Mapping from iSamples Core 1.0 Material Sample description to Minimum Information about a Digital Specimen (MIDS), based on MIDS Github issue tracker (https://github.com/tdwg/mids/labels/status%3A%20accepted%20in%20specification). Levels in MIDS scheme are indicated. Some of the fields are proposed in MIDS but as of this writing are ‘not accepted’. Fields on the left with the prefix ‘X--' do not map between schemes, or require processing to map.

| iSamplesSchemaCore1.0 | iSamples notes | **MIDS** | MIDS note |
| --- | --- | --- | --- |
| X-- metadata update date | Update date not currently included | Modified (level 1) | date/time of first creation or subsequent modification |
| X-- sample mass | MIDS includes Mass in MIDS-3. iSamples, concatenate in description | Mass (level 3) | quantity of matter in a specimen, particularly for minerals, phases and meteorites |
| alternate\_identifiers/label |  | collectingNumber (level 2) | identifier given to the specimen at the time it was recorded [collected] |
| curation/curation\_location | Information about where and how the sample is currently stored. | InstitutionID (level 3) | identifier for the institution having custody of the object(s) |
| curation/description | Concatenate information from MIDS | PreparationType, PreservationMethod (not accepted) | proposed, not accepted; this information in iSamples curation description |
| curation/responsibility [role='classification'] | unique identifier for the person, people, groups, or organizations responsible for assigning the scientific name to the subject. Include this as a curation/responsibility | IdentifiedByID (level 3) | list (concatenated and separated) of the globally unique identifier for the person, people, groups, or organizations responsible for assigning the scientific name to the subject |
| curation/responsibility/name | Person or organization name | Organization (level 0) | term to indicate in which institution the specimen is held. This may include an institution code and an institution identifier. |
| dc\_rights | Statement of legal requirements and rights for accessing, using, or sharing information about the material sample. | License (level 1) | License under which the specimen data are published |
| has\_material\_category | Map to iSamples top level classifications for material. Include verbatim values if different as keywords. | MaterialType (not accepted) |  |
| has\_sample\_object\_type | specify the kind of object that the specimen is. Map MIDS terms to iSamples Material Sample Object Type vocab | ObjectType (level 1) | term to describe the kind of specimen. In combination with SpecimenType - hierarchical; a more specific classification than described by SpecimenType |
| keywords/keyword | An identifier for the nomenclatural (not taxonomic) details of a scientific name. | SpecimenType (level 1) | High-level term to delimit and define specimens. For example: preserved specimen, fossil specimen, as opposed to observation. [if there is a controlled vocabulary, map to iSamplesMaterialType category where logically consistent] |
| keywords/scheme\_name = GeologicAge | included in MIDS-2. implement as keyword in iSamples | GeologicAge (level 2) |  |
| keywords/scheme\_name = TypeStatus | included in MIDS-2. implement as keyword in iSamples | TypeStatus (level 2) | nomenclatural type status of the specimen; a null value means "Assumed not to be a type". Examples: Holotype, Isotype, Syntype, Cotype, Epitype, Neotype, Lectotype |
| keywords/keyword [scheme\_uri = ICS time scale] | Formal time ordinal era terms and identifier in keywords. Summary of details about an age estimation for temporal extent of sample origin goes is iSamples sample description. | GeologicAge (level 2) | geological age of a Earth Science specimen (i.e. Fossil, Rock, Mineral or Meteorite) and can be any kind of stratigraphic age, isotopically determined age or structural age [numeric age should be reported in the description; this field should be consistent with a term for a time-ordinal era] |
| keywords/keyword\_uri |  | ScientificNameID (level 3) | identifier for the nomenclatural (not taxonomic) details of a scientific name. [note that the associated keyword should be the nomenclatural detail label associated with the identifier.] |
| label | a human intelligible string used to identify the sample; i.e. the name to use for the sample; should be unique in the scope of a sample collection. This will typically be a sample identifier or label assigned by the original collector | Name (level 1) | string of characters and/or numbers by which the object is referenced within a collection |
| produced\_by/SamplingEvent/ responsibility | the responsibility is an agent-- could be person or organization, with role = 'collector'. Other agents associated with the sampling event could be included, e.g. with roles like 'sponsor', 'funder'.... | CollectingAgent (level 2) | list (concatenated and separated) of names of people, groups, or organizations responsible for recording the original Occurrence [i.e. sample collection] |
| produced\_by/SamplingEvent/ responsibility[role=collector]/ identifier | only one identifier associated with person in this role. iSamples identifier value is a string. | CollectorID (level 3) | list (concatenated and separated) of the globally unique identifier for the person, people, groups, or expeditions responsible for responsible for collecting the specimen |
| produced\_by/SamplingEvent/ result\_time | Date on which the sample was collected. | dateCollected (level 2) | date/time when the [sample collection] event was recorded |
| produced\_by/SamplingEvent/ sampling\_site/identifier/identifier | An identifier for the geographical locality where the material sample was collected. | GeographicalLocalityID (level 3) | identifier for the geographical locality where the specimen was collected |
| produced\_by/SamplingEvent/ sampling\_site/ sample\_location/latitude | sample location point coordinate | quantitativeLocation (level 2) | A quantitative measure that would include coordinate or shape data, an identifier, or data that can be easily converted into a quantitative measure |
| produced\_by/SamplingEvent/sampling\_site/ sample\_location/longitude | sample location point coordinate | quantitativeLocation (level 2) | quantitative measure that would include coordinate or shape data, an identifier, or data that can be easily converted into a quantitative measure |
| produced\_by/SamplingEvent/sampling\_site/place\_name | iSamples can have multiple values. | qualitativeLocation (level 2) | term [or text] to describe where the specimen was collected; A human readable location |
| related\_resource/label | a human intelligible string used to identify a thing, i.e. the name to use for the thing; should be unique in the scope of a sample collection or dataset. | Media (level2) | list (concatenated and separated) of media associated with the specimen. [not clear if this are expected to be labels or identifiers] |
| related\_resource/target | identifier for the target resource in the relationship. Should be a resolvable URI. | AssociatedMediaID (level 3) | list (concatenated and separated) of identifiers (publication, global unique identifier, URI) of media associated with the specimen. |
| sample\_identifier | unique identifier for the physical object, ideally a URI that is physically attached to the material sample object, an IGSN or ARK | PhysicalSpecimenID (Level 0) | unique identity [identifier] for the specimen within the curating institution |