

Site Quality Self-Assessment

based on

Rx-360 Supplier Assessment Questionnaire

Module 2, Site Specific Information

Relevant for

Sigma Aldrich Chemie GmbH Sigma Aldrich Produktions GmbH Riedstrasse 2, 89555 Steinheim Germany

An affiliate of Merck KGaA, Darmstadt, Germany

The site Self-assessment covers our quality management system for the following regulated applications:

- Manufacturing and packing of food & flavours & fragrences
- Manufacturing and packing of reagents and chemicals for research use



Merck KGaA, Darmstadt, Germany is an active member of the Rx 360 Consortium

As a trusted partner of our customers, we deliver quality - always.

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Information

This document is based on the Rx-360 Consortium's Supplier Assessment Questionnaire template, Module 2. The contents of this questionnaire are built on the Rx-360 questionnaire version 2.0 intact with no question added or deleted.

Rx-360's CEO/COO gave permission to Life Science to use the Rx-360 logo.



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Rx-360 Supplier Assessment Questionnaire : Site-Specific Information

| | Please | check he | ere if a | dditional | documents | are | attached |
|-----|---------|-----------|------------|-----------|-----------|-----|-----------|
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| | SECTION 1. General Site Information |
|-----|--|
| 1.1 | Site or Facility-Specific Name: Sigma Aldrich Chemie GmbH Sigma Aldrich Produktions GmbH |
| 1.2 | Address: Riedstrasse 2, 89555 Steinheim, a.A Germany GPS Coordinates: Latitude 48° 41' 15.7272" Longitude 10° 4' 35.0214" |
| 1.3 | Phone: + 49 7329 97 0 |
| 1.4 | Email: Please refer to your local Sales representative |
| 1.5 | Fax: +49 7329 97 2160 |
| 1.6 | Website: www.sigmaaldrich.com |

| | SECTION 2. General Site Operating Information | | | | | | | |
|---|--|--|--|--|--|--|--|--|
| 2.1 | 2.1 What year did the site start operating? 60 years | | | | | | | |
| 2.2 What is the primary activity of the site? (e.g. manufacturing, distribution, etc.) Manufacturing, purchasing, testing, packaging, labelling | | | | | | | | |
| 2.3 To which, if any, subdivision of the parent company does the site belong? | | | | | | | | |
| | Merck KGaA, Darmstadt, Germany | | | | | | | |

| | SECTION 2. General Site Operating Information | | | | |
|------|--|--|--|--|--|
| | | | | | |
| 2.4 | Size of site (in sq. ft. or m.): 64000 m2 | | | | |
| 2.5 | Please list or attach the normal hours/schedule of the facilities, including shutdown dates (if applicable): 5 working days 1 shift 5 working days 2 shifts in pilot plant 6 working days 3 shifts in SCP | | | | |
| 2.6 | Total number of employees on site: 200 | | | | |
| 2.7 | Total number of employees in Quality: 20 | | | | |
| 2.8 | Total number of employees in Manufacturing: 35 (chemicals & oligos production) | | | | |
| 2.9 | What quality management system is utilized on site? ☐ ISO 9001 ☐ ISO 13485 ☐ 21 CFR Part 210/211 ☐ 21 CFR Part 820 ☐ European GMP, Eudralex Volume 4 Part I ☐ European GMP, Eudralex Volume 4 Part II ☐ ICH Q7 ☐ HACCP ☐ ISO 22000 ☐ Other Please describe: Which Regulatory Initiatives does the site follow/comply with? ☐ Reach ☐ Rohs ☐ Ca Prop. 65 ☐ WEEE | | | | |
| 2.10 | Does the company/site | | | | |

| SECTION 2. General Site Operating Information | | | | | | | |
|---|--|-------------------|-------------------|---------------------|--|--|--|
| 2.11 | Is the site registered with any gove | rnment regulate | ory agency (FD | OA registration, | | | |
| | GMP certification, etc.)? | | | | | | |
| | ∑ Yes | N/A | | | | | |
| | If yes, please specify. FDA Bioterroism Preparedness and Response Act Registry number 18009909824 | | | | | | |
| | FDA Bioterroism Preparedness an | d Response Act | Registry number | per 18009909824 | | | |
| 2.12 | By whom is the site inspected (reg | ulatory or third | party) and list | inspections within | | | |
| | the last three years: | | 0 | | | | |
| | DNV, TUV, Regierungspräsidium | (regional board | l) | | | | |
| 2.13 | How often, as an annual average, i | s the site audite | d by customers | s or third parties? | | | |
| | 2-3 audits | | • | - | | | |
| | | | | | | | |
| 2.14 | Has an Rx-360 audit been performed | | Yes | ⊠ No | | | |
| | Please also state the date of the audi | t if applicable. | | | | | |
| | http://rx-360.org/audit-programs/ | | | | | | |
| | | | | | | | |
| 2.15 | Are you willing to have Rx-360 con | | • | r customers | | | |
| | according to the Rx-360 audit progra | ams on your site | e? | | | | |
| 2.16 | Yes No | 1 . | 4*. *. | 0 | | | |
| 2.16 | Are you willing to have your custom Yes No | iers conduct auc | dits on your site | e? | | | |
| 2.17 | Please list regulatory sanctions impa | cting the site w | ithin the last fi | ve vears (i e | | | |
| 2.17 | warning letters, CEP suspension, im | - | | ve years (i.e. | | | |
| | No | | | | | | |
| | | | | | | | |
| 2.18 | Does the site outsource any quality- | related activity? | | | | | |
| | ⊠ Yes □ No □ | N/A | | | | | |
| | If answering yes, please specify the activities: | | | | | | |
| | Few analytical tests | | | | | | |
| 2.19 | Please check the supplier controls in | place for this fa | acility: | | | | |
| 2.10- | O1:4 A | | | | | | |
| 2.19a | Quality Agreements with Suppliers | X Yes | □ No | □ N/A | | | |
| | оцрупств | <u> </u> | | | | | |
| 2.19b | Subcontractor Qualification/Audit | | | | | | |
| | Program | ⊠ Yes | ☐ No | N/A | | | |
| | | | | | | | |

| | SECTION 2. General Site Operating Information | | | | | | | |
|-------|---|----------|-------------|------------------------|----------------|------|--|--|
| 2.19c | Periodic Review of Supplier Performance | ⊠ Yes | | No | □ N/A | | | |
| 2.19d | Supplier Feedback Program | ⊠ Yes | | No | □ N/A | | | |
| 2.19e | Approved Material Supplier List | X Yes | | No | □ N/A | | | |
| 2.19f | Approved Service Supplier List | ⊠ Yes | | No | □ N/A | | | |
| Addit | ional comments: | . 11 34 | | G*4 | | | | |
| | SECTION 3. Object | | aterials (| on Site | | | | |
| 3.1 | Does the site or production plant p process or store any of the following | | Yes | No | Not Applica | | | |
| 3.1a | Beta-Lactam Antibiotics | | | \boxtimes | П | | | |
| 3.1b | Steroids and/or hormones | | | | | | | |
| 3.1c | High potency compounds | | | $\overline{\boxtimes}$ | | | | |
| 3.1d | Materials of animal origin/Biologi | cs | | X | | | | |
| 3.1e | Live virus or micro-organism | | | | | | | |
| 3.1f | Allergens | | | | | | | |
| 3.1g | Genetically Modified Organisms (| GMO) | | \boxtimes | | | | |
| 3.1h | Agrochemicals (Pesticides, Herbic Fungicides, etc.) | eides, | | \boxtimes | | | | |
| 3.1i | Other (Please specify): GMO in laboratory scale | | | | | | | |
| | SECTION 4. Cross | Contamin | ation Co | ontrol | | | | |
| 4.1 | Are any of the following cross- | | Yes | No | Not | | | |
| | contamination controls in place | ? | 1 65 | 110 | Applica | able | | |
| 4.1a | Dedicated Facilities | | \boxtimes | | | | | |
| 4.1b | Access Controls | | | | | | | |
| 4.1c | Dedicated Personnel | | | | | | | |
| 4.1d | Dedicated Gowning | | | | | | | |
| 4.1e | Procedural Controls | | | | | | | |
| 4.1f | Other (please specify): | | | | | | | |
| Add | Additional Comments: | | | | | | | |

| SECTION 5. Site Operating Policies | | | | | | |
|------------------------------------|--|-------------|------------|-------------------|--|--|
| 5.1 | Does the site utilize the following written polici | es, prog | rams, or p | procedures? | | |
| Site Spec | ific: | Yes | No | Not Applicable | | |
| 5.1a | Environmental, Health, and Safety | \boxtimes | | | | |
| 5.1b | Facility Environmental Control Policy | \boxtimes | | | | |
| 5.1c | General Facility Cleaning Procedures | \boxtimes | | | | |
| 5.1d | Hygiene and Sterilization Procedures | \boxtimes | | | | |
| 5.1e | Validated Equipment Cleaning Procedures | | | | | |
| 5.1f | Preventative Maintenance Program/Procedures | \boxtimes | | | | |
| 5.1g | Pest Control Program | \boxtimes | | | | |
| 5.1h | Master Production Procedure | | | | | |
| Quality: | | | | | | |
| 5.1i | Quality Control/Quality Management Policy | | | | | |
| 5.1j | Quality Manual | | | | | |
| 5.1k | Periodic Product Quality Review | | | | | |
| 5.11 | Master Validation Plan | | | | | |
| 5.1m | Risk Assessment Program | | | | | |
| 5.1n | Supplier Approval Procedure | | | | | |
| 5.1o | Monitoring and Review of Approved Suppliers | | | | | |
| 5.1p | Mechanism to Reduce Testing | | | | | |
| 5.1q | Receiving Incoming Inspection | | | | | |
| 5.1r | Change Control Procedures | | | | | |
| 5.1s | Document Management Policy | | | | | |
| 5.1t | Document Retention Policy | | | | | |
| 5.1u | Change Notification Procedures for Clients | | | | | |
| 5.1v | Control of Nonconforming Material | | | | | |
| 5.1w | Deviation/Investigation Procedure | | | | | |
| 5.1x | Out of Specification Policy and Procedure | | | | | |
| 5.1y | Sampling Procedure/Sampling Plan | | | | | |
| 5.1z | Raw Material Retention Program | | | | | |
| 5.1aa | CAPA Procedure | | | | | |
| 5.1bb | Label Control and Accountability | | | | | |
| 5.1cc | Product Release Procedure | | | | | |
| 5.1dd | Employee Training Program | | | | | |
| 5.1ee | Stability, Expiration, and Shelf-Life Program | | | | | |
| 5.1ff | Product Retention Program | | | | | |
| 5.1gg | Recall Procedure | | | | | |
| 5.1hh | Customer Complaint Handling | \boxtimes | | | | |
| 5.1ii | Equipment validation/qualification procedure | | | | | |

| SECTION 5. Site Operating Policies | | | | | | | |
|--|--|-----|----|-------------------|--|--|--|
| | | Yes | No | Not Applicable | | | |
| 5.1jj | Internal audit/self-inspection program procedure | | | | | | |
| 5.1kk | Site Security/Site Access Control Policies | | | | | | |
| 5.111 | New Hire Program/Induction Program | | | | | | |
| Business | Continuity/Contingency Plan: | | | | | | |
| 5.1mm | Disaster Recovery Plan | | | | | | |
| 5.1nn | Pandemic Preparedness Plan | | | | | | |
| 5.100 | Supply Chain Emergency Preparedness Plan | | | | | | |
| 5.1pp | Business Continuity/Contingency Plan | | | | | | |
| 5.1qq Can the company provide a plan upon request? OR provide a short description below: This plans are confidential and will not be shared outside the company | | | | | | | |

| SECTION 6. Quality Assurance and Production | | | | | | |
|---|--|-------------|-------------|-------------------|--|--|
| | | Yes | No | Not Applicable | | |
| 6.1 | Does the site have an independent and defined Quality Assurance/Quality Management Division? | | | | | |
| 6.2 | Does QA/QM have authority over the following: | | | | | |
| 6.2a | Policies and procedures? | \boxtimes | | | | |
| 6.2b | Review of documentation for release? | \boxtimes | | | | |
| 6.2c | Release or rejection of incoming materials? | | \boxtimes | | | |
| 6.3 | Does QA/QM investigate and resolve quality complaints? | | | | | |
| 6.4 | Does QA/QM investigate and resolve internal deviations? | | | | | |
| 6.5 | Does the QA/QM have the authority to assign a disposition to materials? | | | | | |
| 6.6 | Does the QA/QM review manufacturing and testing records prior to release? | | | | | |
| 6.7 | Does the facility utilize computerized systems for managing GxP activities or data? | | | | | |
| 6.8 | Are relevant computerized systems 21 CFR part 11 and EU GMP annex 11 compliant? | | | | | |
| 6.9 | Does the site use statistical methods for consistency and uniformity? | | | | | |
| 6.10 | Does the site use controlled documents for following and recording manufacturing instructions? | | | | | |
| 6.11 | Does the company qualify and/or validate manufacturing procedures? | | | | | |

| | SECTION 6. Quality Assurance and Production | | | | | | |
|-------|--|-------------|-------------|-------------------|--|--|--|
| | | Yes | No | Not Applicable | | | |
| 6.12 | Is any environmental monitoring conducted in production/finishing areas? | | | | | | |
| 6.13 | Does the site supply BSE/TSE declarations? | \square | П | | | | |
| 6.14 | Does the site supply a declaration of Elemental Impurities? | | H | | | | |
| 6.15 | Are ICH Q3C(R4) solvents used in the manufacturing process | | | | | | |
| (16 | of supplied materials? | | | N/1 | | | |
| 6.16 | Are stability studies carried out according to ICH guidance? | | Н | | | | |
| 6.17 | Are solvents and mother liquor reused/recycled? | | H | | | | |
| 6.18 | Does the site have a process water treatment system? | | | | | | |
| 6.18a | Please check all that apply to the system: | | | | | | |
| | City/potable water | | | | | | |
| | Distilled water | | | | | | |
| | Dionized water | | | | | | |
| | Water for injection (WFI) | | | | | | |
| | Reverse Osmosis | | | | | | |
| | Clean steam | | | | | | |
| | Ultra-filtrated water (purified water) | | | | | | |
| | Other: | | | | | | |
| | | | | | | | |
| 6.19 | Does the plant have a batch/lot system? | | | | | | |
| 6.19a | Is the system traceable? | | | | | | |
| 6.19b | Is it unique? | \boxtimes | | | | | |
| 6.19c | Is batch/lot manufacturing continuous? | | \boxtimes | | | | |
| 6.19d | Is manufacturing batch by batch? | | | | | | |
| 6.20 | Does the site perform on-plant audits prior to approving | | | | | | |
| | critical GxP suppliers? | | | | | | |
| 6.21 | Does the site audit critical GxP suppliers after initial | | П | \boxtimes | | | |
| (22 | approval? | | | | | | |
| 6.22 | Does the site inspect incoming materials? | | | | | | |
| 6.23 | Does the site test incoming materials to defined specifications? | | | | | | |
| 6.24 | Does the site establish purchase specifications for raw | | | | | | |
| | materials? | | | | | | |
| 6.25 | Is the equipment multi-use? | | | | | | |
| 6.26 | Does the site qualify equipment installation? | | | | | | |
| 6.27 | Does the site qualify equipment operation? | ΙĒ | | | | | |
| 6.28 | Does the site qualify equipment performance? | IT | | - | | | |
| 6.29 | Are production critical use instruments calibrated regularly? | X | Ħ | | | | |
| 6.30 | Is rework allowed? | | H | | | | |
| 0.50 | 10 10 more uno mou: | | | | | | |

| | SECTION 6. Quality Assurance and Production | | | | | | |
|--|--|-------------|----|-------------------|--|--|--|
| | | Yes | No | Not Applicable | | | |
| 6.31 | Is reprocessing allowed? | \boxtimes | | | | | |
| 6.32 | Are manufacturing and packaging activities traceable to the equipment, areas, and materials used? | \boxtimes | | | | | |
| 6.33 | Are production materials handled and stored in a manner to prevent degradation, contamination and cross-contamination? | \boxtimes | | | | | |
| 6.34 If answering 'not applicable' for any of the above, please elaborate: This site does not claim to meet/operate under GMP conditions | | | | | | | |
| Additi | onal Comments: Product release is done by QC (as a Quality Uni | it) | | | | | |

| | SECTION 7. Laboratory Procedures | N/A for this Site | | |
|------|---|-------------------|----|----------------|
| | | Yes | No | Not Applicable |
| 7.1 | Does the site have standard procedures for sample handling/tracking? | \boxtimes | | |
| 7.1a | Does the site have standard procedures for retaining samples? | \boxtimes | | |
| 7.1b | Does the site have standard procedures for retesting samples? | \boxtimes | | |
| 7.2 | Does the site have written and approved specifications and test methods? | \boxtimes | | |
| 7.3 | Are laboratory instruments calibrated regularly? | \boxtimes | | |
| 7.4 | Is there a standard procedure in place for analytical method development? | \boxtimes | | |
| 7.5 | Does the site qualify and/or validate analytical test procedures? | | | |
| 7.6 | Does the site perform stability testing on materials and/or products? | | | |
| 7.7 | Are retention samples of key raw materials maintained? | \boxtimes | | |
| 7.8 | Are standards traceable to their preparation and reagents used? | \boxtimes | | |
| 7.9 | Are retention samples of finished product maintained? | | | |
| 7.10 | Are shelf life/retest/expiration dates available and standardized? | \boxtimes | | |
| 7.11 | Does the company provide a certificate of analysis (CoA) and/or a Certificate of Conformation/Compliance (CoC) for each lot or batch? | \boxtimes | | |

| SECTION 7. Laboratory Procedures | | | ☐ N/A for this Site | | |
|--|--|---------------------------------------|---------------------|---------------------|--|
| | | Yes | No | Not Applicable | |
| 7.12 | Does the CoA/CoC contain the manufacture name and location? | | \boxtimes | | |
| 7.13 | Does the CoA/CoC signed/e-signed by a Quality representative? | | | | |
| 7.14 | If a repacker performs analyses, will the CoA reflect both the original manufacturing site data as well as the repacking site data? | | | | |
| 7.15 | If answering 'not applicable' for any of the above, please elaborate: Stability tests are not performed under ICH conditions, and qualification/validation is not performed according GMP requirements | | | | |
| 7.16 | Additional Comments: This site does not claim to conditions | meet/opera | ate under | GMP | |
| SECTION 8. Packaging, Storage, and Transport | | | | ☐ N/A for this Site | |
| | 9 9/ | Yes | No | Not Applicable | |
| 8.1 | Does the site have a validated or qualified labeling system? | | | \boxtimes | |
| 8.2 | Are batch production records retained and available? | | | | |
| 8.3 | Are packaging and labeling areas separate from production? | | | | |
| 8.4 | Are barcode readers in use and challenged regularly? | | | | |
| 8.5 | Are vision systems in use? | | | | |
| 8.6 | Is product ever packaged without a label being initially applied (i.e. bright stocking)? | | | | |
| 8.7 | Do labels include shelf life/expiration dates? | | | | |
| 8.8 | Do labels include lot/batch number? | | | | |
| 8.9 | Do labels include requirements for storage conditions? | | | | |
| 8.10 | Is tamper evident seal used for each container of supplied materials? | | | | |
| 8.11 | Does the company use a First-In-First-Out or First-Expiration-First-Out system? | | | | |
| 8.12 | Does the company maintain appropriate storage conditions? | | | | |
| 8.12a | Are those storage conditions monitored and documented? | \boxtimes | | | |
| 8.13 | Does the site make available a description of storage and/or warehouse conditions? | \boxtimes | | | |
| | | · · · · · · · · · · · · · · · · · · · | | | |

| SECTION 8. Packaging, Storage, and Transp | | | ☐ N/A for this Site | | |
|--|--|-----|---------------------|----------------|--|
| | | Yes | No | Not Applicable | |
| 8.14 | Does the site distribute products via a third party? | | | | |
| 8.15 | Are good distribution policies implemented? | | | | |
| 8.16 | Are transport mechanisms dedicated? | | | | |
| 8.17 | Does the company validate shipping method? | | | | |
| 8.18 | Does the company validate packaging methods? | | | | |
| Additional Comments: Manufacturing site, distribution is done via DC's | | | | | |

I (Supplier) confirm that the information provided in this questionnaire is correct and can be verified.

Date: 26. May 2020

Title: Head of Quality & EHS Steinheim, Germany