Supplier Quality and Sustainability Requirements Manual

for Non-Chemical Products

delivered to

Ascorium Industries

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Note: Amendments to the previous version are marked in ***blue***.

1. SCOPE

This document obliges supplier and customer on mutual cooperation in relation to the product and its realization, and the fulfillment of all quality, economical, and environmental targets. During the product's lifetime, all parties strive to implement continuous improvement programs.

1.1 The contents of the manual are the minimum mandatory quality and sustainability requirements for suppliers of non-chemical products (plastic parts, tapes, screws, etc. …) to ***Ascorium Industries (called hereafter 'Ascorium')*** in order to be an ***Ascorium*** approved supplier.

1.2 For every project, more specific product, process, and quality requirements have to be agreed upon with the project leader/engineer and the local quality responsible.

1.3 Supplier quality and sustainability requirements manual has to be applied in compliance with general purchase terms and conditions.

2. PURPOSE

The purpose of this manual is to clearly communicate ***Ascorium***'s expectations and supplier quality and sustainability requirements. The actual version is available on our webpage www.ascorium.com. It's up to the supplier to monitor and fulfil the latest version of the supplier quality manual.

Ascorium emphasizes continuous improvement of quality, efficiency, delivery performance, customer requirements and expectations. Our quality performance is dependent on you as a supplier and cooperation through the supply chain in general. OEM-related specifications and standards are applied in our internal processes. These specifications and standards automatically apply to the suppliers.

Accordingly, our suppliers are committed to

a) ensure customer satisfaction

b) conform to product and quality requirements with focus on **zero defects strategy**

c) continuously improve processes, supplied products, and productivity and reduce variation and waste

d) manage processes to consistently and cost-effectively produce products and furnish services conforming to our requirements

e) control and track changes in process / product lifetime

f) undertake to ensure the traceability of products

g) manage their business in a sustainable way (see also annex 1).

Our requirements are an integral and legally binding aspect of our purchase orders.

3. DOCUMENTATION & COMMUNICATION

Documentation and communication will be in English, unless otherwise agreed and confirmed by SQM (Supplier Quality Management) (see 9: ***Ascorium*** contact persons). Suppliers have to proactively communicate towards their customer and to notify him in time about the potential risks and process / product changes.

4. SUPPLIER APPROVAL & QUALITY MANAGEMENT SYSTEM REQUIREMENTS

A Supplier must obtain and maintain an "Approved" status, which is assigned based upon the following basic requirements:

4.1. The supplier manufacturing location is required to have a third party certified Quality Management System (min. ISO 9001 ; pref. IATF 16949). The actual certificates must be submitted annually to Ascorium.

4.2. As all ***Ascorium*** plants are IATF 16949 certified or are in the process of being certified, ***Ascorium*** performs supplier quality management system development with the goal of conformity with this quality management system. Consequently, our suppliers have to fulfil the following performance requirements:

a) no modification to the delivered product without prior ***Ascorium*** approval
b) utilisation of the ***Ascorium*** defined PPAP process (Production Part Approval Process - see 6) / EMPB – on time, complete and accurate – for all delivered products
c) monitoring of process and product quality performance
d) continuously improve, with a focus on defect prevention and reduction of variation and waste in the supply chain
e) ensure 100% on-time delivery
f) compliance with government, safety and environmental regulations
g) submission of SQC (Statistical Quality Control)-results as defined and agreed in the specific product, process, and quality requirements (see 6.3)
h) full responsibility for non-conforming products and their effects, including financial aspects
i) report to SQM or local quality representatives within the defined time frames in case of corrective action reports
j) use of a project / quality planning format (see 5)

These additional requirements can be further discussed and explained by SQM during a meeting with the supplier.

4.3. Each approved ***Ascorium*** supplier is responsible for the control (quality system, change management, document control, process control, performance…) of its subsuppliers.

4.4. The supplier agrees to accept ***Ascorium*** 's sustainability requirements, as described in Annex 1.The acceptance is part of the approval process.
Alternatively, supplier's own sustainability policy can be accepted but only in case all items and requirements as described in Annex 1, are covered.

4.5. TISAX (Trusted Information Security Assessment Exchange) as a security standard must be implemented at the supplier to guarantee that all data / confidential information and product protection are taken into account and established.

4.6. ***Ascorium*** reserves the right to visit and audit sub-suppliers if required.

5. QUALITY PLANNING

5.1 Project Management

For every new project or process / product change, the supplier shall define and document how the quality requirements will be met using a project management methodology. A multi-disciplinary team should use appropriate techniques e.g. the APQP (Advanced Product Quality Planning) -process .

From initial product concept through production, the supplier and ***Ascorium*** must understand and agree on all applicable quality requirements: special characteristics, control items, checking fixtures, packaging requirements and other quality related matters.

5.2. Initial project meeting

In case of a new project, an initial project meeting will be organised by ***Ascorium***. Technical, quality, purchasing, supplier quality… representatives will be present as required in order to provide the supplier with all necessary information and requirements.

5.3. Special characteristics

Any special characteristics defined by ***Ascorium*** will be discussed during the initial project meeting, including marking, symbols, and follow-up.

5.4. Feasibility reviews

Feasibility is an assessment of the suitability of a design/material/process while conforming to all engineering requirements at the required statistical process capability and at specified volumes.

Feasibility will be discussed during the initial project meeting and has to be documented by the supplier.

5.5. FMEA (Failure Mode and Effects Analysis)

In case of special characteristics (see 5.4), the use of FMEA will be discussed during the initial project meeting.

5.6. Engineering Prototype Sample Submission

Prototype parts shall be submitted by the supplier for validation by ***Ascorium*** . Each prototype sample must be accompanied by a complete report including at least dimensional results, material test results and performance test results, unless waived by the ***Ascorium***'s project leader/engineer. Details must be discussed with ***Ascorium*** 's project leader/engineer.

5.7. *Ascorium* Run@rate

In order to physically verify that the production process is capable of producing quality products at quoted rates, an ***Ascorium*** Run@rate (based on the Run@rate of GM) can be performed.
If so, details must be discussed with ***Ascorium***'s project leader/engineer.

6. PPAP (Production Part Approval Process)

The standard product approval process within ***Ascorium*** l is PPAP (Production Part Approval Process). However, some of our customers may require another product and manufacturing process approval procedure to be applied to our supplier: e.g. German customers may require PPF (Produktionsprozess und Produkt Freigabe Verfahren) instead of PPAP and consequently EMPB (Erstmusterprüfbericht) instead of PSW (Part Submission Warrant).

6.1. When is PPAP required?

PPAP is required in case of deliveries of:
a) a new part (= initial submission)
b) a modified product:
   - engineering change(s)
   - change in part processing
   - delivery from another production plant
c) a correction of discrepancy

Any modification of the product must be communicated to ***Ascorium*** 's project leader/engineer or ***Ascorium*** 's plant quality representative prior to making the change.

6.2. What are the PPAP requirements?

6.2.1. PSW (Part Submission Warrant) / EMPB:
The PSW-form of ***Ascorium*** (see example in annex) has to be used.

6.2.2. Information to be submitted:
- according to the IMDS (International Material Data System), in which all materials used in car manufacture are archived and maintained, it is requested:
  - to complete the IMDS-database with the supplied product(s) (to be found on the website www.mdsystem.com , free registration)

- to complete the question (see PSW-6.2.1) on heavy metals: Lead Pb, Mercury Hg, Cadmium Cd or hexavalent Chromium Cr (VI)
- to complete the question (see PSW-6.2.1) on reportable substances of the ILRS-list, this list can be found on the website www.mdsystem.com

- Completion of the question on Reach: substances and/or preparations, delivered to ***Ascorium*** , must comply with the requirements of the European Regulation (EC) 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
- product sample(s)
- dimensional results
- material and functional test results
- appearance results (if applicable)
- capability results on a significant production run (as defined in the specific product and/or process requirements – see 6.3)
- an inspection and testing plan for all incoming, in-process and final controls

6.2.3. Information to be retained:

- master sample(s)
- SQC-results (as defined in the specific product and/or process requirements – see 6.3)

6.3. Specific product, process and quality requirements

Other, more specific product, process and quality requirements will be further discussed by ***Ascorium*** 's project leader/engineer. These requirements need to be registered and documented (see 5.3).

7. MANUFACTURING PROCESS AND PRODUCT DELIVERIES

7.1. NoC (Note of Complaint) / Car (Corrective Action Request / Report)

Whenever a quality problem arises, the supplier will be notified through a NoC / CAR by letter or e-mail. The type of complaint can be logistically, administratively, qualitatively, safety- and/or environment-related, or service-related. The administration fee is 300 € and will be charged to the supplier.

Depending on the severity and/or frequency, an immediate action and/or a corrective action can be necessary.

Immediate action has to been taken within 24 hours. Permanent corrective action has to be taken within 10 working days since the NoC was created.

In case of complaints, all costs (at ***Ascorium*** as well as at our customer's site) due to the complaint and due to machine stops, will be invoiced to the supplier.

All non-conforming products need to be exchanged or reworked for, respectively into conforming products without any charge.

7.3. Containment

7.3.1. Containment is accomplished through deployment of additional controls in the suppliers manufacturing process to identify (potential) non-conformance and to prevent it from delivering to ***Ascorium*** .
Additional controls will be defined case by case.

7.3.2. Level I containment

a) Defined as additional controls implemented at the supplier's location upon ***Ascorium*** 's request.
b) The supplier is required to quarantine and sort all suspect products within their plant, at their subcontractors, in transit and at ***Ascorium*** 's facilities.
c) Upon classification of an issue, the ***Ascorium*** plant quality representative and/or SQM will initiate containment activities by sending a "Level I" letter to the supplier.
d) During a "Containment meeting", ***Ascorium*** 's plant quality representative and/or SQM will discuss further details, including criteria for exiting "Level I".

7.3.3. Level II containment

a) Defined as additional controls implemented by an impartial third party selected by ***Ascorium*** .
b) Whenever "Level I" containment fails, the ***Ascorium*** plant quality representative and/or SQM will initiate further containment activities by sending a "Level II" letter to the supplier.
c) During a "Containment meeting", ***Ascorium*** 's plant quality representative and/or SQM will discuss further details, including criteria for exiting "Level II".

7.4. Packaging & Labelling

Each container, rack, box, or pallet of material shipped to ***Ascorium*** shall be identified as instructed by Ascorium's project leader/engineer.

7.5. Delivery requirements

- Deliveries shall respect FIFO (First In – First Out).
- Unloading times for ***Ascorium*** plants need to be respected (available on request).
- EDI has to be installed and used as a tool of interface for communication

8. SUPPLIER PERFORMANCE MONITORING

8.1. Initial evaluation

For new suppliers, an initial screening will be done by SQM. Purchasing, SID (Sustainable Innovation Department) , Production and / or Project Management representatives can be part of the evaluation team.

A process audit can be part of this initial evaluation. Supplier will be asked to send a self-assesment as a first input in advance.

8.2. Performance reporting

Ascorium will send a "Supplier Performance Evaluation" to the supplier on a monthly basis. This will contain information on supplier's performance based on:

- Pricing
- Operational performance
- Managerial assessment
- product performance (ppm results vs target)
- delivery performance (on-time deliveries,…)
- customer support / quality of communication
- SQ performance (audit results, quality of PPAP documentation,…)

In case performance is below the expected level, this report will include a request for supplementary corrective actions. The supplier will be evaluated on base of our internal criteria (**A** = 100 – 80 points, **B** = 79 – 60 points, **C** = 59 – 0 points). Only the suppliers which are evaluated in ranking A or B can be released for further supply into Ascorium.

8.3. Process or product audits

Ascorium reserves the right to perform a process or product audit at supplier's facility whenever necessary. This will always be announced in advance.

9. APPROVALS & CONTACT INFORMATION

9.1 Approvals

This SQRM was reviewed and approved by:

Dr. Jochen Luft,	Ascorium Industries CEO jochen.luft@ascorium.com
Dr. Geert Trossaert,	Ascorium Industries VP R&D, Quality, HSE and Sustainability geert.trossaert@ascorium.com
Radek Foltyn	Group Purchasing Manager radek.foltyn@ascorium.com

9.2 Contact information *Ascorium* Europe

Responsibility	Name & title	Contact information
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Quality	Hybner Jiří SQA	jiri.hybner@ascorium.com Tel.: +420 326 377 121

9.3 Contact information *Ascorium* North America

Responsibility	Name & title	Contact information
	Cal Kuykendall	Cal.Kuykendall@ascorium.com Tel.: +1 205 861 1324
	Anca Iordachianu	anca.iordachianu@ascorium.com Tel.: +1 248 241 9160

9.4 Contact information *Ascorium* China

Responsibility	Name & title	Contact information
Quality	Alan Chen	alan.chen@ascorium.com Tel.: +86 13776366477

10. SUPPLIER ACCEPTANCE

Supplier Quality and Sustainability Requirements Manual for non-chemical products delivered to ***Ascorium*** accepted.

Comments:

Quality Manager	**Contact person for *Ascorium***
Name:_____	Name:_____
e-mail:_____	Function:_____
Date:_____	Date:_____
Signature:_____	Signature:_____

11. Annex 1

Ascorium Supplier Sustainability Requirements (ASSR)

See Website www.ascorium.com

Annex 2

Part Submission Warrant (PSW)

PPAP 4th Edition

Part Name _____ Cust. Part Number _____

Shown on Drawing No. _____ Org. Part Number _____

Engineering Change Level _____ Dated _____

Additional Engineering Changes _____ Dated _____

Safety and/or Government Regulation ☐ Yes ☐ No Purchase Order No. _____ Weight '(kg) _____

Checking Aid No. _____ Checking Aid Engineering Change Level _____ Dated _____

ORGANIZATION MANUFACTURING INFORMATION

Organization Name & Supplier/Vendor Code

Street Address

City Region Postal Code Country

CUSTOMER SUBMITTAL INFORMATION

Customer Name/Division

Buyer Code

Application

MATERIALS REPORTING

Has customer-required Substances of Concern information been reported? ☐ Yes ☐ No ☐ n/a

Submitted by IMDS or other customer format: _____

Are polymeric parts identified with appropriate ISO marking codes? ☐ Yes ☐ No ☐ n/a

REASON FOR SUBMISSION (Check at least one)

- ☐ Initial Submission
- ☐ Engineering Change(s)
- ☐ Tooling: Transfer, Replacement, Refurbishment, or additional
- ☐ Correcton of Discrepancy
- ☐ Tooling Inactive > 1 year
- ☐ Change to Optional Construction or Material
- ☐ Supplier or Material Source Change
- ☐ Change in part Processing
- ☐ Parts Produced at Additional Location
- ☐ Other - please specify below

REQUESTED SUBMISSION LEVEL (Check one)

- ☐ Level 1 - Warrant only (and for designated appearance items, an Appearance Approveal Report) submitted to customer.
- ☐ Level 2 - Warrant with product samples and limited supporting data submitted to customer.
- ☐ Level 3 - Warrant with product samples and complete suporting data submitted to customer.
- ☐ Level 4 - Warrant and other requirements as defined by customer.
- ☐ Level 5 - Warrant with product samples and complete supporting data reviewed at organization's manufacturing location

SUBMISSION RESULTS

The results for ☐ dimensional measurements ☐ material and functional tests ☐ appearance criteria ☐ statistical process package

These results meet all design record requirements: ☐ Yes ☐ NO (If "NO" - Explanation required)

Mold / Cavity / Production Process _____

DECLARATION

I affirm that the samples represented by this warrant are representative of our parts which were made by a process that meets all production Part Approval Process Manual 4th Edition Requirements. I further affirm that these samples were produced at the production rate of …. / ….. hours.
I also certify that documented evidence of such a compliance is on the file and available for review. I have noted any deviations form this declaration below.

EXPLANATION/COMMENTS: _____

Is each Customer Tool properly tagged and numbered? ☐ Yes ☐ No ☐ n/a

Organization Authorized Signature _____ Date _____

Print Name _____ Phone No. _____ FAX No. _____

Title _____ E-mail _____

FOR CUSTOMER USE ONLY (IF APPLICABLE)

PPAP Warrant Disposition: ☐ Approved ☐ Rejected ☐ Other

Customer Signature _____ Date _____

Print Name _____ Customer Tracking Number (optional) _____

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Change history table:

Revision:	Sec/Para Changed:	Change Made:	Date:
1-5	N/A	Initial Issue of Document	
6.	N/A	Addition of Sustainability Requirements Addition of the SQRM to QSI	‘08/2014
7.	N/A	Update Sustainability requirements	‘08/2019
8.	N/A	Update Sustainability requirements	‘02/2020
9.	N/A	Update Sustainability requirements	‘06/2020
10.	N/A	Switch to Ascorium Industries	‘04/2021
11.	N/A	Several clarifications	‘03/2024