and distribution of its products. This system documents the chemical composition of Dow Silicones's raw materials and products. The detailed composition, along with product application and use information, is reviewed by experts in the Health and Environmental Opinion (HEO) process to determine if enough safety information exists for the intended uses of the product. In addition, during the product/process development phase, a Life Cycle Screen process is used to minimize waste streams and other impacts on the environment.

Communication

Dow Silicones Corporation Version 22, 26Feb2018 Page 19 of 20 Dow Silicones communicates product safety information through Material Safety Data Sheets (MSDSs). In some instances for selected products, Dow Silicones has developed toxicology summaries, bulletins, fact sheets, and/or videos aimed at ensuring safe and responsible use.

The Product Stewardship processes summarized above allow for evaluation of both potential concerns and opportunities from environmental, societal and business perspectives. Consistent use of this approach helps us determine where and how our products can be used – preserving the commercial freedom of our businesses, enabling our Values and Sustainability Guiding Principles, and protecting human health and the environment.

# **Dow Silicones Insurance Coverage**

Dow Silicones Corporation negotiates insurance coverage annually for itself and on behalf of all its legal entities.

Dow Silicones legal entities are insured for General Liability and Product Liability (including bodily injuries and property damage).

# LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

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