EVERGLASS

Data Management Plan

(RP1 update of the Data Management Plan)

D1.2

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1   PU = Public
PP = Restricted to other programme participants (including the Commission Services)
RE = Restricted to a group specified by the consortium (including the Commission Services)
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Summary

Summary of Deliverable

The Data Management Plan (DMP) for the EVERGLASS project outlines the comprehensive approach to managing the data generated throughout the project. This document provides a detailed description of the data types to be produced, the methodologies for data collection, generation, and management, as well as strategies for ensuring data quality, accessibility, and long-term preservation.

This version of the Data Management Plan (DMP) corresponds to the updated version after the Review Period 1 (1st year of project implementation). Main introduced changes are related to the update of dataset types, descriptions, formats of data files, and lists of datasets to be produced as a result of research activities during EVERGLASS project implementation.

The EVERGLASS project will generate diverse data types from both experimental and computational activities. Experimental data will include microscopy images, spectroscopy spectra, mechanical testing data, and thermal analysis data. Computational data will encompass modeling files, simulation results, and analytical data. These datasets will be meticulously documented and stored in secure repositories, ensuring their integrity and accessibility.

Adhering to the FAIR (Findable, Accessible, Interoperable, and Reusable) principles, the project will employ robust metadata standards and data documentation practices. This will enhance data discoverability and facilitate its reuse by the scientific community. The data will be stored in secure servers with regular backups and access controls to maintain data confidentiality and integrity.

The EVERGLASS project is committed to open science and will make data openly accessible through repositories such as Zenodo, OpenAIRE, and CERN. However, certain datasets may have temporary restrictions or embargos to protect intellectual property and ensure the novelty of publications. The project will implement strategies to minimize these restrictions and promote timely data sharing.

Data security is a top priority, and the project will adhere to stringent data security standards, including ISO27001 compliance, encryption protocols, and regular security audits. The project will also ensure compliance with ethical standards and regulatory requirements, particularly concerning the General Data Protection Regulation (GDPR) for handling personal data.

The DMP is a living document and will be updated as necessary to reflect new data, changes in project policies, and external factors. The EVERGLASS project aims to produce high-quality, reliable data that supports its research objectives and contributes to advancements in the field of glass material science.

This DMP underscores the project's commitment to responsible data management and open science, ensuring that the data generated is valuable, secure, and accessible for future research and innovation.

Disclaimer

Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Innovation Council and SMEs Executive Agency (EISMEA). Neither the European Union nor the granting authority can be held responsible for them.

Table of contents

1 Introduction and document structure

The EVERGLASS project aims to innovate the glass recycling industry through a multidisciplinary approach that integrates advanced experimental techniques and computational modelling. This Data Management Plan (DMP) outlines the methodologies and practices for managing the data generated throughout the project, ensuring that it adheres to the FAIR (Findable, Accessible, Interoperable, and Reusable) principles. The DMP is designed to ensure that all data produced is well-documented, secure, and accessible for future research and innovation.

Document structure

1. **Introduction and document structure**

This section introduces the purpose and structure of the DMP, providing an overview of the contents and their organization.

2. **Data Management in EVERGLASS**

Describes the overall approach to data management within the EVERGLASS project, detailing roles and responsibilities, as well as the types of data produced.

3. **Data Summary**

Provides a detailed summary of the data to be generated by the project, including data types, formats, and volumes.

4. **FAIR Data**

Outlines the strategies for ensuring that the data is findable, accessible, interoperable, and reusable. This includes metadata standards, data accessibility, and interoperability practices.

5. **Data Security**

Details the measures in place to ensure data security, including access controls, encryption, and compliance with relevant data protection regulations.

6. **Ethical Aspects**

Discusses the ethical considerations related to data management, particularly in compliance with the General Data Protection Regulation (GDPR).

7. **Responsibilities**

Defines the roles and responsibilities of the project team in managing and ensuring the quality and security of the data.

8. **Relevant Institutional, Departmental, or Study Policies on Data Sharing and Data Security**

Lists the policies related to data sharing and security that are applicable to the EVERGLASS project.

9. **Conclusion**

Summarizes the key points of the DMP and outlines the ongoing review and update process to ensure its relevance and effectiveness throughout the project lifecycle.

10. **Annex: Datasets to be Produced**

Provides detailed descriptions of each dataset to be produced during the project, including their types, formats, and management plans.

This document will be reviewed and updated regularly to reflect new data, changes in project policies, and external factors affecting data management. The EVERGLASS project is committed to producing high-quality, reliable data that supports its research objectives and contributes to advancements in the field of glass material science.

2 Data Management in EVERGLASS

2.1 About Data Management in EVERGLASS

The EVERGLASS project, aligned with the principles of open science and FAIR (Findable, Accessible, Interoperable, and Reusable) data management, has established a comprehensive Data Management Plan (DMP). This plan outlines the types of data generated, methodologies for data collection, and strategies for data management, sharing, and preservation. The DMP is designed to ensure that all data produced is meticulously documented, securely stored, and accessible for future research and innovation.

As a Horizon Europe project, EVERGLASS is committed to providing a continuously updated DMP that describes what data will be generated, whether and how these data will be exploited or made accessible for verification and reuse, and how the data will be curated and preserved after the project's conclusion. Open data will be stored in public repositories compliant with OpenAIRE to enable metadata harvesting.

The project's data management policy handles these issues on both administrative and technical levels. This includes data and metadata collection, treatment of personal data, data repository infrastructure, and mandatory compliance with OpenAIRE.

The EVERGLASS DMP follows the structure of the Horizon Europe DMP template, reflecting the status of the data collected, processed, or generated by the project. It details whether and how this data will be shared and/or made open, and how it will be curated and preserved. As a public document, the DMP will be made available on the EVERGLASS website, ensuring transparency and accessibility.

2.2 Roles and Responsibilities

Effective data management within the EVERGLASS project requires clearly defined roles and responsibilities. These roles ensure that all data-related activities are coordinated, monitored, and executed according to the project's data management policy and best practices. The key roles and their responsibilities are as follows:

Project Data Manager

UVIGO as Project Coordinator will be the Project Data Manager, and therefore responsible for the overall coordination and implementation of the Data Management Plan (DMP). This role involves:

- Developing the DMP in collaboration with technical partners.

- Ensuring compliance with data management policies across the project.

- Coordinating the collection, storage, and publication of data.

- Monitoring data management activities and deadlines and sending reminders to Work Package (WP) Data Managers.

- Providing support and solutions for specific data management issues.

- Coordinating the writing and updating of the DMP deliverable document.

Work Package (WP) Data Managers

Each Work Package Leader serves as a Data Manager for their respective WP. Their responsibilities include:

- Implementing the data management policy within their WP.

- Monitoring data collection, storage, and publication activities and ensuring they meet project deadlines.

- Communicating with partners to gather missing information or clarifications.

- Providing input for the DMP deliverable documents.

- Offering customized help and guidance for publishing open data.

- Ensuring that open results are deposited in the default repository or a complementary OpenAIRE-compliant repository.

- Ensuring that open results available in OpenAIRE are properly linked with the EVERGLASS project.

Principal Investigator (PI)

The Principal Investigator or person in charge at each partner participating in EVERGLASS oversees the overall data management strategy and ensures compliance with the DMP. The PI's responsibilities include:

- Ensuring that all data management activities align with the project's objectives and H2020 requirements.

- Coordinating with the Project Data Manager and WP Data Managers to address any data management challenges.

- Reviewing and approving updates to the DMP.

- Assisting in choosing the right publication path (green or gold open access).

- Offering guidance and support for publishing scientific publications.

- Ensuring that the open access policy of journals complies with H2020 open data requirements.

- Monitoring that publications and research data are deposited in repositories and properly linked to the project.

- Monitoring possible embargo periods and sending reminders to partners.

- Ensuring that metadata about publications is made available in the R&I Participant Portal and on the EVERGLASS website.

Project Team Members

All project team members are responsible for:

- Collecting, processing, and accurately documenting data according to established protocols.

- Ensuring data quality and integrity.

- Following data management guidelines and policies.

By clearly defining these roles and responsibilities, the EVERGLASS project ensures effective and efficient data management throughout its lifecycle, supporting high-quality research and facilitating open access to valuable data.

2.3 Research data produced by EVERGLASS

The EVERGLASS project will generate a diverse array of data from both experimental and computational activities. This data is crucial for advancing the project's research objectives and will be managed in accordance with the principles of open science and FAIR data management. The types of data produced include:

Experimental data

1. **Microscopy Images**: High-resolution images obtained from electron microscopy (SEM, TEM) and optical microscopy. These images will be used to analyse the microstructure and morphology of the glass materials and will be saved in formats such as JPEG, TIFF, and proprietary formats specific to the imaging software.

2. **Spectroscopy Spectra**: Data from various spectroscopic techniques, including X-ray diffraction (XRD), Raman spectroscopy, and Fourier-transform infrared spectroscopy (FTIR). These spectra provide information about the chemical composition and structural properties of the glass materials and will be stored in XML, RAW, and CSV file formats.

3. **Mechanical Testing Data**: Results from mechanical tests such as tensile strength, hardness, and fracture toughness measurements. These will be recorded in spreadsheets and graphical formats (CSV, JSON, XLSX).

4. **Thermal Analysis Data**: Data from differential scanning calorimetry (DSC) and thermogravimetric analysis (TGA) to understand the thermal stability and decomposition behaviour of the glass materials. These datasets will be stored in Excel and specialized software formats.

Computational data

1. **Modelling Files**: Input and output files from computational simulations performed using finite element analysis (FEA) and molecular dynamics (MD) simulations. These files will be in software-specific formats such as .inp, .gro and .xtc, among others.

2. **Simulation Results**: Data from computational simulations, including stress-strain curves, atomic displacement, and energy distributions. These will be stored in formats such as HDF5, CSV, and proprietary formats.

Analytical data

1. **Processed Data**: Data processed from raw experimental and computational results, including calculated properties, derived parameters, and summarized results. These will be presented in tables, graphs, and charts, typically stored in Excel, CSV, and PDF formats.

2. **Statistical Analysis**: Results from statistical analyses performed to validate the experimental findings and computational predictions. These will be stored in formats such as SPSS, R scripts, and Excel.

Documentation and metadata

1. **Standard Operating Procedures (SOPs)**: Detailed documentation of experimental protocols, computational workflows, and data processing methods. These documents will be in Word, PDF, and HTML formats.

2. **Metadata**: Descriptive information about the data, including experimental conditions, simulation parameters, data provenance, and quality metrics. This metadata will be stored alongside the primary data in JSON, XML, and CSV formats.

Format and scale of the data

The EVERGLASS project will produce substantial volumes of data, each with specific formats and scales critical for effective data management, analysis, and sharing. The expected formats and scales for the various types of data generated are:

- **Microscopy Images**: Approximately 10,000 images, each ranging from 1 MB to 100 MB depending on resolution and colour depth.

- **Spectroscopy Spectra**: Around 500 spectra files, each ranging from 10 MB to 200 MB.

- **Mechanical Testing Data**: Approximately 200 datasets, each ranging from 1 MB to 50 MB.

- **Thermal Analysis Data**: Around 100 datasets, each ranging from 1 MB to 20 MB.

- **Modelling Files**: Approximately 2,000 files, each ranging from 10 MB to 500 MB.

- **Simulation Results**: Around 1,000 datasets, each ranging from 100 MB to 2 GB.

- **Processed Data**: Approximately 500 datasets, each ranging from 1 MB to 50 MB.

- **Statistical Analysis**: Around 300 datasets, each ranging from 1 MB to 10 MB.

- **SOPs**: Approximately 100 documents, each ranging from 100 KB to 10 MB.

- **Metadata**: Files for each primary data type, typically ranging from 10 KB to 1 MB.

Storage and management

The total data volume expected from the EVERGLASS project will amount to several terabytes (TB) over its duration. Data will be stored on secure servers with regular backups to ensure data integrity and availability. Access to data will be managed through repositories such as Zenodo, OpenAIRE, and CERN, ensuring that the data is discoverable and reusable by the scientific community. Data sharing will follow clear policies to balance open access with the protection of intellectual property and sensitive information.

3. Data summary

The EVERGLASS project will generate a comprehensive and diverse range of datasets from both experimental and computational activities. These datasets are crucial for achieving the project's objectives and will be managed to ensure high standards of data quality, security, and accessibility. Below is a summary of the types of data, their sources, formats, and estimated volumes.

Types of data

1. Experimental data:

- **Microscopy Images:** High-resolution images from electron microscopy (SEM, TEM) and optical microscopy. Formats: JPEG, TIFF, proprietary formats. Estimated Volume: ~10,000 images, 1 MB to 100 MB each.

- **Spectroscopy Spectra:** Data from X-ray diffraction (XRD), Raman spectroscopy, and Fourier-transform infrared spectroscopy (FTIR). Formats: XML, RAW, CSV. Estimated Volume: ~500 files, 10 MB to 200 MB each.

- **Mechanical Testing Data:** Results from tensile strength, hardness, and fracture toughness tests. Formats: Excel, CSV, JSON. Estimated Volume: ~200 datasets, 1 MB to 50 MB each.

- **Thermal Analysis Data:** Data from differential scanning calorimetry (DSC) and thermogravimetric analysis (TGA). Formats: Excel, proprietary formats. Estimated Volume: ~100 datasets, 1 MB to 20 MB each.

2. Computational data:

- **Modelling Files:** Input and output files from finite element analysis (FEA) and molecular dynamics (MD) simulations. Formats: .inp (Abaqus), .gro and .xtc (GROMACS), etc. Estimated Volume: ~2,000 files, 10 MB to 500 MB each.

- **Simulation Results:** Data from computational simulations including stress-strain curves, atomic displacement, and energy distributions. Formats: HDF5, CSV, proprietary formats. Estimated Volume: ~1,000 datasets, 100 MB to 2 GB each.

3. Analytical data:

- **Processed Data:** Data processed from raw experimental and computational results, including calculated properties and summarized results. Formats: Excel, CSV, PDF. Estimated Volume: ~500 datasets, 1 MB to 50 MB each.

- **Statistical Analysis:** Results from statistical analyses validating experimental findings and computational predictions. Formats: SPSS, R scripts, Excel. Estimated Volume: ~300 datasets, 1 MB to 10 MB each.

4. Documentation and metadata:

- **Standard Operating Procedures (SOPs):** Detailed protocols for data collection and processing. Formats: Word, PDF, HTML. Estimated Volume: ~100 documents, 100 KB to 10 MB each.

- **Metadata:** Descriptive information about the data, including experimental conditions and data provenance. Formats: JSON, XML, CSV. Estimated Volume: Metadata files for each primary data type, 10 KB to 1 MB each.

Total data volume

The project is expected to generate several terabytes (TB) of data over its duration. This data will be systematically managed and stored to ensure its integrity, accessibility, and long-term preservation.

Storage and accessibility

Data will be stored on secure servers with regular backups to prevent data loss and ensure recovery in case of system failures. Data will be made accessible through repositories such as Zenodo, OpenAIRE, and CERN. These repositories will facilitate the discoverability and reuse of the data by the scientific community.

Data Management practices

- **Documentation and Metadata:** All datasets will be accompanied by comprehensive metadata to ensure they are well-documented and easily interpretable.

- **Quality Assurance:** Regular audits and validation checks will be conducted to maintain data quality.

- **Access and Sharing:** Data will be made accessible according to the principles of open science, with temporary restrictions as necessary to protect intellectual property and ensure the novelty of publications.

By adhering to these practices, the EVERGLASS project aims to produce high-quality, reliable data that supports its research objectives and contributes to advancements in the field of glass material science.

4. FAIR Data

4.1 Making data findable, including provisions for metadata

To ensure that data generated by the EVERGLASS project is easily discoverable and accessible, the project will adhere to stringent metadata standards and implement robust data documentation practices. Key strategies include:

Metadata standards: All datasets will be accompanied by comprehensive metadata that conforms to established standards relevant to the types of data collected. Key metadata standards include:

- **Dublin Core:** Used for general data description, providing basic elements such as title, creator, subject, description, publisher, contributor, date, type, format, identifier, source, language, relation, coverage, and rights.

- **ISA-Tab:** Employed for experimental metadata, particularly in biological and biomedical studies, detailing investigation, study, and assay information.

- **DataCite:** Applied for datasets to ensure proper citation and to facilitate linking between publications and data.

Key metadata elements:

- **Dataset Title:** A descriptive title that accurately reflects the content of the dataset.

- **Authors/Creators:** Names and affiliations of individuals who created the dataset.

- **Abstract/Description:** A detailed summary of the dataset, including the purpose of the data collection, the methods used, and any relevant contextual information.

- **Keywords:** Terms that describe the dataset and facilitate search and discovery.

- **Date of Collection:** The dates when the data was collected or generated.

- **Location:** Geographic location where the data was collected, if applicable.

- **Methodology:** Detailed information on the methods and protocols used to collect and process the data.

- **Data Format:** Description of the file formats and any software or tools required to read the data.

- **Access Information:** Information on how to access the dataset, including any restrictions or permissions required.

- **Related Publications:** References to any publications that describe or utilize the dataset.

Naming Conventions: Clear and consistent naming conventions will be used for all datasets and files to ensure they are easily identifiable and searchable. Naming conventions will include elements such as project name, data type, date, and version number.

Versioning: Datasets will have version numbers to track changes and updates. This will ensure that users can identify the most current version of the data and understand the history of changes.

Data cataloguing: All datasets will be catalogued in a centralized data repository with detailed metadata. This catalogue will be searchable and will facilitate the discovery of datasets by researchers and other stakeholders.

Persistent identifiers: Each dataset will be assigned a persistent identifier (e.g., DOI) to ensure that it can be reliably cited and accessed over time. This will be facilitated through repositories like Zenodo, which provide DOI assignment services.

Interoperability with repositories: Metadata will be formatted to be compatible with major data repositories and indexing services such as OpenAIRE and DataCite. This will enhance the visibility and discoverability of the data.

4.2 Making data openly accessible

The EVERGLASS project is committed to ensuring that the data generated is openly accessible to the scientific community and other stakeholders. This commitment aligns with the principles of open science and the FAIR (Findable, Accessible, Interoperable, and Reusable) guidelines. The strategies for making data openly accessible include:

4.2.1 Open access to scientific publications

Under the Horizon Europe framework, each beneficiary must ensure open access to all peer-reviewed scientific publications relating to its results. The EVERGLASS project will adhere to this mandate by:

- **Green Open Access (Self-Archiving):** Authors will deposit a copy of the manuscript in a trusted repository (e.g., institutional repository, Zenodo) and ensure that it is freely accessible. Embargo periods, if any, will be minimized according to the publisher's policies.

- **Gold Open Access:** Publishing in open access journals where articles are immediately available for free. The project will cover the publication fees when applicable.

4.2.2 Open access to research data

The EVERGLASS project will provide open access to the research data generated in accordance with the principles of the Horizon Europe Open Research Data Pilot. The key actions include:

- **Depositing Data in repositories:** All datasets will be deposited in trusted, OpenAIRE-compliant repositories such as Zenodo, OpenAIRE, or CERN. These repositories ensure long-term preservation and accessibility of the data.

- **Ensuring accessibility:** Data will be made available free of charge to all users, with clear terms and conditions for reuse. Where necessary, access restrictions may apply to protect sensitive data, intellectual property, or ongoing research.

- **Metadata and documentation:** Comprehensive metadata and documentation will accompany each dataset, providing context and ensuring that the data can be understood and reused by others.

- **Licensing:** Datasets will be made available under open licenses such as Creative Commons (CC BY or CC0), which allow for broad reuse while ensuring appropriate attribution to the data creators.

4.2.3 Data accessibility and tools

- **Data formats:** Data will be provided in widely used, non-proprietary formats (e.g., CSV, JSON, XML) to ensure that it can be easily accessed and used with a variety of software tools.

- **Access platforms:** The EVERGLASS project website and relevant repositories will serve as access points for the data. These platforms will offer search and download capabilities, making it easy for users to find and retrieve the data.

- **Supporting tools:** Information about tools and software necessary for accessing, using, and interpreting the data will be provided. This includes links to software downloads, user guides, and technical documentation.

4.2.4 Addressing accessibility challenges

- **Sensitive data:** If the data contains sensitive information, steps will be taken to anonymize it or provide controlled access to protect privacy and confidentiality. For example, data involving human subjects will comply with GDPR and other relevant regulations.

- **Embargo periods:** To protect intellectual property or pending publications, certain datasets may be subject to temporary embargoes. The project will clearly communicate the duration and rationale for these embargoes and will ensure that data becomes openly accessible as soon as possible.

4.3 Making data interoperable

To ensure that the data generated by the EVERGLASS project can be easily integrated and used in conjunction with other datasets, the project will adopt several strategies to enhance data interoperability. These strategies are designed to facilitate data exchange and reuse between researchers, institutions, and systems, thereby supporting the broader scientific community's efforts to collaborate and innovate.

4.3.1 Use of Standardized Formats and Protocols

The EVERGLASS project will use standardized data formats and protocols to ensure that the data is compatible with a wide range of software tools and platforms. Key practices include:

- **Data formats:** Employing widely accepted, non-proprietary formats such as CSV, JSON, XML, HDF5, and TIFF for storing different types of data. These formats are broadly supported and facilitate data exchange across various platforms and tools.

- **Metadata standards:** Utilizing standardized metadata schemas such as Dublin Core, ISA-Tab, and DataCite to describe datasets. This ensures that metadata is consistent and can be easily understood and processed by other systems.

4.3.2 Controlled Vocabularies and Ontologies

To ensure that data is described consistently, the EVERGLASS project will use controlled vocabularies and ontologies. These standardized terminologies help in maintaining consistency and improving the interoperability of data. Examples include:

- **Domain-specific ontologies:** Utilizing ontologies relevant to materials science and computational modelling to describe the data accurately.

- **Controlled vocabularies:** Applying controlled vocabularies for key data elements such as material types, experimental methods, and analytical techniques.

4.3.3 Adherence to Interoperability Standards

The project will adhere to established interoperability standards to ensure that data can be easily shared and integrated with other datasets and platforms. These standards include:

- **OpenAIRE guidelines:** Complying with OpenAIRE guidelines for the interoperability of research data to ensure that datasets can be harvested and indexed by OpenAIRE services.

- **Research Data Alliance (RDA) recommendations:** Following RDA recommendations for data interoperability, which provide best practices for data sharing and integration across different disciplines and platforms.

4.3.4 Semantic Interoperability

To enhance semantic interoperability, the EVERGLASS project will implement practices that ensure data is not only syntactically but also semantically interoperable. This involves:

- **Rich metadata descriptions:** Providing detailed metadata that includes contextual information about the data, such as experimental conditions, methodologies, and processing steps.

- **Linking data with persistent identifiers:** Using persistent identifiers (e.g., DOIs) to link datasets with related publications, software, and other resources. This creates a network of interconnected data that can be easily navigated and understood.

4.3.5 Data Documentation and Provenance

Comprehensive documentation and provenance information will be maintained for all datasets. This includes:

- **Data provenance:** Documenting the origin and history of the data, including how it was collected, processed, and transformed. This ensures that users can understand the context and reliability of the data.

- **User guides and documentation:** Providing detailed user guides and documentation to help users understand how to access, use, and interpret the data.

4.3.6 Interoperable Data Repositories

The EVERGLASS project will deposit data in repositories that support interoperability. These repositories will:

- **Support standard protocols:** Implement standard data exchange protocols such as OAI-PMH (Open Archives Initiative Protocol for Metadata Harvesting) to enable data harvesting and integration with other repositories.

- **Facilitate cross-repository search:** Allow for cross-repository search and discovery, enabling users to find related datasets across different platforms.

4.4 Increase data reuse

To maximize the reuse of the data generated by the EVERGLASS project, the following strategies will be implemented:

Licensing and Usage Rights

- **Open Licenses:** Data will be made available under open licenses such as Creative Commons (CC BY or CC0), allowing free access and use with proper attribution.

- **Clear Usage Terms:** Terms of use will be clearly defined to ensure users understand their rights and responsibilities.

Comprehensive Documentation

- **Detailed Metadata:** Comprehensive metadata will accompany each dataset, providing information on data collection, processing, and context.

- **User Guides:** User guides and documentation will be provided to assist users in accessing and utilizing the data.

Ensuring Data Quality and Integrity

- **Quality Assurance:** Rigorous quality checks will ensure data accuracy and reliability.

- **Version Control:** Version control mechanisms will track changes to datasets, ensuring access to the most current version.

Long-term Preservation

- **Trusted Repositories:** Data will be stored in long-term repositories like Zenodo, OpenAIRE, and CERN.

- **Data Retention Policies:** Data will be retained for at least 10 years post-project, following institutional and international guidelines.

Enhancing Discoverability

- **Searchable Catalogues:** Datasets will be indexed in searchable catalogue and repositories for easy discovery.

- **Persistent Identifiers:** Each dataset will have a persistent identifier (e.g., DOI) for reliable citation and access.

Community Engagement

- **Collaboration and Feedback:** Engaging with the scientific community through workshops and forums to promote data reuse and gather feedback.

- **Promotion and Dissemination:** Actively promoting data reuse through the project's website and communication channels.

5. Data security

Ensuring the security of data generated by the EVERGLASS project is paramount. The project will implement robust data security measures to protect the integrity, confidentiality, and availability of the data. Key strategies include:

Formal Information/Data Security Standards

- **ISO27001 Compliance:** Adhering to the international standard for information security management to ensure systematic management of sensitive information.

- **Access Controls:** Implementing role-based permissions to ensure that only authorized personnel have access to sensitive data.

- **Encryption:** Using strong encryption protocols to protect data both in transit and at rest.

- **Secure Storage:** Storing data on secure servers with robust physical and digital protections.

- **Regular Security Audits:** Conducting regular audits and vulnerability assessments to identify and mitigate potential risks.

Main Risks to Data Security

1. **Data Loss:**
   o **Risk:** Accidental deletion, hardware failure, or natural disasters.
   o **Mitigation:** Regular automated backups and redundant storage systems to ensure data can be recovered.

2. **Unauthorized Access:**
   o **Risk:** Unauthorized individuals accessing sensitive data, leading to data breaches or misuse.
   o **Mitigation:** Strict access controls, role-based permissions, and encryption protocols to protect data.

3. **Data Corruption:**
   o **Risk:** Data corruption due to software bugs, malware, or hardware issues.

- o **Mitigation:** Regular integrity checks, use of reliable storage systems, and up-to-date antivirus software to detect and prevent data corruption.

4. **Data Breaches:**

- o **Risk:** Cyberattacks such as hacking, phishing, or ransomware compromising data security.

- o **Mitigation:** Firewalls, intrusion detection systems, and regular security audits to reduce the risk of data breaches.

5. **Insider Threats:**

- o **Risk:** Malicious or negligent actions by insiders leading to data exposure or damage.

- o **Mitigation:** Regular training on data security best practices and strict access controls to minimize insider threats.

Data Anonymization and GDPR Compliance

- **Anonymization:** Anonymizing sensitive data to protect privacy, ensuring that personal information cannot be traced back to individuals.

- **GDPR Compliance:** Ensuring all data handling practices comply with the General Data Protection Regulation (GDPR) to protect personal data and privacy.

Incident Response Plan

- **Incident Handling Procedures:** Establishing procedures to address and mitigate data breaches promptly.

- **Training and Awareness:** Regular training for all personnel on data security best practices and incident response protocols.

6. Ethical aspects

The EVERGLASS project is committed to conducting research ethically, ensuring compliance with relevant regulations and guidelines. The project will adhere to the General Data Protection Regulation (GDPR) to protect personal data and ensure privacy. Personal data will be processed lawfully, fairly, and transparently, with informed consent obtained when necessary. The project will collect only the data necessary for its objectives and ensure that data is used solely for specified, explicit purposes.

Data minimization principles will be followed, and personal data will be anonymized or pseudonymized to protect privacy. Data security measures will be implemented to prevent unauthorized access, and data subjects will be informed of their rights, including the right to access, correct, and delete their data. Ethical approval will be sought for all research involving human subjects, and the project will ensure compliance with ethical standards and guidelines throughout its duration.

6.1 Alignment with the GDPR

The EVERGLASS project will strictly adhere to the General Data Protection Regulation (GDPR) to ensure the protection of personal data and privacy. The following measures will be implemented:

Personal data will be processed lawfully, fairly, and transparently. Informed consent will be obtained from all data subjects when necessary, ensuring they are aware of how their data will be used. The project will follow data minimization principles, collecting only the data necessary for achieving its objectives.

Data will be anonymized or pseudonymized to protect the privacy of individuals. Data security measures, including encryption and access controls, will be in place to prevent unauthorized access. Data subjects will be informed of their rights under the GDPR, including the rights to access, correct, and delete their data.

The project will ensure compliance with all relevant GDPR principles, including purpose limitation, data minimization, accuracy, storage limitation, integrity and confidentiality, and accountability.

6.2 Lawfulness, fairness and transparency

The EVERGLASS project is committed to ensuring that personal data is processed in a lawful, fair, and transparent manner in compliance with the GDPR. This involves the following practices:

Lawfulness: All personal data processing activities will have a valid legal basis as defined by the GDPR. This includes obtaining explicit consent from data subjects where required and ensuring that data processing is necessary for the performance of the project.

Fairness: Personal data will be processed in a manner that is fair to the data subjects. This means being transparent about how their data is collected, used, and shared. The project will avoid any practices that could mislead or harm data subjects.

Transparency: The EVERGLASS project will be open about its data processing activities. Data subjects will be informed about the purposes of data collection, the types of data being collected, how the data will be used, and who it will be shared with. This information will be provided in a clear and easily understandable manner.

By adhering to these principles, the EVERGLASS project ensures that personal data is handled responsibly, maintaining trust and compliance with GDPR regulations.

6.3 Purpose limitation

The EVERGLASS project will adhere to the principle of purpose limitation, ensuring that personal data is collected and processed solely for specified, explicit, and legitimate purposes. Key practices include:

Specified Purposes: Personal data will only be collected for clearly defined and legitimate research objectives related to the EVERGLASS project. These purposes will be communicated to data subjects at the time of data collection.

Restriction of Use: Data will be used exclusively for the purposes for which it was collected. It will not be further processed in a manner that is incompatible with those original purposes unless additional consent is obtained from the data subjects.

Transparency: Data subjects will be informed about the specific purposes for which their data is being collected and processed, ensuring transparency and compliance with GDPR requirements.

By following these practices, the EVERGLASS project ensures that personal data is used appropriately and responsibly, maintaining trust and regulatory compliance.

6.3.1 Data minimisation

The EVERGLASS project will collect and process only the personal data that is necessary for its objectives. Unnecessary data collection will be avoided, and any data that is not essential will be securely deleted or anonymized. Regular reviews will ensure that all collected data remains relevant and necessary.

6.3.2 Accuracy

The EVERGLASS project will ensure that personal data is accurate and kept up to date. Regular checks will be conducted to verify the accuracy of the data, and any inaccuracies will be corrected promptly. Data subjects will have the right to request corrections to their data to ensure it remains accurate and reliable.

6.3.3 Storage limitation

The EVERGLASS project will retain personal data only for as long as necessary to achieve the project's objectives. Once the data is no longer needed, it will be securely deleted or anonymized. Data retention periods will be clearly defined and regularly reviewed to ensure compliance with GDPR and project requirements.

6.3.4 Integrity and confidentiality

The EVERGLASS project will implement robust measures to ensure the integrity and confidentiality of personal data. This includes using encryption, secure storage solutions, and access controls to protect data from unauthorized access, alteration, or loss. Regular security audits and compliance checks will be conducted to maintain high standards of data protection.

6.3.5 Accountability

The EVERGLASS project will ensure accountability by implementing and documenting all data protection measures. Project leaders will regularly review data processing activities to ensure compliance with GDPR and other relevant regulations. Any data breaches or compliance issues will be promptly addressed, and all team members will be trained on data protection principles and practices.

7. Conclusion

The EVERGLASS project is dedicated to implementing comprehensive data management practices that align with the principles of FAIR (Findable, Accessible, Interoperable, and Reusable) and comply with GDPR regulations. This Data Management Plan (DMP) serves as a guiding document to ensure that all data generated during the project is managed effectively, securely, and ethically.

Throughout the project, data will be meticulously documented, securely stored, and made accessible for future research and innovation. By adhering to standardized metadata practices and using controlled vocabularies, the project ensures that data is both discoverable and interoperable. The use of open licenses and clear usage terms will promote data reuse, allowing the broader scientific community to benefit from the findings of the EVERGLASS project.

Robust measures will be implemented to protect the integrity and confidentiality of the data. This includes encryption, secure storage solutions, access controls, and regular security audits to safeguard against unauthorized access and data breaches. Data minimization principles will be followed to ensure that only necessary data is collected and processed, while regular reviews will maintain the accuracy and relevance of the data.

Ethical considerations are at the forefront of the EVERGLASS project's data management practices. Compliance with GDPR ensures that personal data is processed lawfully, fairly, and transparently. The project will obtain informed consent from data subjects, protect their privacy through anonymization and pseudonymization, and uphold their rights to access, correct, and delete their data.

Accountability is a key aspect of the EVERGLASS project's approach to data management. Project leaders will oversee data processing activities, conduct regular compliance checks, and ensure that all team members are trained in data protection principles. Any data breaches or compliance issues will be promptly addressed to maintain high standards of data protection.

This DMP is a living document that will be regularly reviewed and updated to reflect new data, changes in project policies, and evolving external factors. By maintaining a dynamic and responsive approach to data management, the EVERGLASS project aims to contribute to advancements in the field of glass material science, foster a culture of open science, and support the ongoing and future research efforts of the scientific community.

In conclusion, the EVERGLASS project's commitment to rigorous data management practices underscores its dedication to producing high-quality, reliable data that can drive innovation and collaboration. Through careful planning and diligent implementation of data management strategies, the project will ensure that its data is valuable, secure, and accessible for the long term.

ANNEX 1: Datasets to be produced as a result of research activities during EVERGLASS

The EVERGLASS project will generate a variety of datasets through its research activities. These datasets will be documented, stored, and made accessible according to the principles of FAIR (Findable, Accessible, Interoperable, and Reusable). Below is a summary of the key datasets expected to be produced during the project:

Dataset 1: Microscopy Images

- **Description:** High-resolution images obtained from scanning electron microscopy (SEM) and transmission electron microscopy (TEM).

- **Format:** JPEG, TIFF, proprietary formats.

- **Data Type:** Experimental.

- **Volume:** Approximately 10,000 images, 1 MB to 100 MB each.

- **Purpose:** Analysis of microstructure and morphology of glass materials.

- **Access:** Open access with proper metadata.

Dataset 2: Spectroscopy Spectra

- **Description:** Spectroscopic data from X-ray diffraction (XRD), Raman spectroscopy, and Fourier-transform infrared spectroscopy (FTIR), X-ray fluorescence spectroscopy (XRF).

- **Format:** XML, RAW, CSV.

- **Data Type:** Experimental.

- **Volume:** Approximately 500 spectra, 10 MB to 200 MB each.

- **Purpose:** Characterization of chemical composition and structural properties of glass materials.

- **Access:** Open access with proper metadata.

Dataset 3: Mechanical Testing Data

- **Description:** Results from tensile strength, hardness, nanoindentation, and fracture toughness tests.

- **Format:** Excel, CSV, JSON.

- **Data Type:** Experimental.

- **Volume:** Approximately 200 datasets, 1 MB to 50 MB each.

- **Purpose:** Evaluation of mechanical properties of glass materials.

- **Access:** Open access with proper metadata.

Dataset 4: Thermal Analysis Data

- **Description:** Data from differential scanning calorimetry (DSC), thermogravimetric analysis (TGA), dilatometry, high temperature rheometry.

- **Format:** Excel, CSV, proprietary formats.

- **Data Type:** Experimental.

- **Volume:** Approximately 100 datasets, 1 MB to 20 MB each.

- **Purpose:** Assessment of thermal stability, evolution and decomposition behavior of glass materials.

- **Access:** Open access with proper metadata.

Dataset 5: Modeling Files

- **Description:** Input and output files from finite element analysis (FEA) and molecular dynamics (MD) simulations.

- **Format:** .inp (Abaqus), .gro and .xtc (GROMACS), .stl, .iges, .step, .acis, parasolid, etc.

- **Data Type:** Computational.

- **Volume:** Approximately 2,000 files, 10 MB to 500 MB each.

- **Purpose:** Simulation of material behavior under various conditions.

- **Access:** Open access with proper metadata.

Dataset 6: Simulation Results

- **Description:** Data from computational simulations including stress-strain curves, atomic displacement, and energy distributions.

- **Format:** HDF5, CSV, DAT, OBJ, GEN, TEM, HTO, LCD, STN, STE, CDB proprietary formats.

- **Data Type:** Computational.

- **Volume:** Approximately 1,000 datasets, 100 MB to 2 GB each.

- **Purpose:** Detailed analysis of simulated material behavior.

- **Access:** Open access with proper metadata.

Dataset 7: Processed Data

- **Description:** Data processed from raw experimental and computational results, including calculated properties and summarized results, results of LCA, etc.

- **Format:** pdf, csv, xls(x), xml, txt, ILCD, EcoSpold01, EcoSpold02.

- **Data Type:** Analytical.

- **Volume:** Approximately 500 datasets, 1 MB to 50 MB each.

- **Purpose:** Summarization and interpretation of research findings.

- **Access:** Open access with proper metadata.

Dataset 8: Statistical Analysis

- **Description:** Results from statistical analyses validating experimental findings and computational predictions.

- **Format:** SPSS, R scripts, Excel.

- **Data Type:** Analytical.

- **Volume:** Approximately 300 datasets, 1 MB to 10 MB each.

- **Purpose:** Statistical validation of research data.

- **Access:** Open access with proper metadata.

Dataset 9: Standard Operating Procedures (SOPs)

- **Description:** Detailed protocols for data collection and processing.

- **Format:** Word, PDF, HTML.

- **Data Type:** Documentation.

- **Volume:** Approximately 100 documents, 100 KB to 10 MB each.

- **Purpose:** Ensuring consistency and reproducibility in data collection and processing.

- **Access:** Open access with proper metadata.

Dataset 10: Metadata

- **Description:** Descriptive information about the data, including experimental conditions and data provenance.

- **Format:** JSON, XML, CSV.

- **Data Type:** Metadata.

- **Volume:** Metadata files for each primary data type, 10 KB to 1 MB each.

- **Purpose:** Facilitating data discoverability and reuse.

- **Access:** Open access with proper metadata.

Dataset 11: Other Characterization Data

- **Description:** Characterization data such as particle size distribution, optical transmittance, density, thermal conductivity, electrical resistance, dielectric properties.

- **Format:** Excel, CSV, proprietary formats.

- **Data Type:** Experimental.

- **Volume:** Approximately 100 datasets, 1 MB to 20 MB each.

- **Purpose:** Assessment of different properties of glass materials at different process stages.
- **Access:** Open access with proper metadata.

These datasets will be stored in secure repositories and made accessible according to the principles of open science. Comprehensive metadata and documentation will accompany each dataset to ensure they are easily discoverable and reusable by the broader

Data Manager / Responsible partner: UNIVERSIDAD DE VIGO

Dataset number	1	*1, 2, 3... Correlative number in case you will be producing several datasets*
Will it be open (made publicly accessible	No	*Yes/No*
If your answer has been "No", please explain why you cannot open the data	*Data related to the glass laser morphing is restricted to the Everglass partners*	
Data repository used for making it open		
Description	Data related to the functioning of the glass laser morphing	
What purpose is it for?	Functioning of the glass laser morphing system	
What is EVERGLASS' related objective?	To test the proof of concept of EVERGLASS as a converter of glass waste into glass products	
About data		
Type of data	Numeric	*Please, select an option from the list*
Format	pdf	*Examples:* *For texts - HTML, PDF, TXT...* *For numeric data - XLS, CSV...* *For audiovisuals - JPEG, MP4, TIFF, PNG, MP3, WAVE...*
Dataset is:	Revisable	***Fixed:*** *never change after being collected or generated.* ***Growing:*** *new data may be added, but the old data is never changed or deleted.* ***Revisable:*** *new data may be added, and old data may be changed or deleted.*
Discipline		
Is it instrument specific?	Yes	*If yes, please answer the sub-questions below*
Equipment	*Glass laser morphing*	
Format	*Numeric*	
About the origin - *Define and describe the origin/source of your data. Data can be gathered from different sources*		
Observational		*Data captured in real time - often not reproducible i.e. sensor readings, images, telemetries, sample data...*
Experimental		*Data from lab equipment, often reproducible, but with high costs - i.e. chromatograms, magnetic fields readings...reproducible i.e. sensor readings,images, telemetries, sample da*
Simulation		*Data generated by computational models where model and metadata are equally important to output data - i.e. climate models, economic models, materials models,...*
Derived/Compiled	X	*Data coming from analysis or compilation. Reproducible but with high costs - i.e. the results of text and data mining, compiled databases...*
Reference or Canonical (links)		*Collection or conglomeration of smaller (peer-reviewed) datasets published and curated - i.e. chemical structures, gene sequence databanks, spatial data portals...*
Long term / FAIR access		
Is there any provision for an specific license model for this dataset?	No	
To whom it could be useful?	EVERGLASS partners	
For what?	Functioning the glass laser morphing	
Any metadata provided?	No	
Any other comment		

Dataset number	2	*1, 2, 3... Correlative number in case you will be producing several datasets*
Will it be open (made publicly accessible)	Yes	*Yes/No*
If your answer has been "No", please explain why you cannot open the data		
Data repository used for making it open	INVESTIGO	
Description	Interaction of CO laser radiation with different types of glasses	
What purpose is it for?	Determination of the interaction of CO laser radiation with glass	
What is EVERGLASS' related objective?	To test the proof of concept of EVERGLASS as a converter of glass waste into glass products	
About data		
Type of data	Numeric	*Please, select an option from the list*
Format	pdf	*Examples:*
		For texts - HTML, PDF, TXT...
		For numeric data - XLS, CSV...
		For audiovisuals - JPEG, MP4, TIFF, PNG, MP3, InVIVE...
Dataset is:	Revisable	***Fixed:** never change after being collected or generated.*
		***Growing** : new data may be added, but the old data is never changed or deleted.*
		***Revisable:** new data may be ddded, and old data may be changed or deleted.*
Discipline		
Is it instrument specific?	Yes	*If yes, please answer the sub-questions below*
Equipment	*CO laser*	
Format	*Numeric*	
About the origin - *Define and describe the origin/source of your data. Data can be gathered from different sources*		
Observational		*Data captured in real time - often not reproducible i.e. sensor readings, images, telemetries, sample data...*
Experimental	X	*Data from lab equipment, often reproducible, but with high costs - i.e. chromatograms, magnetic fields readings...reproducible i.e. sensor readings,images, telemetries, sample a*
Simulation		*Data generated by computational models where model and metadata are equally important to output data - i.e. climate models, economic models, materials models,...*
Derived/Compiled		*Data coming from analysis or compilation. Reproducible but with high costs - i.e. the results of text and data mining, compiled databases...*
Reference or Canonical (links)		*Collection or conglomeration of smaller (peer-reviewed) datasets published and curated - i.e. chemical structures, gene sequence databanks, spatial data portals...*
Long term / FAIR access		
Is there any provision for an specific license model for this dataset?	No	
To whom it could be useful?	EVERGLASS partners	
For what?	Functioning the glass laser morphing	
Any metadata provided?	No	
Any other comment		

Dataset number	3	1, 2, 3... Correlative number in case you will be producing several datasets
Will it be open (made publicly accessible)	Yes	Yes/No
If your answer has been "No", please explain why you cannot open the data		
Data repository used for making it open	INVESTIGO	
Description	Flowability of different types of glass powder	
What purpose is it for?	Adquate feeding of the precursor material to the glass laser morphing system	
What is EVERGLASS' related objective?	To test the proof of concept of EVERGLASS as a converter of glass waste into glass products	
About data		
Type of data	Numeric	*Please, select an option from the list*
Format	pdf	*Examples:*
		For texts - HTML, PDF, TXT...
		For numeric data - XLS, CSV...
		For audiovisuals - JPEG, MP4, TIFF, PNG, MP3, WAVE...
Dataset is:	Revisable	***Fixed:*** *never change after being collected or generated.*
		Growing*: new data may be added, but the old data is never changed or deleted.*
		Revisable: *new data may be added, and old data may be changed or deleted.*
Discipline		
Is it instrrument specific?	No	*If yes, please answer the sub-questions below*
Equipment		
Format	*Numeric*	
About the origin - *Define and describe the origin/source of your data. Data can be gathered from different sources*		
Observational		*Data captured in real time - often not reproducible i.e. sensor readings, images, telemetries, sample data...*
Experimental	X	*Data from lab equipment, often reproducible, but with high costs - i.e. chromatograms, magnetic fields readings...reproducible i.e. sensor readings, images, telemetries, sample d...*
Simulation		*Data generated by computational models where model and metadata are equally important to output data - i.e. climate models, economic models, materials models,...*
Derived/Compiled		*Data coming from analysis or compilation. Reproducible but with high costs - i.e. the results of text and data mining, compiled databases...*
Reference or Canonical (links)		*Collection or conglomeration of smaller (peer-reviewed) datasets published and curated - i.e. chemical structures, gene sequence databanks, spatial data portals...*
Long term / FAIR access		
Is there any provision for an specific license model for this dataset?	No	
To whom it could be useful?	EVERGLASS partners	
For what?	Functioning the glass laser morphing	
Any metadata provided?	No	
Any other comment		

Data Manager / Responsible partner: FunGlass

Dataset number	1	1, 2, 3... Correlative number in case you will be producing several datasets
Will it be open (made publicly access	Yes	Yes/No
If your answer has been "No", please explain why you cannot open the		
Data repository used for making it ope	Under selection	
Description	Investigation of the chemical composition of selected basic glass waste systems	
What purpose is it for?		
What is EVERGLASS' related objecti	To test the proof of concept of EVERGLASS as a converter of glass waste into glass products	
About data		
Type of data	Text	Please, select an option from the list
Format	PDF, XLS	Examples:
		For texts – HTML, PDF, TXT...
		For numeric data – XLS, CSV...
		For audiovisuals – JPEG, MP4, TIFF, PNG, MP3, WAVE...
Dataset is:	Revisable	**Fixed:** never change after being collected or generated.
		Growing : new data may be added, but the old data is never changed or deleted.
		Revisable: new data may be dded, and old data may be changed or deleted.
Discipline	Physics and Chemistry	
Is it instrument specific?	Yes	If yes, please answer the sub-questions below
Equipment	XRF, SEM-EDS/WDS+, ICP-MS, ICP-OS	
Format		
About the origin - *Define and describe the origin/source of your data. Data can be gathered from different sources*		
Observational		Data captured in real time – often not reproducible i.e. sensor readings, images, telemetries, sample data...
Experimental	chemical composition of	Data from lab equipment, often reproducible, but with high costs – i.e. chromatograms, magnetic fields readings...reproducible i.e. sensor readings, images, telemetries
Simulation		Data generated by computational models where model and metadata are equally important to output data – i.e. climate models, economic models, materials models,...
Derived/Compiled		Data coming from analysis or compilation. Reproducible but with high costs – i.e. the results of text and data mining, compiled databases...
Reference or Canonical (links)		Collection or conglomeration of smaller (peer-reviewed) datasets published and curated – i.e. chemical structures, gene sequence databanks, spatial data portals...
Long term / FAIR access		
Is there any provision for an specific license model for this dataset?	No	
To whom it could be useful?	For those interested in the chemical composition of various waste glasses	
For what?	To understand the different chemical composition of various waste glasses	
Any metadata provided?	No	
Any other comment	No	

Dataset number+A40A40:M67	2	*1, 2, 3... Correlative number in case you will be producing several datasets*					
Will it be open (made publicly access	Yes	*Yes/No*					
If your answer has been "No", please explain why you cannot open the							
Data repository used for making it ope	Under selection						
Description	Investigation of chemical composition, final chemical homogeneity of prepared 3D objects (EVERGLASS products)						
What purpose is it for?							
What is EVERGLASS' related objecti	To test the proof of concept of EVERGLASS as a converter of glass waste into glass products						
About data							
Type of data	Text	*Please, select an option from the list*					
Format	PDF, XLS	*Examples:*					
Dataset is:	Revisable	***Fixed:*** *never change after being collected or generated.*					
Discipline	Physics and Chemistry						
Is it instrument specific?	Yes	*If yes, please answer the sub-questions below*					
Equipment		*SEM-EDS/WDS, Laser ablation-ICP-MS, ICP-OS, XRF, UV-VIS-NIS spectrophotometer, Optical Microscope, Confocal Microscope,*					
Format							
About the origin - *Define and describe the origin/source of your data. Data can be gathered from different sources*							
Observational		*Data captured in real time – often not reproducible i.e. sensor readings, images, telemetries, sample data...*					
Experimental	chemical and colour	*Data from lab equipment, often reproducible, but with high costs – i.e. chromatograms, magnetic fields readings...reproducible i.e. sensor readings, images, telemetries*					
Simulation		*Data generated by computational models where model and metadata are equally important to output data – i.e. climate models, economic models, materials models,...*					
Derived/Compiled		*Data coming from analysis or compilation. Reproducible but with high costs – i.e. the results of text and data mining, compiled databases...*					
Reference or Canonical (links)		*Collection or conglomeration of smaller (peer-reviewed) datasets published and curated – i.e. chemical structures, gene sequence databanks, spatial data portals...*					
Long term / FAIR access							
Is there any provision for an specific	No						
To whom it could be useful?	For those interested in the physicochemical properties (chemical homogeneity) and its changes during the preparation of 3D glass objects by an additive technique based on						
For what?	To understand the fabrication process by additive technique (laser) and its optimization based on chemical homogeneity						
Any metadata provided?	No						
Any other comment	No						

Dataset number+A40A40:M67	3	1, 2, 3... Correlative number in case you will be producing several datasets
Will it be open (made publicly access	Yes	Yes/No
If your answer has been "No", please explain why you cannot open the		
Data repository used for making it ope	Under selection	
Description	characterization of the selected performance indicators I of EVERGLASS products (mechanical properties, heat resistance, and optical properties).	
What purpose is it for?		
What is EVERGLASS' related objecti	To test the proof of concept of EVERGLASS as a converter of glass waste into glass products	
About data		
Type of data	Text	Please, select an option from the list
Format	PDF, XLS	Examples:
Dataset is:	Revisable	Fixed: never change after being collected or generated
Discipline	Physics and Chemistry	
Is it instrument specific?	Yes	If yes, please answer the sub-questions below
Equipment		Instron-Mechanical properties, UV-VIS-NIR spectrophotometer (optical properties), TMA/Dilatometer (Thermal characteristics)
Format		
About the origin - Define and describe the origin/source of your data. Data can be gathered from different sources		
Observational		Data captured in real time – often not reproducible i.e. sensor readings, images, telemetries, sample data...
Experimental	physicochemical data	Data from lab equipment, often reproducible, but with high costs – i.e. chromatograms, magnetic fields readings...reproducible i.e. sensor readings, images, telemetries
Simulation		Data generated by computational models where model and metadata are equally important to output data – i.e. climate models, economic models, materials models...
Derived/Compiled		Data coming from analysis or compilation. Reproducible but with high costs – i.e. the results of text and data mining, compiled databases...
Reference or Canonical (links)		Collection or conglomeration of smaller (peer-reviewed) datasets published and curated – i.e. chemical structures, gene sequence databanks, spatial data portals...
Long term / FAIR access		
Is there any provision for an specific	No	
To whom it could be useful?	For those interested in the physicochemical properties (mechanical properties, heat resistance, and optical properties of EVERGLASS products) and their changes during the	
For what?	To understand the fabrication process by EVERGLASS technique and its optimization based on physicochemical properties	
Any metadata provided?	No	
Any other comment	No	

Dataset number	4	*1, 2, 3... Correlative number in case you will be producing several datasets*
Will it be open (made publicly access	Yes	*Yes/No*
If your answer has been "No", please explain why you cannot open the		
Data repository used for making it ope	Under selection	
Description	Characterization of the selected performance indicators II of EVERGLASS products (dishwashing resistance, hydrolytic resistance/properties)	
What purpose is it for?		
What is EVERGLASS' related objecti	To test the proof of concept of EVERGLASS as a converter of glass waste into glass products	
About data		
Type of data	Text	*Please, select an option from the list*
Format	PDF, XLS	*Examples:*
Dataset is:	Revisable	*Fixed: never change after being collected or generated.*
Discipline	Physics and Chemistry	
Is it instrument specific?	Yes	*If yes, please answer the sub-questions below*
Equipment	Dishwasher, SEM-EDS, Optical Microscope, Confocal Microscope, ICP-OS, ICP-MS, Autoclave	
Format		
About the origin - *Define and describe the origin/source of your data. Data can be gathered from different sources*		
Observational		*Data captured in real time - often not reproducible i.e. sensor readings, images, telemetries, sample data...*
Experimental	physicochemical data	*Data from lab equipment, often reproducible, but with high costs – i.e. chromatograms, magnetic fields readings...reproducible i.e. sensor readings, images, telemetries*
Simulation		*Data generated by computational models where model and metadata are equally important to output data – i.e. climate models, economic models, materials models....*
Derived/Compiled		*Data coming from analysis or compilation. Reproducible but with high costs – i.e. the results of text and data mining, compiled databases...*
Reference or Canonical (links)		*Collection or conglomeration of smaller (peer-reviewed) datasets published and curated – i.e. chemical structures, gene sequence databanks, spatial data portals...*
Long term / FAIR access		
Is there any provision for an specific	No	
To whom it could be useful?	For those interested in the physicochemical properties (dishwashing resistance, hydrolytic resistance/properties of EVERGLASS products) and their changes during the	
For what?	To understand the fabrication process by EVERGLASS technique and its optimization based on physicochemical properties	
Any metadata provided?	No	
Any other comment	No	

Data Manager / Responsible partner: Fraunhofer

Dataset number	1	*1, 2, 3… Correlative number in case you will be producing several datasets*
Will it be open (made publicly accessible)?	Yes	*Yes/No*
If your answer has been "No", please explain why you cannot open the data		
Data repository used for making it open	https://gitlab.cc-asp.fraunhofer.de/everglass-eu/mf-simulations	
Description	Git repository containing the simulation input files for computational models of the GLM processes using MESHFREE.	
What purpose is it for?	Storing the simulation input files for computational models of the GLM processes using MESHFREE.	
What is EVERGLASS' related objective?		
About data		
Type of data	Models & simulation	*Please, select an option from the list*
Format	ASCII text files (.dat), Geometry files (.obj)	*Examples:* *For texts - HTML, PDF, TXT…* *For numeric data - XLS, CSV…* *For audiovisuals - JPEG, MP4, TIFF, PNG, MP3, WAVE…*
Dataset is:	Growing	***Fixed:*** *never change after being collected or generated.* ***Growing*** *: new data may be added, but the old data is never changed or deleted.* ***Revisable:*** *new data may be dded, and old data may be changed or deleted.*
Discipline	applied mathematics/numerical	
Is it instrrument specific?	no	*If yes, please answer the sub-questions below*
Equipment		
Format		
About the origin - *Define and describe the origin/source of your data. Data can be gathered from different sources*		
Observational		*Data captured in real time - often not reproducible i.e. sensor readings, images, telemetries, sample data…*
Experimental	Material data (from partners) will be included	*Data from lab equipment, often reproducible, but with high costs - i.e. chromatograms, magnetic fields readings…reproducible i.e. sensor readings,images, telemetries, sample data..*
Simulation	Input files for simulations are self written	*Data generated by computational models where model and metadata are equally important to output data - i.e. climate models, economic models, materials models,…*
Derived/Compiled	Some output from simulation results may be included in the repository	*Data coming from analysis or compilation. Reproducible but with high costs - i.e. the results of text and data mining, compiled databases…*
Reference or Canonical (links)		*Collection or conglomeration of smaller (peer-reviewed) datasets published and curated - i.e. chemical structures, gene sequence databanks, spatial data portals…*
Long term / FAIR access		
Is there any provision for an specific license model for this dataset?	Licensing model not yet defined, but planned.	
To whom it could be useful?	Anybody wanting to simulate similar processes in MESHFREE	
For what?	To simulate GLM processes and to derive simulation setups for similar applications	
Any metadata provided?		
Any other comment	Repository might later be moved to a different host for long term storage.	

Data Manager / Responsible partner: ACTALIA

Dataset number	1	*1, 2, 3… Correlative number in case you will be producing several datasets*
Will it be open (made publicly accessible)?	No	*Yes/No*
If your answer has been "No", please explain why you cannot open the data		*Data related to the LCA of glass laser morphing is restricted to the Everglass partners*
Data repository used for making it open		
Description	Data related to the LCA of EVERGLASS technology and prototype	
What purpose is it for?	Analyse and evidence of the enviromental assessment of the glass laser morphing system and technology	
What is EVERGLASS' related objective?	To test the proof of concept of EVERGLASS as a converter of glass waste into glass products	
About data		
Type of data	Numeric	*Please, select an option from the list*
Format	pdf, csv, xls(x), xml, txt, ILCD, EcoSpold01, EcoSpold02	*Examples:* *For texts - HTML, PDF, TXT…* *For numeric data - XLS, CSV…* *For audiovisuals - JPEG, MP4, TIFF, PNG, MP3, WAVE…*
Dataset is:	Revisable	***Fixed:*** *never change after being collected or generated.* ***Growing*** *: new data may be added, but the old data is never changed or deleted.* ***Revisable:*** *new data may be dded, and old data may be changed or deleted.*
Discipline	LCA/environmental assessment	
Is it instrrument specific?	no	*If yes, please answer the sub-questions below*
Equipment	*LCA software/Glass laser morphing*	
Format	*Numeric*	
About the origin - *Define and describe the origin/source of your data. Data can be gathered from different sources*		
Observational		*Data captured in real time - often not reproducible i.e. sensor readings, images, telemetries, sample data…*
Experimental	May content experimental data such as energy consumption,material, weight, water consumption, etc.	*Data from lab equipment, often reproducible, but with high costs - i.e. chromatograms, magnetic fields readings…reproducible i.e. sensor readings,images, telemetries, sample data..*
Simulation	Simulation of different scenarios	*Data generated by computational models where model and metadata are equally important to output data - i.e. climate models, economic models, materials models,…*
Derived/Compiled	some output results can be included	*Data coming from analysis or compilation. Reproducible but with high costs - i.e. the results of text and data mining, compiled databases…*
Reference or Canonical (links)		*Collection or conglomeration of smaller (peer-reviewed) datasets published and curated - i.e. chemical structures, gene sequence databanks, spatial data portals…*
Long term / FAIR access		
Is there any provision for an specific license model for this dataset?	No	
To whom it could be useful?	Anybody wanting to conduct LCA on glass recycling or Laser Glass Morphing technology	
For what?	To analyce LCA of glass products or glass recycling technology	
Any metadata provided?	No	
Any other comment		

Data Manager / Responsible partner: ICV_CSIC

Dataset number	1	*1, 2, 3… Correlative number in case you will be producing several datasets*
Will it be open (made publicly access	Yes	*Yes/No*
If your answer has been "No", please explain why you cannot open the		
Data repository used for making it ope	Under selection	
Description	Investigation of the chemical composition of selected basic glass waste systems	
What purpose is it for?		
What is EVERGLASS' related objecti	To test the proof of concept of EVERGLASS as a converter of glass waste into glass products	

About data		
Type of data	Text	*Please, select an option from the list*
Format	PDF, XLS	*Examples:*
		For texts – HTML, PDF, TXT…
		For numeric data – XLS, CSV…
		For audiovisuals – JPEG, MP4, TIFF, PNG, MP3, WAVE…
Dataset is:	Revisable	***Fixed**: never change after being collected or generated.*
		***Growing**: new data may be added, but the old data is never changed or deleted.*
		***Revisable**: new data may be dded, and old data may be changed or deleted.*
Discipline	Physics and Chemistry	
Is it instrument specific?	Yes	*If yes, please answer the sub-questions below*
Equipment	*XRF, SEM-EDS/WDS+, ICP-MS, ICP-OS*	
Format		

About the origin - *Define and describe the origin/source of your data. Data can be gathered from different sources*		
Observational		*Data captured in real time – often not reproducible i.e. sensor readings, images, telemetries, sample data…*
Experimental	chemical composition of	*Data from lab equipment, often reproducible, but with high costs – i.e. chromatograms, magnetic fields readings…reproducible i.e. sensor readings,images, telemetries*
Simulation		*Data generated by computational models where model and metadata are equally important to output data – i.e. climate models, economic models, materials models,…*
Derived/Compiled		*Data coming from analysis or compilation. Reproducible but with high costs – i.e. the results of text and data mining, compiled databases…*
Reference or Canonical (links)		*Collection or conglomeration of smaller (peer-reviewed) datasets published and curated – i.e. chemical structures, gene sequence databanks, spatial data portals…*

Long term / FAIR access	
Is there any provision for an specific license model for this dataset?	No
To whom it could be useful?	For those interested in the chemical composition of various waste glasses
For what?	To understand the different chemical composition of various waste glasses
Any metadata provided?	No
Any other comment	No

Dataset number+A40A40:M67	2	*1, 2, 3... Correlative number in case you will be producing several datasets*					
Will it be open (made publicly access	Yes	*Yes/No*					
If your answer has been "No", please explain why you cannot open the							
Data repository used for making it ope	Under selection						
Description	Investigation of chemical composition, final chemical homogeneity of prepared 3D objects (EVERGLASS products)						
What purpose is it for?							
What is EVERGLASS' related objecti	To test the proof of concept of EVERGLASS as a converter of glass waste into glass products						
About data							
Type of data	Text	*Please, select an option from the list*					
Format	PDF, XLS	*Examples:*					
Dataset is:	Revisable	***Fixed:*** *never change after being collected or generated.*					
Discipline	Physics and Chemistry						
Is it instrument specific?	Yes	*If yes, please answer the sub-questions below*					
Equipment	SEM-EDS/WDS, Laser ablation-ICP-MS, ICP-OS, XRF, UV-VIS-NIS spectrophotometer, Optical Microscope, Confocal Microscope,						
Format							
About the origin - *Define and describe the origin/source of your data. Data can be gathered from different sources*							
Observational		*Data captured in real time - often not reproducible i.e. sensor readings, images, telemetries, sample data...*					
Experimental	chemical and colour	*Data from lab equipment, often reproducible, but with high costs - i.e. chromatograms, magnetic fields readings...reproducible i.e. sensor readings, images, telemetries*					
Simulation		*Data generated by computational models where model and metadata are equally important to output data - i.e. climate models, economic models, materials models,...*					
Derived/Compiled		*Data coming from analysis or compilation. Reproducible but with high costs - i.e. the results of text and data mining, compiled databases...*					
Reference or Canonical (links)		*Collection or conglomeration of smaller (peer-reviewed) datasets published and curated - i.e. chemical structures, gene sequence databanks, spatial data portals...*					
Long term / FAIR access							
Is there any provision for an specific	No						
To whom it could be useful?	For those interested in the physicochemical properties (chemical homogeneity) and its changes during the preparation of 3D glass objects by an additive technique based on						
For what?	To understand the fabrication process by additive technique (laser) and its optimization based on chemical homogeneity						
Any metadata provided?	No						
Any other comment	No						

Dataset number+A40A40:M67	3	1, 2, 3... Correlative number in case you will be producing several datasets
Will it be open (made publicly access	Yes	Yes/No
If your answer has been "No", please explain why you cannot open the		
Data repository used for making it ope	Under selection	
Description	characterization of the selected performance indicators I of EVERGLASS products (mechanical properties, heat resistance, and optical properties).	
What purpose is it for?		
What is EVERGLASS' related objecti	To test the proof of concept of EVERGLASS as a converter of glass waste into glass products	
About data		
Type of data	Text	Please, select an option from the list
Format	PDF, XLS	Examples:
Dataset is:	Revisable	**Fixed**: never change after being collected or generated.
Discipline	Physics and Chemistry	
Is it instrument specific?	Yes	If yes, please answer the sub-questions below
Equipment		Instron-Mechanical properties, UV-VIS-NIR spectrophotometer (optical properties), TMA/Dilatometer (Thermal characteristics)
Format		
About the origin - *Define and describe the origin/source of your data. Data can be gathered from different sources*		
Observational		Data captured in real time – often not reproducible i.e. sensor readings, images, telemetries, sample data...
Experimental	physicochemical data	Data from lab equipment, often reproducible, but with high costs – i.e. chromatograms, magnetic fields readings...reproducible i.e. sensor readings, images, telemetries
Simulation		Data generated by computational models where model and metadata are equally important to output data – i.e. climate models, economic models, materials models...
Derived/Compiled		Data coming from analysis or compilation. Reproducible but with high costs – i.e. the results of text and data mining, compiled databases...
Reference or Canonical (links)		Collection or conglomeration of smaller (peer-reviewed) datasets published and curated – i.e. chemical structures, gene sequence databanks, spatial data portals...
Long term / FAIR access		
Is there any provision for an specific	No	
To whom it could be useful?	For those interested in the physicochemical properties (mechanical properties, heat resistance, and optical properties of EVERGLASS products) and their changes during the	
For what?	To understand the fabrication process by EVERGLASS technique and its optimization based on physicochemical properties	
Any metadata provided?	No	
Any other comment	No	

EVERGLASS

Dataset number	4	*1, 2, 3... Correlative number in case you will be producing several datasets*					
Will it be open (made publicly access	Yes	*Yes/No*					
If your answer has been "No", please explain why you cannot open the							
Data repository used for making it ope	Under selection						
Description	Characterization of the selected performance indicators II of EVERGLASS products (dishwashing resistance, hydrolytic resistance/properties)						
What purpose is it for?							
What is EVERGLASS' related objecti	To test the proof of concept of EVERGLASS as a converter of glass waste into glass products						
About data							
Type of data	Text	*Please, select an option from the list*					
Format	PDF, XLS	*Examples:*					
Dataset is:	Revisable	***Fixed:*** *never change after being collected or generated.*					
Discipline	Physics and Chemistry						
Is it instrrument specific?	Yes	*If yes, please answer the sub-questions below*					
Equipment	*Dishwasher, SEM-EDS, Optical Microscope, Confocal Microscope, ICP-OS, ICP-MS, Autoclave*						
Format							
About the origin - *Define and describe the origin/source of your data. Data can be gathered from different sources*							
Observational		*Data captured in real time – often not reproducible i.e. sensor readings, images, telemetries, sample data...*					
Experimental	physicochemical data	*Data from lab equipment, often reproducible, but with high costs – i.e. chromatograms, magnetic fields readings...reproducible i.e. sensor readings, images, telemetries*					
Simulation		*Data generated by computational models where model and metadata are equally important to output data – i.e. climate models, economic models, materials models...*					
Derived/Compiled		*Data coming from analysis or compilation. Reproducible but with high costs – i.e. the results of text and data mining, compiled databases...*					
Reference or Canonical (links)		*Collection or conglomeration of smaller (peer-reviewed) datasets published and curated – i.e. chemical structures, gene sequence databanks, spatial data portals...*					
Long term / FAIR access							
Is there any provision for an specific	No						
To whom it could be useful?	For those interested in the physicochemical properties (dishwashing resistance, hydrolytic resistance/properties of EVERGLASS products) and their changes during the						
For what?	To understand the fabrication process by EVERGLASS technique and its optimization based on physicochemical properties						
Any metadata provided?	No						
Any other comment	No						

Dataset number	5	1, 2, 3... Correlative number in case you will be producing several datasets					
Will it be open (made publicly accessible)?	Yes	Yes/No					
If your answer has been "No", please explain why you cannot open the data							
Data repository used for making it open	Under selection						
Description	Differential Therml Analysis (DTA) of reference glasses, waste glasses and mixtures						
What purpose is it for?	To study the thermal behaviour of glasses upon heating						
What is EVERGLASS' related objective?	To test the proof of concept of EVERGLASS as a converter of glass waste into glass products						
About data							
Type of data	Numeric	Please, select an option from the list					
Format	XLS, CSV	Examples: For texts - HTML, PDF, TXT... For numeric data - XLS, CSV...					
Dataset is:	Revisable	*Fixed:* never change after being collected or generated. *Growing :* new data may be added, but the old data is never changed or deleted.					
Discipline	Physics and Chemistry						
Is it instrrument specific?	YES	If yes, please answer the sub-questions below					
Equipment	DTA/TG SDT Q600-TA instrument						
Format							
About the origin - *Define and describe the origin/source of your data. Data can be gathered from different sources*							
Observational		Data captured in real time - often not reproducible i.e. sensor readings, images, telemetries, sample data...					
Experimental	DTA curves	Data from lab					
Simulation		Data generated by computational models where model and metadata are equally important to output data - i.e. climate models, economic models, materials models,...					
Derived/Compiled		Data coming from analysis or compilation. Reproducible but with high costs - i.e. the results of text and data mining, compiled databases...					
Reference or Canonical (links)		Collection or conglomeration of smaller (peer-reviewed) datasets published and curated - i.e. chemical structures, gene sequence databanks, spatial data portals...					
Long term / FAIR access							
Is there any provision for an specific license model for this dataset?	No						
To whom it could be useful?	to those interested on the physico-chemical properties of different types of glasses and for modelling						
For what?	To obtain information about the glass transition temperature and its possible crystallization upon laser heating						
Any metadata provided?	no						
Any other comment							

Dataset number	6	1, 2, 3… Correlative number in case you will be producing several datasets					
Will it be open (made publicly accessible)?	Yes	Yes/No					
If your answer has been "No", please explain why you cannot open the data							
Data repository used for making it open	Under selection						
Description	Particle size distribution of glass powders to be used to feed the laser morphing machine						
What purpose is it for?	Determine the optimum particle size of glass powders to feed the laser morphing machine						
What is EVERGLASS' related objective?	To test the proof of concept of EVERGLASS as a converter of glass waste into glass products						
About data							
Type of data	Numeric	Please, select an option from the list					
Format	XLS	Examples: For texts - HTML, PDF, TXT… For numeric data - XLS, CSV…					
Dataset is:	Revisable	*Fixed:* never change after being collected or generated. *Growing :* new data may be added, but the old data is never changed or deleted.					
Discipline	Physics and Chemistry						
Is it instrument specific?	Yes	If yes, please answer the sub-questions below					
Equipment	Malvern Mastersizer						
Format							
About the origin - *Define and describe the origin/source of your data. Data can be gathered from different sources*							
Observational		Data captured in real time - often not reproducible i.e. sensor readings, images, telemetries, sample data…					
Experimental	Data of particle size distributions	Data from lab					
Simulation		Data generated by computational models where model and metadata are equally important to output data - i.e. climate models, economic models, materials models,…					
Derived/Compiled		Data coming from analysis or compilation. Reproducible but with high costs - i.e. the results of text and data mining, compiled databases…					
Reference or Canonical (links)		Collection or conglomeration of smaller (peer-reviewed) datasets published and curated - i.e. chemical structures, gene sequence databanks, spatial data portals…					
Long term / FAIR access							
Is there any provision for an specific license model for this dataset?	No						
To whom it could be useful?	to those interested on the physico-chemical properties of different types of glasses and for modelling						
For what?	to understand the influence on glass powder particle size on glass processing with laser						
Any metadata provided?	no						
Any other comment							

Dataset number	7	1, 2, 3… Correlative number in case you will be producing several datasets				
Will it be open (made publicly accessible)?	Yes	Yes/No				
If your answer has been "No", please explain why you cannot open the data						
Data repository used for making it open	Under selection					
Description	X-ray diffraction of different glasses					
What purpose is it for?	To study the crystalline phases present in glass-ceramic wastes or phases forming after the laser proccesing					
What is EVERGLASS' related objective?	To test the proof of concept of EVERGLASS as a converter of glass waste into glass products					
About data						
Type of data	Numeric	Please, select an option from the list				
Format	XLS, CSV	Examples: For texts - HTML, PDF, TXT… For numeric data - XLS, CSV…				
Dataset is:	Revisable	*Fixed:* never change after being collected or generated. *Growing* : new data may be added, but the old data is never changed or deleted.				
Discipline	Physics and Chemistry					
Is it instrument specific?	Yes	If yes, please answer the sub-questions below				
Equipment	Bruker D8 Advance					
Format						
About the origin - *Define and describe the origin/source of your data. Data can be gathered from different sources*						
Observational		Data captured in real time - often not reproducible i.e. sensor readings, images, telemetries, sample data…				
Experimental	XRD diffraction patterns	Data from lab				
Simulation		Data generated by computational models where model and metadata are equally important to output data - i.e. climate models, economic models, materials models,…				
Derived/Compiled		Data coming from analysis or compilation. Reproducible but with high costs - i.e. the results of text and data mining, compiled databases…				
Reference or Canonical (links)		Collection or conglomeration of smaller (peer-reviewed) datasets published and curated - i.e. chemical structures, gene sequence databanks, spatial data portals…				
Long term / FAIR access						
Is there any provision for an specific license model for this dataset?	No					
To whom it could be useful?	to those interested on the physico-chemical properties of different types of glasses and for modelling					
For what?	to study the possible crystallization of glasses upon heating especially when different types of glasses are mixed					
Any metadata provided?	no					
Any other comment						

Dataset number	8	1, 2, 3... Correlative number in case you will be producing several datasets					
Will it be open (made publicly accessible)?	Yes	Yes/No					
If your answer has been "No", please explain why you cannot open the data							
Data repository used for making it open	Under selection						
Description	Mechanical properties of glasses						
What purpose is it for?	to measure their mechanical properties, such as hardness, elastic modulus, and fracture toughness						
What is EVERGLASS' related objective?	To test the proof of concept of EVERGLASS as a converter of glass waste into glass products						
About data							
Type of data	Numeric	Please, select an option from the list					
Format	XLS, CSV	Examples: For texts - HTML, PDF, TXT... For numeric data - XLS, CSV...					
Dataset is:	Revisable	*Fixed:* never change after being collected or generated. *Growing*: new data may be added, but the old data is never changed or deleted.					
Discipline	Physics and Chemistry						
Is it instrument specific?	Yes	If yes, please answer the sub-questions below					
Equipment	Indenter model A PEX-1 (CETR, Brucker)						
Format							
About the origin - *Define and describe the origin/source of your data. Data can be gathered from different sources*							
Observational		Data captured in real time - often not reproducible i.e. sensor readings, images, telemetries, sample data...					
Experimental	Nanoindentation	Data from lab					
Simulation		Data generated by computational models where model and metadata are equally important to output data - i.e. climate models, economic models, materials models,...					
Derived/Compiled		Data coming from analysis or compilation. Reproducible but with high costs - i.e. the results of text and data mining, compiled databases...					
Reference or Canonical (links)		Collection or conglomeration of smaller (peer-reviewed) datasets published and curated - i.e. chemical structures, gene sequence databanks, spatial data portals...					
Long term / FAIR access							
Is there any provision for an specific license model for this dataset?	No						
To whom it could be useful?	to those interested on the physico-chemical properties of different types of glasses and for modelling						
For what?	to assess the mechanical performance and durability of glasses, including resistance to deformation and cracking.						
Any metadata provided?	no						
Any other comment							

Dataset number	9	1, 2, 3... Correlative number in case you will be producing several datasets						
Will it be open (made publicly accessible)?	Yes	Yes/No						
If your answer has been "No", please explain why you cannot open the data								
Data repository used for making it open	Under selection							
Description	Optical transmittance of different glass wastes							
What purpose is it for?	Comparison with the optical properties of the commercial products in the market							
What is EVERGLASS' related objective?	To test the proof of concept of EVERGLASS as a converter of glass waste into glass products							
About data								
Type of data	Numeric	Please, select an option from the list						
Format	XLS, CSV	Examples: For texts - HTML, PDF, TXT... For numeric data - XLS, CSV...						
Dataset is:	Revisable	*Fixed:* never change after being collected or generated. *Growing*: new data may be added, but the old data is never changed or deleted.						
Discipline	Physics and Chemistry							
Is it instrument specific?	Yes	If yes, please answer the sub-questions below						
Equipment	Perkin Elmer- Lambda 950							
Format								
About the origin - *Define and describe the origin/source of your data. Data can be gathered from different sources*								
Observational		Data captured in real time - often not reproducible i.e. sensor readings, images, telemetries, sample data...						
Experimental	Optical transmittance data	Data from lab						
Simulation		Data generated by computational models where model and metadata are equally important to output data - i.e. climate models, economic models, materials models,...						
Derived/Compiled		Data coming from analysis or compilation. Reproducible but with high costs - i.e. the results of text and data mining, compiled databases...						
Reference or Canonical (links)		Collection or conglomeration of smaller (peer-reviewed) datasets published and curated - i.e. chemical structures, gene sequence databanks, spatial data portals...						
Long term / FAIR access								
Is there any provision for an specific license model for this dataset?	No							
To whom it could be useful?	to those interested on the physico-chemical properties of different types of glasses and for modelling							
For what?	To study the transmitance of the laser proccesed materials and determination of colour							
Any metadata provided?	no							
Any other comment								