

OBJECTIVE:

The intent of this policy is to provide clear and consistent instructions regarding acceptable steps and measures for creating a permanent and legally-sufficient record of research and development activities by MANE group employees, contractors, interns, externs, or other persons conducting research related activities on behalf of the MANE group.

SCOPE OF APPLICATION:

This policy specifically governs acceptable practices relating to creation and retention of all research and development records at MANE's R&D/Innovation Centers worldwide. This policy, which is based on and consistent with Procedure ITG-DS-001/08 of V. MANE FILS, applies to all MANE employees, trainees, or any other persons having a contractual obligation to assign or license intellectual property rights to any direct or indirect affiliate of V. MANE FILS.

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1. Laboratory Notebook

1.1. Functions and objectives

Research and development (R&D) refers to innovative activities toward developing new products, processes, or equipment, or improvements in existing products, processes, or equipment. To that end, all R&D work involving new products, processes, equipment, or modification of existing products, processes, or equipment must be evaluated to assess novelty and obviousness (inventive step). All Mane researchers, engineers, technicians, trainees, interns, in charge of product or production process development work shall utilize a company-issued laboratory notebook to record any R&D work that foreseeably involves the creation of new, nonobvious, and commercially relevant products, processes, or equipment.

The primary purpose of a laboratory notebook is to preserve and protect intellectual property rights in all new and improved products, processes, or equipment by serving as a record and archive for all research and development work (ideas, experiments, formulations, etc.). A laboratory notebook, when properly utilized, may be used as legal evidence with respect to various aspects of the new or improved methods/products, such as conception and/or reduction to practice of an invention and date(s) corresponding thereto, test results, and the like.

In this respect, laboratory notebooks enable inventors:

- To record and provide an accounting of the intellectual and technical progress corresponding to each project carried out;
- To explain the manner in which an experiment was carried out and how the result(s) of that experiment was obtained, and thus serve as the definitive account of what transpired, which thereby ensures the reproducibility of the experiment; and
- To ensure the preservation of information which may be useful for both internal and external communications (e.g., writing scientific publications, preparing presentations, drafting of patent applications, transfer of technology, etc.).

By following the steps prescribed herein for their implementation, MANE laboratory notebooks will possess the authenticity to serve as evidentiary tools in the event of litigation(s), dispute(s), or claim(s). Proper implementation of the prescribed procedure will create laboratory notebooks that can be used:

- To certify that, on a specified date, the holder possessed the information contained therein (e.g., experimental results, scientific observation, working hypotheses, etc.);
- To specifically define the information created by the holder, such as working hypothesis, reflections, experimental designs and results, which may assist with determining inventorship, establishing invention rights, and providing data for patent filings; and
- To provide a factual accounting toward the degree of participation (e.g., intellectual and material contribution) of an individual and/or a company in the design of an invention.

Accordingly, a properly documented laboratory notebook makes it possible to capitalize on the knowledge and know-how of researchers / laboratories / companies. As such, they are an essential component of the heritage of V. MANE FILS, and the rest of the MANE Group.

1.2. Model and storage

The approved laboratory notebook model should be sewn and hardbound, and substantially identical for all personnel at a given site. One suitable example of an approved laboratory notebook is Boorum & Pease Record Book, Record Ruled, 10-3/8" x 8-1/8" Size, 300 Pages (21-300-R) or its equivalent. Each laboratory notebook shall have a unique alphanumerical identifier assigned (further discussed below), either embossed on the exterior covering or marked in permanent ink on the interior cover.

A supply of laboratory books should be maintained by the Director or Vice President (VP) of R&D of the respective R&D/Innovation site. Each person(s) assigned to a given notebook is responsible for the safekeeping, maintenance, and archiving thereof.

1.3. Attribution and classification

The VP of R&D or Director of the Mane R&D/Innovation site is responsible for creating and maintaining a Laboratory Notebook Log for recording the assignment of laboratory notebooks to personnel. The assignment of each laboratory notebook is entered into the Laboratory Notebook Log by associating the laboratory notebook's unique alphanumerical identifier with at least one individual, who is responsible for its maintenance and safekeeping.

A laboratory notebook's unique alphanumerical identifier shall comprise a mixture of letters and numbers. Letters are used to designate the MANE group company (e.g., MINC for Mane, Inc. in USA; MSEA for Mane Sea in Singapore; KCOR for KANCOR INGREDIENTS LIMITED in India etc...). For the numerical portion of the identifier, at least three digits should correspond to the sequence number of opening of the laboratory notebook, and two digits corresponding to the year of assignment should be set apart from the previous digits with a forward slash (/) (ex: MUSA-001/17, MMEX-014/17, PTMI-008/17, etc.).

The unique alphanumerical identifier may be embossed on the notebook's exterior and/or recorded in permanent ink inside the front cover. Further, this unique alphanumerical identifier should be entered on the first page of experiments, and on all subsequent pages that begin a new program, a new test, new experiment, etc.

On the inside cover of the laboratory notebook, the following information must be entered:

- The exact (legal entity) Company Name (e.g., PT MANE INDONESIA).
- The section (department) information (e.g., Flavors, Applications, etc.).
- The control number (i.e., the unique identifier assigned to that book).
- The name of the person to whom the laboratory notebook has been assigned.
- Signature of the person, which acknowledges the receipt thereof.
- The date of issuance.
- The date of the last entry.
- The control number of the previously used laboratory notebook, if applicable.
- The control number of the next used laboratory notebook, if applicable.
- The name of the person who assigned the notebook.
- The total number of pages of data entered.

Additionally, inside the front and back covers shall be placed a stamp specifying the

ownership of the laboratory notebook, by specifically identifying the name of the MANE group subsidiary/affiliate and its contact information (e.g., address, telephone and fax numbers).

Note 1: Example:

This laboratory notebook is the exclusive property of the company:
Mane, Inc., a subsidiary of V. MANE FILS, located at:
2501 Henkle Drive
Lebanon, OH 45036
PH: 513-248-9876

FAX: 513-248-8808

Note 2: While it is permissible to allot a single laboratory notebook to more than one person (e.g., a team or department), this practice should be reserved only for temporary workers, such as interns or trainees. If necessary, at the time of the opening of this lab notebook, one person (e.g., a supervisor) is designated as the assignee, where the first page is filled out with information which corresponds to this person. Each contributor (intern or trainee) making entries into the laboratory notebook must be identified. A listing of the contributors, along with their respective handwritten signatures, needs to be prepared on the page following the LABORATORY RECORDKEEPING PROCEDURES near the front of the laboratory notebook.

The operating instructions for making entries into the laboratory notebook, which are printed at the beginning pages of the laboratory notebook, as well as reproduced at the end of this policy, must be known to every contributor writing entries into a laboratory notebook. By signing, each contributor to the laboratory notebook attests to having read these instructions, and agrees to comply with the rules and principles defined therein.

1.4. Property and confidentiality

The laboratory notebooks and their contents remain, in all circumstances, the exclusive property of the MANE group. The laboratory notebooks and their content are subjected to an obligation of confidentiality and cannot be disclosed to a third without express authorization of an authorized representative of MANE General Management.

Until the return of the laboratory notebook to the VP of R&D (or Director) for archiving or filing, the duty of preserving the integrity of the laboratory notebooks remains with the laboratory notebook assignee. The originally-assigned holder of a notebook will be able to maintain possession of their laboratory notebooks as a long time as there is a need, but no longer than 3 years from the date of last entry. In the event of termination of employment, the laboratory notebook assignee shall immediately surrender each laboratory notebook in his/her possession to his/her supervisor, the VP of R&D, or Director, who will assume responsibility for archiving the surrendered notebook(s).

2. Instructions for Recording Information

Generally speaking, the person performing the research and development activity records his/her work progressively in the assigned laboratory notebook (work hypotheses, methods and means used, results obtained, conclusions drawn...), in a sufficiently complete, clear and

precise way to enable allow a person having ordinary skill in the relevant art, to reproduce recorded work and to obtain at least similar results.

2.1. General Rules Regarding Form

- Preferably, the language of the laboratory notebook is English, but French or Spanish may be acceptable alternatives depending on the location of the Mane Innovation center.
- The information is recorded directly in the laboratory booklet, dated (using two digits for the day, at least three letters to uniquely identify the month, and four digits for the year, e.g., 20 MAY 2017 or 05 NOV 2017), and referenced with its company project name or number and/or an internal reference specific to the researcher.
- The recording of handwritten information is done directly and only on the printed lines of the pages of the notebook, respecting the full width of the pages.
- The insertion of information near the internal margin is to be avoided, as information may be difficult to capture accurately during scanning.

<u>Note 3</u>: If the need for a later entry or amendment arises, it is advisable to use unmarked section of the page immediately below, and particularly point out the passage(s) concerned. Where no such unmarked section is available, one should make the entry/amendment on a subsequent page, and record the subsequent page number on the instant page. An arrow, asterisk, etc. can be used to precisely identify the section being amended or corrected.

Recording data can also be carried out by means of inserting preprinted information in the notebook (for example, typed reports, diagrams, diagrams, output datum of equipment of analysis, photographs, etc.). The preprinted information should not exceed the dimensions of the page, nor cover any information already entered on the page. Transparent tape or other adhesive should be utilized to affix the inserted information to the page surface.

For two successive inserts, the second must be affixed below the other (or on two successive pages) and not side by side. Each taped or glued insert must be signed and dated by both the writer and the witness (each signature should traverse at least one of the seams between the insert and the support page). Other than the aforementioned dates and signatures, no other handwritten annotations on the insert are permitted.

<u>Note 4</u>: If there is a need to annotate information on an insert (e.g., for reasons of clarity), the "original" preprinted copy must be annotated first and then photocopied; the corresponding photocopy is then adhered to the surface of the notebook page.

<u>Note 5</u>: It is not necessary to integrate every piece of data in the laboratory notebook. For example, if the data set is too large, the writer can also create alternative archives for the data (e.g., an electronic database of HPLC chromatographs), and simply reference the corresponding file number.

<u>Note 6</u>: Rather than the original of an experimental material, a photograph or a digitized reproduction may be used, such as in the case of a thin-layer chromatography plate, a gel, a membrane, an autoradiography, or a thermosensitive ticket.

Significant blank spaces between two information entries (for example, successions of blank lines, page breaks, pages left blank) or to the right of an insert, must be crossed out by means of a "Z", so that no information may be subsequently added. The removal of any laboratory notebook page is strictly prohibited, as doing so may jeopardize the integrity of the entire notebook.

All handwritten entries shall be made using permanent ink. There is no restriction on the choice of ink colors to be used, provided that the recorded information remains fully legible and comprehensible in full, after black and white reproduction using a standard photocopier. Black or dark blue inks are recommended. The use of erasable ink, pencil, or "white correction fluid" is not allowed. The texts and entries must be legible (any erasure must be referred to and dated, both by the editor and the witness).

Any coding of information using specific colors should be avoided. If the use of colors cannot be avoided, the selection of colors and/or textures must be made with careful consideration of a possible need for subsequent reproduction using a standard photocopier in black and white.

On each page containing an entry, the name of the project and laboratory notebook number must be entered in the designated location at the top of the page.

2.2. General Rules Regarding Substance

Each test, experiment, or analysis, whether positive or negative, must be recorded in the laboratory record. Care should be taken to ensure that the following elements are clearly and precisely stated:

- The context in which the work was carried out, the objectives set and/or the problem to be solved, the working hypotheses, etc.;
- The experimental conditions used (protocols, particular parameters and material used ...); and
- The results obtained, their possible interpretation, as well as any ideas, reflections or comments relating thereto.

Note 7: If a protocol has already been previously described, in the same or different laboratory notebook, it is not necessary to reproduce the entire information for a new entry. Rather, it is sufficient to simply reference the previous occurrence with particularity, i.e., the laboratory notebook number and page(s) concerned along with the name of its author. All modifications, changes, or adaptations to the referenced information must be sufficiently described. Referencing scientific publications or books is permissible if identified unambiguously using a full bibliographical citation.

Abbreviations may be used. However, abbreviations that are non-standard to persons having ordinary skill in the relevant field must be defined at their first appearance. Further, abbreviations, along with their definition, should also be recorded after the table of contents/index section at the front of the laboratory notebook.

<u>Note 8</u>: It is possible to create a separate laboratory notebook specifically reserved for recording standard laboratory or testing procedures and protocols, abbreviations, etc., and then make an appropriate reference to this separate laboratory notebook.

2.3. Required Duties of Author and Witness

Each laboratory notebook must be regularly submitted to a witness review process. Witnesses are Mane employees having the ability or background to understand the invention. For example, if the invention involves advanced chemical or electronic concepts, the witness must possess adequate background in the relevant field. If called upon later, the witness must be able to testify to their own knowledge that the facts of the entry are correct. However, the witness must not have the status of co-author (joint researcher) of the recorded information, nor should the witness be able to be considered as co-inventor of any invention resulting from all or part of the experimental information. Accordingly, the witness should not be a collaborator on the same/similar projects as the drafter. Preferably, the witness will be chosen from another team or department.

a. Duties of the author:

- Each page must be dated.
- Each page of the laboratory book, as soon as it is completed, must be dated and signed by the author, in the space designated for this purpose.
- Any mistakes or crossed-out entries, as soon as they appear in the laboratory book, must be dated and signed by the author.
- Do not insert any information (including corrections) in a corner of a page (even if that page has not yet been countersigned by a witness).
- If any error or mistake is identified, the erroneous information should be clearly identified and corrected in a space immediately below the error. If there is no available space or the available space is insufficient, then corrections may be made on a subsequent page (with an appropriate forward reference on the page bearing the erroneous information). If the date on which the error was found and/or corrected is different from the origin date, said correction date should be properly recorded.
- Unused lines or space at the bottom of the page should be crossed out using a "Z" marking.
- In order to certify the reality of the recording, the author must have a witness sign each of the pages of his laboratory notebook within a maximum of 4 weeks after the writing of each of these pages.
- No new information or data integration can be entered onto any page that has been already signed by a witness.

b. Duties of the witness:

- Read the information entered by the author/researcher to evaluate whether the level of detail is sufficient to enable its reproduction by another having ordinary skill in the relevant art.
- Co-sign all taped or glued inserts. The date and signature must be affixed astride the insert and its supporting page surface.
- Verify the quality of the information with regard to compliance with Mane's Laboratory Notebook Policy, along with laboratory recordkeeping procedures found at the front of the laboratory notebook itself.

By the words "READ AND UNDERSTOOD", the witness attests that his/her duties have been performed and then affixes his/her signature in the adjacent space reserved for that purpose. By this signature, the witness does not express agreement with respect to its technical content. The witness shall not be responsible for any errors or inaccuracies in the recorded technical data and information that may be subsequently noted.

Should the witness deem the information insufficient for understanding, or finds error(s) with the form or manner of recording the information in the laboratory notebook, the witness shall inform the author. Corrective measures must be taken by the author (or supervisor) to address the insufficiency or error(s). After clarification/correction, the witness may complete his/her duties by applying the witness signature and date on the page.

The witness may only review pages that have been filled in their entirety. Accordingly, unused lines or space above the signature blocks need to be properly addressed by the author (possibly with one or more "Z" marks to mark spaces left empty).

3. Certification

The holder/assignee of a laboratory notebook must have it certified, twice a year at the time of certification sessions organized in May and November, by a member of Mane's Legal and IP Department. All laboratory notebooks, in progress or completed, must be submitted to the Legal and IP Department on the working day immediately preceding the certification date. Prior to this submission, the holder of a laboratory notebook must ensure that the information in each laboratory notebook is correctly recorded, including marking out any significant empty space (e.g., marked out with a "Z"), updating the table of contents, as well as arranging for the proper witnessing of the notebook.

During certification, each laboratory notebook shall be inspected with regard to compliance with this policy. At the end of this inspection, the reviewer will make an entry into the laboratory notebook and notate the completed inspection by affixing the reviewer's stamp, date, and signature. At the end of each certification, the notebook will be promptly returned to its assignee, ideally no later than the next working day after certification.

For remote Innovation sites without a local or regional representative from MANE's Legal and IP Department, arrangements will be made based on the volume of laboratory notebooks to enable completion of the certification process without undue expense of time or resources.

4. Archiving

Each person assigned to a laboratory notebook is responsible for the maintenance of the notebook while it is in his/her possession. The assigned person (or holder) must ensure that each assigned laboratory book (s) is stored in a safe and secure location to prevent loss, theft, or degradation. If a laboratory notebook is lost, stolen, or damaged, the assigned person shall immediately notify his/her supervisor. The holder and supervisor shall immediately prepare a report detailing the circumstances leading to the loss, theft, or degradation, and the completed report is to be submitted to the Legal and IP Department for review and investigation.

Prior to preserving an electronic copy of a laboratory notebook, the holder must ensure

that 1) the content of the notebook meets the standards set forth in this policy, and 2) the notebook is certified (per Section 3 above). Once a notebook is complete and certified, the holder should make arrangements with the VP of R&D to begin the laboratory notebook scanning/archiving process. After securing an electronic archival copy of the laboratory notebook, the original hardcopy will be returned to its originally assigned holder for a reasonable period, which shall not exceed three (3) years from the date of last entry.

After the reasonable retention period, the original hardcopy of the laboratory notebook will be turned in to the VP of R&D (or site Director), who will arrange for long term storage of the notebook within a fire resistant container at the local Mane Innovation site, such as a fire resistant safe utilized by Accounting or Human Resource departments.



Appendix: Laboratory Recordkeeping Procedures

General Instruction

Laboratory Notebooks are the means for keeping a permanent record of the details of an individual's day-to-day work in the research and development areas. They provide 1) a basic reference which the individual and others can refer to at a later date; 2) legal evidence with respect to the materials recorded, such as conception of an invention and date thereof or date of reduction to practice and test results; and 3) in some instances, compliance with the provisions of many contractual arrangements.

Instructions for Recording Data in the Laboratory Notebook

- 1. All entries should be made in a legible and orderly manner using permanent ink, preferably black. Make entries clear and complete, that someone else could repeat the experiment.
- 2. Avoid erasures. If an error is made, cross it out and make the correction immediately thereafter. Cancellations or insertions should be initialed, dated, and explained by an appropriate notation.
- 3. Make sure control page is filled out prior to usage.
- 4. Complete the table of contents as you make entries in the notebook.
- 5. State the object and results of each experiment clearly and concisely. Give a complete, factual, and self-explanatory account of the progress of the work and the procedure followed (reference to earlier work done by yourself or another may be accomplished by noting a previous page of the same notebook or the page and number of an earlier notebook). Describe and give quantities of all materials used. Explain all code numbers and abbreviations.
- 6. An entry dealing with a conception (invention, idea) must describe the thing conceived. (Example, whether it is a chemical compound, a combination of a compound and a solvent, etc.) as well as the utility for the ting conceived, how it is to be used and the method(s) by which it is to be prepared, including equivalent materials which could be used. Statements with regard to utility should be stated positively. Work toward practical implementation of an invention should start as soon as possible in a notebook.
- 7. Negative or deprecatory entries should be avoided. (Example: A reaction gives a 2% yield was expected. Do not state "Process does not work".) Phraseology which expresses an opinion rather than a positive statement and gratuitous comments should be avoided. This is not an instruction to omit the conclusion of an experiment which had less than the expected results. Be factual.
- 8. Each day's work should, whenever possible, be started on a separate page with lines drawn down angularly across the unused portion of the previous page. (This gives legal evidence that additions were not made at a later date.) It is permissible, as stated above, to make reference to an earlier page by reciting "Continued from page ...". It is extremely important that each page show the date of entry.
- 9. Each page must be signed and dated by the individual who makes the entry and does the work. In addition, each page must be witnessed (signed and dated), using the notation "Read and Understood", preferably on the same day, but at least within one week. The witness should not be connected with the conception, should not have taken part in the experimental work performed by another, but should understand the technical filed of the entry. Record Laboratory Notebook Number and project on each page.
- 10. Where a conception is made by two or more individuals, it need only be entered in the notebook of one, but must be signed and dated by all the conceivers. Ideally, all conceivers should sign on the same day.
- 11. For microfilming purposes, graphs, charts, analytical data, etc. must be attached to the notebook pages with a permanent adhesive and should, when unfolded, be kept within the confines of the opened notebook. NO ENTRIES SHOULD BE MADE ON THE PAGE BENEATH ATTACHED SHEETS AND NOTHING MUST BE OBSCURED. Leave the heading on the top and the space provided for the witnessing signature at the bottom of each page exposed. Inserts should be signed and dated by the person making the entry and witnessed by another to provide the best legal evidence. If materials such as spectra, graphs, etc. are not kept in the notebook, they must be signed, dated and identified in such a manner as to provide a reference back to the pertinent page(s) of the Laboratory Notebook itself.
- 12. Report the loss or theft of a research notebook.
- 13. Following the use of all the pages of each notebook, it must be sent to the Library for record maintenance. Make sure table of contents pages are complete. After it has been recorded it will be returned to the individual. An individual may retain in his possession the Laboratory Notebook immediately preceding the one in which entries are currently being made. Normally, all other Laboratory Notebooks will be kept on file in the Library or in vault storage. They may then be checked out for reasonable lengths of time by authorized individuals.

Instructions read and included/understood by:	
Date:	
Signature:	