



| System Name: GAS CHROMATOGRAPHY (PC) | System ID: |
|--------------------------------------|------------|
|--------------------------------------|------------|

| Risk ID No. | Identified Risk | Impact | Severity | Probability | Risk Class | Probability of Detection | Risk Priority | Mitigation Action Performed |
|-------------------|--|--|----------|-------------|---------------|--------------------------|------------------|--|
| A. Una | uthorized System | Access | | | | | | |
| 1. | Unauthorized person tries to log into system | Unauthorized persons may damage the system | High | Low | 2 | High | Low | System is password Protected. Unathorized Person log in test Verified in Operational Qualification (Point No.12.4 & Point No 12.5. |

| Verified by: | Date: |
|--------------|-------|
| | |
| Reviewed by: | Date |

Document No.:

Page 1 of 10





| System Name: GAS CHROMATOGRAPHY (PC) | System ID: |
|--------------------------------------|------------|
| | • |

| Risk ID No. | Identified Risk | Impact | Severity | Probability | Risk Class | Probability of Detection | Risk Priority | Mitigation Action Performed |
|-------------------|-----------------------------------|---|----------|-------------|---------------|--------------------------|------------------|---|
| B. PC | Power Failure | | | | | | | |
| 1. | Power failure during operation | Data may be lost and system may get damaged which may lead to affect Product quality | High | Low | 2 | High | Low | After power resumption, system was started and authorized person can access the system. Data remained same after power failure. No damage found in system after power loss. Verified in Operational Qualification Point No.12.7 |

| Verified by: | Date: |
|--------------|-------|
| | |
| Reviewed by: | Date: |
| | |

Document No.:

Page 2 of 10



Verified by:

RISK ASSESSMENT ANNEXURE-2 (AFTER QUALIFICATION)

System Name: GAS CHROMATOGRAPHY (PC)

System ID:

| Risk ID No. | Identified Risk | Impact | Severity | Probability | Risk Class | Probability of Detection | Risk Priority | Mitigation Action Performed |
|-------------------|--|---|----------|-------------|---------------|--------------------------|------------------|--|
| C. Wir | ndow Security | | | | | | | |
| 1. | Unauthorized person tries to log into Window | Unauthorized persons may damage the window | High | Medium | 1 | Medium | High | Window shall be password Protected. Unathorized Person log in shuould not be granted. Verified in Operational Qualification Point No.12.2. |

| • | |
|--------------|-------|
| Reviewed by: | Date: |

Document No.:

Page 3 of 10

Date:



System Name: GAS CHROMATOGRAPHY (PC)

System ID:

| Risk ID No. | Identified Risk | Impact | Severity | Probability | Risk Class | Probability of Detection | Risk Priority | Mitigation Action Performed |
|-------------------|---|--|----------|-------------|---------------|--------------------------|------------------|---|
| D. Con | nmunication Failur | e | | | | | | |
| 1. | Communication fail between CPU and Monitor | Data may be losses and system operation control is lost. User cannot operate the operation. | High | Low | 2 | High | Low | Monitor should display error message or monitor should not response. Printing command should not reached to printer. Verified in Operational Qualification Point No.12.7. |

| Verified by: | Date: |
|--------------|-------|
| Reviewed by: | Date: |

Document No.:

Page 4 of 10





System Name: GAS CHROMATOGRAPHY (PC)

System ID:

| Risk ID No. | Identified Risk | Impact | Severity | Probability | Risk Class | Probability of Detection | Risk Priority | Mitigation Action Performed |
|-------------------|-----------------------------|---|----------|-------------|---------------|--------------------------|------------------|--|
| E. Har | dware Failure | | | | | | | |
| 1. | Failure of hardware (PC) | In case of hardware (PC) failure, all process shall be stopped. | High | Low | 2 | High | Low | Hardware accessories make were standard and designed as per system specifications. Spare parts of hardware and accessories were available and it is one to one replaceable. Verified in Operational Qualification Point No.12.7. |

| Verified by: | Date: |
|--------------|-------|
| | |
| Reviewed by: | Date: |

Document No.:

Page 5 of 10





System Name: GAS CHROMATOGRAPHY (PC)

System ID:

| Risk ID No. | Identified Risk | Impact | Severity | Probability | Risk Class | Probability of Detection | Risk Priority | Mitigation Action Performed |
|-------------------|--|--|----------|-------------|---------------|--------------------------|------------------|--|
| F. Phy | sical security of sys | etem | | | | | | |
| 1. | Unauthorized person tries to operate the system. | In case system not physical secure the electronic componets damage or loss | High | Medium | 1 | Medium | High | System shall be physically secure. Verified in Installation Qualification Point No.12.6 & 12.11. |

| Verified by: | Date: |
|--------------|-------|
| | |

Reviewed by: ______

Document No.:

Page 6 of 10





System Name: GAS CHROMATOGRAPHY (PC)

System ID:

| Risk ID No. | Identified Risk | Impact | Severity | Probability | Risk Class | Probability of Detection | Risk Priority | Mitigation Action Performed |
|-------------------|---|----------------------------------|----------|-------------|---------------|--------------------------|------------------|--|
| G. Imp | proper Training an | d Procedure | | | | | | |
| 1. | Untrained operator tries to operate the system | System may get damage or lose | High | Low | 2 | High | Low | System is password Protected. Only authorized persons access the system. Operator are trained for operation of system. Verified in Operational Qualification Point No.12.2 & 12.5. |

| Verified by: | Date: |
|--------------|-------|
| Reviewed by: | Date: |

Document No.:

Page 7 of 10



System Name: GAS CHROMATOGRAPHY (PC)

System ID:

| Risk ID No. | Identified Risk | Impact | Severity | Probability | Risk Class | Probability of Detection | Risk Priority | Mitigation Action Performed |
|-------------------|---|----------------------------------|----------|-------------|---------------|--------------------------|------------------|---|
| 2. | Operation SOP or master documents does contain proper information | System may get damage or lose | High | Low | 2 | High | Low | Standard Operating Procedure for GC_PC. Contain proper information available in SOP. Verified in Installation Qualification Point No. 12.2 & Point No. 12.12. |

| Verified by: | Date: |
|--------------|---------|
| Reviewed by: | Date: |
| | 7 0 110 |

Page 8 of 10



System Name: GAS CHROMATOGRAPHY (PC)

System ID:

| Risk ID No. | Identified Risk | Impact | Severity | Probability | Risk Class | Probability of Detection | Risk Priority | Mitigation Action Performed |
|-------------------|---|----------------------------|----------|-------------|---------------|--------------------------|------------------|--|
| H. Au | udit Trial Failure | | | | | | | |
| 1 | Failure of Login, Logout and Login Fail entry into the report | May lead to Data integrity | High | Low | 2 | High | Low | Failure of Login, Logout and Login Fail is update in the report Verified in Operational Qualification Point No. 12.9. |
| 2. | Report Edition | May lead to Data integrity | High | Low | 2 | High | Low | Users are not able to Edition in report Verified in Operational Qualification Point No.12.10. |

| Verified by: | Date: |
|--------------|-------|
| Reviewed by: | Date: |

Document No.: Page 9 of 10



System Name: GAS CHROMATOGRAPHY (PC)

System ID:

| Risk ID No. | Identified Risk | Impact | Severity | Probability | Risk Class | Probability of Detection | Risk Priority | Mitigation Action Performed |
|-------------------|---|-----------------------------|----------|-------------|---------------|-----------------------------|------------------|--|
| I. Au | thorized System Acc | ess | | | | | | |
| 1 | Authorized person (Operator/Supervis or/QA/Manager /Manufacturer Admin) tries to change the date and time | Ambiguity of data may arise | High | Low | 2 | High | Low | Date and time are password protected. Verified in Operational Qualification Point No.12.11. |
| 2. | Authorized person (Operator/Supervis or/QA/Manager / Manufacturer Admin) tries to access to data storage folder | Ambiguity of data may arise | High | Low | 2 | High | Low | System have specific Path and limited access for Data Storage. Verified in Operational Qualification Point No.12.12. |

| Verified by: | Date: |
|--------------|-------|
| Reviewed by: | Date: |

Document No.: Page 10 of 10