

**Electronic Confidential Statement of Formulation (eCSF) XML Guide**

Environmental Protection Agency

Office of Pesticide Programs

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# Introduction

The United States Environmental Protection Agency (EPA) Office of Pesticide Programs (OPP) developed the electronic Confidential Statement of Formulation (eCSF) application within the Central Data Exchange’s (CDX) Pesticide Submission Portal (PSP). The eCSF application provides pesticide registrants the option to create EPA Form 8570-4 in an Extensible Markup Language (XML) format that can be easily updated and reused by registrants and more efficiently reviewed by EPA. Use of the eCSF application and corresponding XML format is not compulsory at this time.

Please refer to the following resources for additional information:

* [Central Data Exchange](https://cdx.epa.gov/)
* [Pesticide Submission Portal](https://www.epa.gov/pesticide-registration/assembly-electronic-packages-and-discs#portal-psp)

## Purpose

This document provides pesticide registrants guidance on how to construct an XML file that is both acceptable for use in the eCSF application and submitable to EPA through PSP.

## Application Support

Assistance is available by contacting the CDX Help Desk (CDXHD) using one of the following options:

* **By Telephone:**

Person-to-person telephone support is available from 8:00 am to 6:00 pm eastern standard time/eastern daylight time (EST/EDT). Call the CDXHD’s toll-free line at (888) 890-1995 or +1 (970) 494-5500 for international callers.

* **By Email:**

Send an email to [helpdesk@epacdx.net](mailto:helpdesk@epacdx.net) with “Technical Support” in the ‘Subject’ line.

* **By Chat:**

Select the ‘Chat with the CDX Help Desk’ link on the ‘[Contact Us](https://cdx.epa.gov/Contact)’ screen to initiate a live chat with a CDXHD agent.

* **By Contact Form:**

Enter information in the text fields under the ‘Contact Form’ section of the ‘[Contact Us](https://cdx.epa.gov/Contact)’ screen.

* **By Website:**

Users can contact the CDXHD from the ‘Contact Us’ screen at <https://cdx.epa.gov/Contact> and read the help section at <https://cdx.epa.gov/Help>.

# eCSF XML File Creation

An XML file in the eCSF format may be submitted via PSP regardless of how the file was created. It is highly recommended, but not required, that pesticide registrants utilize the eCSF builder application to ensure the file is properly formatted and validated.

The following subsections detail how to create a complete eCSF XML file.

## File Creation Dos and Don’ts

* Do use the preferred file naming convention of ‘[EPA Registration Number]\_[Basic/Alternate]\_[Date Signed].xml’. For example, ‘98765-1\_Basic\_10102016.xml’
* Do **not** use “&”, “<”, and “>” within field values.
* Do use characters in the ‘UTF-8’ character set. Commonly used characters that are not part of the ‘UTF-8’ character set include: ™, ®, ©, em dash, and en dash.
* Do use starting and end commands for each XML section.
* Do use starting and end commands for each XML element. The applications use the value between these commands as the data element.
* Do format XML tags exactly as described in the below sections of this document. XML tags are case sensitive and will not be accureately interpreted by eCSF and PSP applications when improperly formatted.
* Do upload outside created XML files into the eCSF application and navigate through all screens to ensure that the XML file is properly formatted and no validation errors are present.

## Preliminary Questions

This section of the XML corresponds to the fields located on the ‘Preliminary Questions’ screen within the eCSF application.

**Tips:**

* A <RepackActiveList> section is required to pass validation for 100% repackaged products
* The <ActiveIngredientRepackPdfInfo> tag is used by the eCSF application and is not required to be in a submission

### Preliminary Questions XML Tags

| XML Tag | Application Field Name or Description | Data Type | Rules and Validations |
| --- | --- | --- | --- |
| <PreliminaryQuestions> | | | |
| <ProductName> | Product Name - Box 3 | * String (255) | * Required * Cannot match an existing product name when 'Reg. No./File Symbol - Box 4' (<RegNo>) is null |
| <NameOfApplicant> | Name of Applicant/Registrant | * String (255) | * Required |
| <AddressOfApplicant> | | | |
| <AddressLine1> | Address | * String (255) | * Required |
| <AddressLine2> | Address Cont. | * String (255) | * Optional |
| <City> | City | * String (255) | * Required |
| <ProvinceOrState> | State | * String (255) | * Required * Must be a value in approved list of states |
| <Country> | Country | * String (255) | * Required * Must be ‘United States’ |
| <PostalCodeOrZIP> | ZIP Code | * String (255) | * Required * Must be in either the '#####' or '#####-####' format |
| </AddressOfApplicant> | | | |
| <CompanyNumber> | Company # | * String (255) | * Required |
| <RegNo> | Reg. No./File Symbol - Box 4 | * String (255) | * Required when <Repack> is ‘True’ * Optional when <Repack> is ‘False’ |
| <EPABasicFormulation> | EPA Formulation - Box A | * Valid values include:   + True   + False | * Required |
| <EPAAlternateFormulation> | Alternate Formulation Number | * String (255) | * Required when <EPABasicFormulation> is 'False' * Must be an integer |
| <ProductManagerTeamNumber> | EPA Product Manager/Team Number - Box 5 | * String (255) | * Optional |
| <Repack> | Is this product a 100% Repack? | * Valid values include:   + True   + False | * Required |
| <OriginalProductRegNo> | Registration Number for the Repackaged Product | * String (255) | * Required when <Repack> is 'True' * The entered number must be for a registered, active product |
| <ProductType> | What is the product type? | * Valid values include:   + tgai   + manufacturingUseProduct   + ep | * Required |
| <Isp> | Is this an Integrated Systems Product (ISP)? | * Valid values include:   + True   + False | * Optional when <ProductType> is 'MUP' and/or when <Repack> is 'True'; otherwise required |
| <Microbial> | Is product microbial? | * Valid values include:   + True   + False | * Optional when <Repack> is 'True'; otherwise required |
| <FoodUses> | Does product have food uses? | * Valid values include:   + True   + False | * Optional when <Repack> is 'True'; otherwise required |
| <ApplyingForClearanceOfInert> | Applying for Inert Clearance? | * Valid values include:   + True   + False | * Optional when <Repack' is 'True'; otherwise required |
| <RepackInfo> | | | |
| <OriginalProductName> | The name of the repackaged product (only displayed on rendered PDF) | * String (255) | * Required when <Repack> is 'True' |
| <RepackActiveList> | | | |
| <RepackActive> | | | |
| <Name> | The chemical name for an Active Ingredient in a repackaged product (only displayed on rendered PDF) | * String (255) | * At least one <RepackActive> set comprised of <Name> and <Percent> fields is required when <Repack> is 'True' |
| <Percent> | The percent purity for an Active Ingredient in a repackaged product (only displayed on rendered PDF) | * String (255) | * At least one <RepackActive> set comprised of <Name> and <Percent> fields is required when <Repack> is 'True' |
| </RepackActive> | | | |
| </RepackActiveList> | | | |
| </RepackInfo> | | | |
| </PreliminaryQuestions> | | | |

Exhibit 2‑1: Table of Preliminary Questions XML Tags

## Product Properties

This section of the XML corresponds to the fields located on the ‘Product Properties’ screen within the eCSF application.

**Tips:**

* The <ProductProperties> section is not required for 100% repack products (i.e., <Repack> is ‘True’) and may be exluded from an XML file in that case. The below listed validations assume file is for a non-repack product.

### Product Properties XML Tags

|  |  |  |  |
| --- | --- | --- | --- |
| XML Tag | Application Field Name or Description | Data Type | Rules/Validation/Format |
| <ProductProperties> | | | |
| <FormulationType> | Formulation Type Code | * Valid values include:   + Solid   + Liquid   + Gas   + Plant Incorporated Protectant | * Required |
| <IsImpregnatedMaterial> | Is this an impregnated material? | * Valid values include:   + True   + False | * Required when 'FormulationType' is 'Solid' |
| <Pressure> | Is the product under pressure? | * Valid values include:   + True   + False | * Required when 'FormulationType' is 'Liquid' |
| <containSubstrate> | Does this product contain substrate/towelette/wipe? | * Valid values include:   + True   + False | * Required when 'FormulationType' is 'Liquid' |
| <TissueType> | Tissue Type | * Valid values include:   + Whole Plant   + Leaf   + Kernel (Seed)   + Root   + Other | * Optional * Only applicable when 'FormulationType' is 'Plant Incorporated Protectant' |
| <TissueTypeOther> | Specify Other Tissue Type | * String (255) | * Required when 'TissueType' is 'Other' |
| <WaterSoluble> | Is this a water soluble package? | * Valid values include:   + True   + False | * Optional * Only applicable when 'FormulationType' is 'Solid' or 'Liquid' |
| <WeaveCount> | Weave Count | * String (255) | * Required when 'containSubstrate' is 'True' |
| <WeaveSize> | Weave Size | * String (255) | * Required when 'containSubstrate' is 'True' |
| <MaterialType> | Material Type | * String (255) | * Required when 'FormulationType' is 'Plant Incorporated Protectant' |
| <InkType> | Ink Type | * String (255) | * Required when 'FormulationType' is 'Solid' or 'Liquid' and "'WaterSoluble' is 'True' |
| <FilmType> | Film Type | * String (255) | * Required when 'FormulationType' is 'Solid' or 'Liquid' and "'WaterSoluble' is 'True' |
| <IsPetCollar> | This product is a pet collar | * Valid values include:   + True   + False | * Optional * Only applicable when 'FormulationType' is 'Solid' |
| <IsEarTag> | This product is an ear tag | * Valid values include:   + True   + False | * Optional * Only applicable when 'FormulationType' is 'Solid |
| <PlasticType> | Plastic Type | * String (255) | * Optional * Only applicable when 'IsPetCollar' and/or 'IsEarTag' is/are 'True' |
| <Viscosity> | Viscosity | * String (255) | * Optional * Must be a number |
| <ViscosityUnits> | Viscosity Units | * Valid values include:   + mPa(s)   + 1cP   + 1St   + 1cSt | * Required when <Viscosity> is not null |
| <DensityNotApplicable> | Check if Density is N/A | * Valid values include:   + True   + False | * Required * Should only be ‘True’ when <FormulationType> is ‘Plant Incorporated Protectant’ | |
| <DensityRangeFlag> | Is there a Density range? | * Valid values include:   + True   + False | * Required when <DensityNotApplicable> is 'False' |
| <DensityComments> | Reason Density is N/A | * String (255) | * Required when <DensityNotApplicable> is 'True' | |
| <Density> | | | | |
| <From> | Used for both the ‘Lower Limit' and 'Density' fields (depending on the <DensityRangeFlag> value) | * String (255) | * Required when <DensityNotApplicable> is 'False' * Must be less than the entered density <To> value * Must be a number |
| <To> | Upper Limit | * String (255) | * Required when <DensityNotApplicable> is 'False' and 'DensityRangeFlag' is 'True' * Must be greater than the entered density <From> value * Must be a number |
| </Density> | | | |
| <DensityUnits> | Density Unit | * Valid values include:   + kilograms per cubic meter (kg/m^3)   + grams per cubic centimeter (g/cm^3)   + kilograms per liter (kg/L)   + grams per milliliter (g/mL   + pounds per cubic foot(lb/ft^3)   + pounds per US gallon (ppg)   + N/A (Specific Gravity) | * Required when <DensityNotApplicable> is 'False' |
| <Temperature> | @Temperature | * String (255) | * Required when <DensityNotApplicable> is 'False' * Must be a number |
| <TemperatureUnits> | Temperature Unit | * Valid options include:   + F   + C | * Required when <DensityNotApplicable> is 'False' |
| <pHNotApplicable> | Check if pH is N/A | * Valid values include:   + True   + False | * Required |
| <phRangeComments> | Reason pH is N/A | * String (255) | * Required when <pHNotApplicable> is 'True' |
| <phRangeFlag> | Is there a pH range? | * Valid values include:   + True   + False | * Required when <pHNotApplicable> is ‘False’ |
| <pHRange> | | | |
| <From> | Used for both the ‘Lower Limit' and ‘pH’ fields (depending on the 'phRangeFlag' value) | * String (255) | * Required when <pHNotApplicable> is 'False' * Must be between ‘0’ and ‘14’ * Must be less than the entered pH <To> value * Must be a number |
| <To> | Upper Limit | * String (255) | * Required when <pHNotApplicable> is 'False' and 'Is there a pH range?' is 'True * Must be between ‘0’ and ‘14’ * Must be greater than the entered pH <From> value * Must be a number |
| </pHRange> | | | |
| <phPhase> | Phase | * Valid values include:   + Neat   + Dispersion   + Emulsion   + Solution | * Optional |
| <FlashPointApplicable> | Does Flash Point apply? | * Valid values include:   + True   + False | * Required |
| <FlashPoint> | Flash Point Value | * String (255) | * Required when 'FlashPointApplicable' is 'True' * Must be a number |
| <FlashPointUnits> | Flash Point Unit | * Valid options include:   + F   + C | * Required when 'FlashPointApplicable' is 'True' |
| <FlashPointComments> |  | * String (255) | * Required when 'FlashPointApplicable' is 'False' |
| <flameExtensionApplicable> | Does Flame Extension apply? | * Valid values include:   + True   + False | * Required |
| <FlameExtension> | Flame Extension (Inches) | * String (255) | * Required when 'flameExtensionApplicable' is 'True' * Must be a number |
| <FlameExtensionComments> | Reason Flame Extension is N/A | * String (255) | * Required when 'flameExtensionApplicable' is 'False' |
| </ProductProperties> | | | |

Exhibit 2‑2: Table of Product Properties XML Tags

## Box 2 - Producers and Product Repackaging Sites

This section of the XML corresponds to the fields located on the ‘Box 2 - Producers and Product Repackaging Site’ screen within the eCSF builder application.

### Box 2 - Producers and Product Repackaging Sites XML Tags

|  |  |  |  |
| --- | --- | --- | --- |
| XML Tag | Application Field Name or Description | Data Type | Rules/Validation/Format |
| <Producers> | | | |
| <ProducerId> | Unique identifier for a producer or repackaging site. This item is not displayed in the builder application nor the rendered PDF. | * String (255) | * Required |
| <ProducerName> |  |  |  |
| <AddressLine1> | Address | String (255) | * Required |
| <AddressLine2> | Address Cont. | String (255) | * Optional |
| <City> | City | String (255) | * Required |
| <ProvinceOrState> | State | String (255) | * Required when <Country> is 'United States’ * Must be a value in the approved list of states when <Country> is 'United States’ |
| <Country> | Country | String (255) | * Required * Must be a value in the approved list of countries |
| <PostalCodeOrZIP> | ZIP Code | String (255) | * Required when <Country> is 'United States’ * Must be in either the '#####' or '#####-####' format when <Country> is 'United States’ |
| <EstablishmentNumber> |  | String (255) |  |
| <Name> |  | String (255) |  |
| <PhoneNumber> | Phone Number | String (255) | * Required * Must be in the '(###) ###-####' format |
| </Producers> | | | |

Exhibit 2‑3: Table of Certification of Approving Official XML Tags

## Manufacturing Sites and Component Suppliers

This section of the XML corresponds to the fields located on the ‘Box 11 – Manufacturing Sites and Component Suppliers’ screen within the eCSF builder application.

**Tips:**

* ‘Manufacturing Site’ and ‘Component Supplier’ entries must be linked to a ‘Component’ entry using the <RelatedComponents> and <ComponentId> XML tags to be displayed in the PDF rendering.
* At least one (1) ‘Manufacturing Site’ or ‘Component Supplier’ (i.e., <SitesAndSuppliers> section) is required for non-repack products. This section is not required for 100% repack products (i.e., <Repack> is ‘True’) and may be exluded from an XML file in that case. The below listed validations assume file is for a non-repack product.

### Manufacturing Sites and Component Suppliers XML Tags

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| XML Tag | Application Field Name or Description | Data Type | | Rules/Validation/Format |
| <SitesAndSuppliers> | | | | |
| <SiteSupplierId> | Unique identifier for a site/supplier. This item is not displayed in the builder application nor the rendered PDF | * String (255) | | * Required |
| <SupplierType> | Supplier Type | * Valid values include:   + Manufacturing Site   + Component Supplier | | * Required |
| <AddressNotApplicable> | Address Not Applicable | * Valid values include:   + True   + False | | * Optional |
| <AddressNotApplicableJustification> | Reason Why Address is N/A | String (255) | | * Required when <AddressNotApplicable> is 'True' |
| <Name> | Site/Supplier Name | String (255) | | * Required |
| <SitesAndSuppliersAddress> | | | | |
| <AddressLine1> | | Address | * String (255) | * Required when <AddressNotApplicable> is 'False' | |
| <AddressLine2> | | Address Cont. | * String (255) | * Optional | |
| <City> | | City | * String (255) | * Required when <AddressNotApplicable> is 'False' | |
| <ProvinceOrState> | | State | * String (255) | * Required when <Country> is 'United States’ and <AddressNotApplicable> is 'False' * Must be a value in the approved list of states when <Country> is 'United States’ | |
| <Country> | | Country | * String (255) | * Required when <AddressNotApplicable> is 'False' * Must be a value in the approved list of countries | |
| <PostalCodeOrZIP> | | ZIP Code | * String (255) | * Required when <Country> is 'United States’ and <AddressNotApplicable> is 'False' * Must be in either the '#####' or '#####-####' format when <Country> is 'United States’ | |
| </SitesAndSuppliersAddress> | | | | |
| <CompanyCode> |  |  | |  |
| <RelatedComponents> | | | | |
| <ComponentId> | Unique identifier for components related to a site/supplier. This item is not displayed in the builder application nor the rendered PDF | * String (255) | | * Must match a corresponding <SiteSupplierId> value |
| </RelatedComponents> | | | | |
| <LinkedTradeName> | Used to associate a specific ‘Trade Name’ for a linked component to a site/supplier | * String (255) | |  |
| </SitesAndSuppliers> | | | | |

Exhibit 2‑4: Table of Manufacturing Sites and Component Suppliers XML Tags

## Components

This section of the XML corresponds to the fields located on the ‘Preliminary Questions’ screen within the eCSF builder application.

**Tips:**

* ‘Manufacturing Site’ and ‘Component Supplier’ entries must be linked to a ‘Component’ entry using the <RelatedComponents> and <ComponentId> XML tags to be displayed in the PDF rendering.
* At least one (1) component (i.e., <Components> section) is required for non-repack products. This section is not required for 100% repack products (i.e., <Repack> is ‘True’) and may be exluded from an XML file in that case. The below listed validations assume file is for a non-repack product.

### Component XML Tags

|  |  |  |  |
| --- | --- | --- | --- |
| XML Tag | Application Field Name or Description | Data Type | Rules/Validation/Format |
| <Components> | | | |
| <ComponentId> | Unique identifier for a component. This item is not displayed in the builder application nor the rendered PDF |  | * Required |
| <Active> | Component Type | * Valid values include:   + True   + False | * Required |
| <Inert> | Component Type | * Valid values include:   + True   + False | * Required |
| <Impurity> | Component Type | * Valid values include:   + True   + False | * Required |
| <Dye> | Component Type | * Valid values include:   + True   + False | * Required |
| <Fragrance> | Component Type | * Valid values include:   + True   + False | * Required |
| <Fertilizer> | Component Type | * Valid values include:   + True   + False | * Required |
| <Towelette> | Component Type | * Valid values include:   + True   + False | * Required |
| <WaterSolublePackagingMaterial> | Component Type | * Valid values include:   + True   + False | * Required |
| <WaterSolublePackagingInkType> | Component Type | * Valid values include:   + True   + False | * Required |
| <AlternateActive> | Component Type | * Valid values include:   + True   + False | * Required * Can only be 'True' when <Active> is also 'True' |
| <AlternateActiveParent> | Add Alternate Source for |  | * Required when <AlternateActive> is 'True' * Must match the <ComponentId> for the parent AI |
| <RegisteredActiveIngredient> | Is this a registered active ingredient? | * Valid values include:   + True   + False | * Required when <Active> is 'True' * Must be 'True' when <AlternateActive> is 'True' |
| <RegOrSubNo> | Reg. No. - Box 12 |  | * Required when <RegisteredActiveIngredient> is 'True' * Required when <AlternateActive> is 'True' * Optional when <RegisteredActiveIngredient> is null and <ProductType> is ‘tgai' * Optional when <Inert> is 'True’ |
| <CommonName> | Common Name (ISO Proposed or Accepted) - Box 10 |  | * Required when <Towelette>, <WaterSolublePackagingMaterial>, or <WaterSolublePackagingInkType> are 'True' * Optional for all other component types |
| <ChemicalName> | Chemical Name - Box 10 |  | * Required |
| <OverrideChemicalName> | Override Chemical Name | * Valid values include:   + True   + False | * Optional when <Active> and <Inert> are ‘True’ * Not applicable to other component types |
| <ReasonForChemicalNameOverride> | Reason for Chemical Name Override |  | * Required when <OverrideChemicalName> is 'True' |
| <pcCode> | PC Code - Box 10 |  | * Optional when <Active> and/or <AlternateActive> is 'True' * Not applicable to other component types |
| <CASNumber> | CASRN - Box 10 |  | * Required when <Towelette>, <WaterSolublePackagingMaterial>, or <WaterSolublePackagingInkType> are 'True' * Optional for all other component types |
| <Mixture> | Is this Inert component a mixture? | * Valid values include:   + True   + False | * Required when <Inert> is 'True’ |
| <ContainsNitrogen> | Contains Nitrogen? | * Valid values include:   + True   + False | * Required when <Fertilizer> is 'True’ |
| <Nitrogen> | Maximum Nitrogen Percentage Tested - Box 10 |  | * Required when <ContainsNitrogen> is 'True’ |
| <TradeName> | Trade Name - Box 10 |  | * Up to ten (10) may be added per component * Only one (1) may be added to an Inert component when <Mixture> is 'True' * Cannot be duplicated within the same component or across components * Required when 'Towelette', <WaterSolublePackagingMaterial>, or <WaterSolublePackagingInkType> are 'True' * Optional when <Active>, 'Inert, <Dye>, <Fragrance>, or <Fertilizer> are 'True' |
| <Purity> | % Purity - Box 10 |  | * Cannot be zero (0) * Required when <Active>, <Inert>, or <Fertilizer> are 'True' * Optional when <Dye> or <Fragrance> is 'True' * When <AlternateActive> is 'True' the value must equal the <Purity> for the 'AlternateActiveParent' * Must be '100' when <Mixture> is 'True' |
| <Amount> | Amount - Box 13a |  | * Cannot be zero (0) * Required when <Active>, <AlternateActive>, 'Inert, <Dye>, <Fragrance>, or <Fertilizer> are 'True' * Optional when <Impurity> is 'True' |
| <PercentW> | % Weight / Total Weight - Box 13b |  | * Cannot be zero (0) * Required when <Active>, <AlternateActive>, 'Inert, <Dye>, <Fragrance>, or <Fertilizer> are 'True' * Optional when <Impurity> is 'True' * When <AlternateActive> is 'True' the value must equal the 'PercentW' for the 'AlternateActiveParent' |
| <NominalPerc> | % Nominal - Box 13b |  | * Optional when <Active>, <AlternateActive>, <Inert> , <Fragrance>, or <Fertilizer> are 'True' * When <AlternateActive> is 'True' the value must equal the 'NominalPerc' for the 'AlternateActiveParent' |
| <LCLPerc> | % Lower Certified Limit - Box 14b |  | * Optional when <Active>, <AlternateActive>, 'Inert, <Dye>, <Fragrance>, or <Fertilizer> are 'True' * When <AlternateActive> is 'True' the value must equal the 'LCLPerc' for the 'AlternateActiveParent' |
| <LCLPercNominal> | % Lower Certified Limit - Box 14b (Nominal) |  | * Optional when <Active>, <Inert>, <Fragrance>, or <Fertilizer> are 'True' |
| <UCLPerc> | % Upper Certified Limit - Box 14a |  | * Optional when <Active>, <Inert>, <Fragrance>, or <Fertilizer> are 'True' |
| <UCLPercNominal> | % Upper Certified Limit - Box 14a (Nominal) |  | * Optional when <Active>, <Inert>, <Fragrance>, or <Fertilizer> are 'True' |
| <ExpandedCertifiedLimits> | Request Wider Certified Limits | * Valid values include:   + True   + False | * Optional when <Active>, 'Inert, <Dye>, <Fragrance>, or <Fertilizer> are 'True' |
| <CertifiedLimitsJustification> | Justification for Wider Certified Limits |  | * Required when 'ExpandedCertifiedLimits' is 'True' |
| <PurposeInFormulation> | Purpose in Formulation - Box 15 |  | * Required when <Active>, <AlternateActive>, 'Inert, <Dye>, <Fragrance>, '<Fertilizer>, 'Towelette', 'WaterSolublePackagingMaterial', or 'WaterSolublePackagingInkType' is 'True' * Only one value allowed per component * When <Active> or <AlternateActive> is 'True' must be 'Active Ingredient' * When <Dye> is 'True' must be 'Dye/Coloring Agent/Colorant/Pigment' * When <Fragrance> is 'True' must be <Fragrance> * When 'Fertilizer is 'True' must be <Fertilizer> |
| <Nano> | Is this component a Nanomaterial? | * Valid values include:   + True   + False | * Required when <Active>, <AlternateActive>, <Inert>, <Impurity>, <Dye>, <Fragrance> is 'True' * When <AlternateActive> is 'True' the value must equal the 'Nano' for the 'AlternateActiveParent' |
| <CultureCollectionDeposit> | Culture Collection Deposit - Box 10 |  | * Optional when <Active> is 'True' and 'Microbial' is 'True |
| <Potency> | Potency - Box 10 |  | * Optional when <Active> is 'True' and 'Microbial' is 'True |
| <Viability> | Viability - Box 10 |  | * Optional when <Active> is 'True' and 'Microbial' is 'True |
| <OtherInfo> | Other Information |  | * Optional when <Active>, <Inert>, <Impurity>, <Dye>, <Fragrance>, '<Fertilizer> is 'True' |
| <SiteSupplierId> | Related Sites & Suppliers |  | * Used to link a site/supplier to a component * All components in a 'Basic Formulation' product are only allowed to be related to one 'Site/Supplier' * All components must have a related site/supplier except Impurities. * Optional when <ProductType> is 'tgai' * Registered Active components may only be associated with a Component Supplier. (EUP/MP) * Unregistered Active components may only be associated with a single *Manufacturing* Site. (EUP/MP) |
| <PrimarySupplierId> | Primary Site/Supplier |  | * Used to indicate the Site/Suppler that prints to the main form of the PDF rendering. All others print on addendum pages. * Must match a <SiteSupplierId> value for the component * Only one (1) per component allowed |
| <Blended> | Not displayed | * Valid values include:   + True   + False | * Required when <Active> or <AlternateActive> is 'True' |
| <ChemicalName> | Active Ingredient Name (Blended Chemical List) |  | * Required in Blended Chemical List when <Blended> is 'True' |
| <PcCode> | Not displayed (Blended Chemical List) |  | * Required in Blended Chemical List when <Blended> is 'True' |
| <Casrn> | Not displayed (Blended Chemical List) |  | * Required in Blended Chemical List when <Blended> is 'True' |
| <PercentW> | % Weight / Total Weight - Box 13b (Blended Chemical List) |  | * Required in Blended Chemical List when <Blended> is 'True' |
| <LowerLimit> | % Lower Certified Limit - Box 14b (Blended Chemical List) |  | * Required in Blended Chemical List when <Blended> is 'True' |
| <UpperLimit> | % Upper Certified Limit - Box 14a (Blended Chemical List) |  | * Required in Blended Chemical List when <Blended> is 'True' |
| <OriginalWeight> | Not displayed (Blended Chemical List) |  | * Required in Blended Chemical List when <Blended> is 'True' |
| <UpperCertifiedLimitExpressed> | % Upper Certified Limit - Expressed (Blended Chemical List) |  | * Required in Blended Chemical List when <Blended> is 'True' |
| <NominalExpressed> | % Nominal - Expressed (Blended Chemical List) |  | * Required in Blended Chemical List when <Blended> is 'True' |
| <LowerCertifiedLimitExpressed> | % Lower Certified Limit - Expressed (Blended Chemical List) |  | * Required in Blended Chemical List when <Blended> is 'True' |
|  | | | |

Exhibit 2‑5: Table of Component XML Tags

## Certification of Approving Official

This section of the XML corresponds to the fields located on the ‘Certification of Approving Official’ screen within the eCSF builder application.

### Certification of Approving Official XML Tags

|  |  |  |  |
| --- | --- | --- | --- |
| XML Tag | Application Field Name or Description | Data Type | Rules/Validation/Format |
| <CertificationOfApprovingOfficial> | | | |
| PositionTitleOfApprovingOfficial | Position Title - Box 19 |  | * Required |
| NameOfApprovingOfficial | Name - Box 16 |  | * Required |
| Signature | Signature - Box 18 |  | * Required |
| Certification | I certify that all the information contained within this form is true and complete. |  | * Required |
| <AddressLine1> | Address | String (255) | * Required |
| <AddressLine2> | Address Cont. | String (255) | * Optional |
| <City> | City | String (255) | * Required |
| <ProvinceOrState> | State | String (255) | * Required * Must be a value in approved list of states |
| <Country> | Country | String (255) | * Required * Must be “United States |
| <PostalCodeOrZIP> | ZIP Code | String (255) | * Required * Must be in either the '#####' or '#####-####' format |
| Date | Date - Box 21 |  | * Required * Must be in ‘mm/dd/yyyy’ format * Cannot be a future date |
| PhoneNumber | Phone Number - Box 20 |  | * Required * Must be in the '(###) ###-####' format |
| Fax | Fax Number |  | * Optional * Must be in the '(###) ###-####' format |
| Email | Email Address |  | * Required * Must be in the ‘user@domain’ format (e.g., user@domain.com) |
| </CertificationOfApprovingOfficial> | | | |

Exhibit 2‑6: Table of Certification of Approving Official XML Tags

## System Tags

This section of the XML corresponds to fields that are applicable to the entire application.

### System Tags XML Tags

|  |  |  |  |
| --- | --- | --- | --- |
| XML Tag | Application Field Name or Description | Data Type | Rules/Validation/Format |
| <ReviewPreliminaryQuestions> | Mark for Registrant Review (‘Preliminary Questions’ screen) |  |  |
| <ReviewProductProperties> | Mark for Registrant Review (‘Product Properties’ screen) |  |  |
| <ReviewProducers> | Mark for Registrant Review (‘Box 2 - Producers and Product Repackaging Sites’ screen) |  |  |
| <ReviewSiteSuppliers> | Mark for Registrant Review (‘Manufacturing Sites and Component Suppliers’ screen) |  |  |
| <ReviewComponents> | Mark for Registrant Review (‘Components’ screen) |  |  |
| <ReviewCertification> | Mark for Registrant Review (‘Certification of Approving Official’ screen) |  |  |
| <TotalWeight> |  |  |  |
| <totalPercentW> |  |  |  |
| <ReviewerComments> |  |  |  |
| <XslVersion> |  |  |  |
|  |  |  |  |

Exhibit 2‑7: Table of System XML Tags

### Non 100% Repack Example

<PreliminaryQuestions>

<ProductName>A Test Pesticide Product</ProductName>

<NameOfApplicant>CDX TESTING COMPANY</NameOfApplicant>

<AddressOfApplicant>

<AddressLine1>1 Main Street</AddressLine1>

<AddressLine2>Suite 300</AddressLine2>

<City>Crystal City</City>

<ProvinceOrState>VA</ProvinceOrState>

<Country>UNITED STATES</Country>

<PostalCodeOrZIP>57350</PostalCodeOrZIP>

</AddressOfApplicant>

<PMRARegistration>False</PMRARegistration>

<EPARegistration>True</EPARegistration>

<PMRAFormulation>0</PMRAFormulation>

<PMRAVersion>0</PMRAVersion>

<CompanyNumber>222</CompanyNumber>

<regNo>98765-1</regNo>

<EPABasicFormulation>False</EPABasicFormulation>

<ProductManagerTeamNumber>5</ProductManagerTeamNumber>

<EPAAlternateFormulation>1</EPAAlternateFormulation>

<PmraRepack>False</PmraRepack>

<PMRACSPSConfidential>False</PMRACSPSConfidential>

<ProductType>tgai</ProductType>

<Isp>False</Isp>

<Microbial>False</Microbial>

<FoodUses>True</FoodUses>

<ApplyingForClearanceOfInert>False</ApplyingForClearanceOfInert>

<DateReceived></DateReceived>

<RepackInfo>

<RepackActiveList/>

</RepackInfo>

</PreliminaryQuestions>

### 100% Repack Example

<PreliminaryQuestions>

<ProductName>A Repack Product</ProductName>

<NameOfApplicant>AndyTest</NameOfApplicant>

<AddressOfApplicant>

<AddressLine1>123 Street</AddressLine1>

<AddressLine2>Suite 5</AddressLine2>

<City>Lafayette</City>

<ProvinceOrState>LA</ProvinceOrState>

<Country>UNITED STATES</Country>

<PostalCodeOrZIP>70506</PostalCodeOrZIP>

</AddressOfApplicant>

<PMRARegistration>False</PMRARegistration>

<EPARegistration>True</EPARegistration>

<PMRAFormulation>0</PMRAFormulation>

<PMRAVersion>0</PMRAVersion>

<CompanyNumber>222</CompanyNumber>

<regNo>222-123</regNo>

<EPABasicFormulation>False</EPABasicFormulation>

<EPAAlternateFormulation>1</EPAAlternateFormulation>

<PmraRepack>True</PmraRepack>

<OriginalProductRegNo>10324-224</OriginalProductRegNo>

<PMRACSPSConfidential>False</PMRACSPSConfidential>

<ProductType>manufacturingUseProduct</ProductType>

<DateReceived></DateReceived>

<RepackInfo>

<ActiveIngredientRepackPdfInfo>1-Decanaminium, N-decyl-N,N-dimethyl-, chloride?6|Pentanedial?24</ActiveIngredientRepackPdfInfo>

<OriginalProductName>MAQUAT 1010N-24-A</OriginalProductName>

<RepackActiveList>

<RepackActive>

<Name>1-Decanaminium, N-decyl-N,N-dimethyl-, chloride</Name>

<Percent>6</Percent>

</RepackActive>

<RepackActive>

<Name>Pentanedial</Name>

<Percent>24</Percent>

</RepackActive>

</RepackActiveList>

</RepackInfo>

</PreliminaryQuestions>

# Appendix A – Valid Country Names

|  |
| --- |
| Country Name/Code |
| ARUBA |
| ANTIGUA AND BARBUDA |
| AFGHANISTAN |
| ALGERIA |
| AZERBAIJAN |
| ALBANIA |
| ARMENIA |
| ANDORRA |
| ANGOLA |
| AMERICAN SAMOA |
| ARGENTINA |
| AUSTRALIA |
| ASHMORE AND CARTIER ISLANDS |
| AUSTRIA |
| ANGUILLA |
| ANTARCTICA |
| BAHRAIN |
| BARBADOS |
| BOTSWANA |
| BERMUDA |
| BELGIUM |
| BAHAMAS |
| BANGLADESH |
| BELIZE |
| BOSNIA AND HERZEGOVINA |
| BOLIVIA |
| BURMA |
| BENIN |
| BELARUS |
| SOLOMON ISLANDS |
| NAVASSA ISLAND |
| BRAZIL |
| BASSAS DA INDIA |
| BHUTAN |
| BULGARIA |
| BOUVET ISLAND |
| BRUNEI |
| BURUNDI |
| CANADA |
| CAMBODIA |
| CHAD |
| SRI LANKA |
| CONGO |
| ZAIRE |
| CHINA |
| CHILE |
| CAYMAN ISLANDS |
| COCOS (KEELING) ISLANDS |
| CAMEROON |
| COMOROS |
| COLOMBIA |
| NORTHERN MARIANA ISLANDS |
| CORAL SEA ISLANDS |
| COSTA RICA |
| CENTRAL AFRICAN REPUBLIC |
| CAPE VERDE |
| COOK ISLANDS |
| CYPRUS |
| DENMARK |
| DJIBOUTI |
| DOMINICA |
| JARVIS ISLAND |
| DOMINICAN REPUBLIC |
| ECUADOR |
| EGYPT |
| IRELAND |
| EQUATORIAL GUINEA |
| ESTONIA |
| ERITREA |
| EL SALVADOR |
| ETHIOPIA |
| EUROPA ISLAND |
| CZECH REPUBLIC |
| FRENCH GUIANA |
| FINLAND |
| FIJI |
| FALKLAND ISLANDS (ISLAS MALVINAS) |
| FEDERATED STATES OF MICRONESIA |
| FAROE ISLANDS |
| FRENCH POLYNESIA |
| BAKER ISLAND |
| FRANCE |
| FRENCH SOUTHERN AND ANTARCTIC LANDS |
| GAMBIA, THE |
| GABON |
| GEORGIA |
| GHANA |
| GIBRALTAR |
| GRENADA |
| GUERNSEY |
| GREENLAND |
| GERMANY |
| GLORIOSO ISLANDS |
| GUADELOUPE |
| GUAM |
| GREECE |
| GUATEMALA |
| GUINEA |
| GUYANA |
| GAZA STRIP |
| HAITI |
| HONG KONG |
| HEARD ISLAND AND MCDONALD ISLANDS |
| HONDURAS |
| HOWLAND ISLAND |
| CROATIA |
| HUNGARY |
| ICELAND |
| INDONESIA |
| MAN, ISLE OF |
| INDIA |
| BRITISH INDIAN OCEAN TERRITORY |
| CLIPPERTON ISLAND |
| ISRAEL |
| ITALY |
| IRAQ |
| JAPAN |
| JERSEY |
| JAMAICA |
| JAN MAYEN |
| JORDAN |
| JOHNSTON ATOLL |
| JUAN DE NOVA ISLAND |
| KENYA |
| KYRGYZSTAN |
| KINGMAN REEF |
| KIRIBATI |
| KOREA, REPUBLIC OF |
| CHRISTMAS ISLAND |
| KUWAIT |
| KAZAKHSTAN |
| LAOS |
| LEBANON |
| LITHUANIA |
| LIBERIA |
| SLOVAKIA |
| PALMYRA ATOLL |
| LIECHTENSTEIN |
| LESOTHO |
| LUXEMBOURG |
| LATVIA |
| LIBYA |
| MADAGASCAR |
| MARTINIQUE |
| MACAU |
| MOLDOVA |
| MAYOTTE |
| MONGOLIA |
| MONTSERRAT |
| MALAWI |
| MACEDONIA |
| MALI |
| MONACO |
| MOROCCO |
| MAURITIUS |
| MIDWAY ISLANDS |
| MAURITANIA |
| MALTA |
| OMAN |
| MALDIVES |
| MONTENEGRO |
| MEXICO |
| MALAYSIA |
| MOZAMBIQUE |
| NEW CALEDONIA |
| NIUE |
| NORFOLK ISLAND |
| NIGER |
| VANUATU |
| NIGERIA |
| NETHERLANDS |
| NORWAY |
| NEPAL |
| NAURU |
| SURINAME |
| NETHERLANDS ANTILLES |
| NICARAGUA |
| NEW ZEALAND |
| PARAGUAY |
| PITCAIRN ISLANDS |
| PERU |
| PARACEL ISLANDS |
| SPRATLY ISLANDS |
| PAKISTAN |
| POLAND |
| PANAMA |
| PORTUGAL |
| PAPUA NEW GUINEA |
| TRUST TERRITORY OF THE PACIFIC ISLANDS (PALAU) |
| GUINEA-BISSAU |
| QATAR |
| REUNION |
| MARSHALL ISLANDS |
| ROMANIA |
| PHILIPPINES |
| PUERTO RICO |
| RUSSIA |
| RWANDA |
| SAUDI ARABIA |
| ST. PIERRE AND MIQUELON |
| ST. KITTS AND NEVIS |
| SEYCHELLES |
| SOUTH AFRICA |
| SENEGAL |
| ST. HELENA |
| SLOVENIA |
| SIERRA LEONE |
| SAN MARINO |
| SINGAPORE |
| SOMALIA |
| SPAIN |
| SERBIA |
| ST. LUCIA |
| SVALBARD |
| SWEDEN |
| SOUTH GEORGIA AND THE SOUTH SANDWICH |
| SWITZERLAND |
| UNITED ARAB EMIRATES |
| TRINIDAD AND TOBAGO |
| TROMELIN ISLAND |
| THAILAND |
| TAJIKISTAN |
| TURKS AND CAICOS ISLANDS |
| TOKELAU |
| TONGA |
| TOGO |
| SAO TOME AND PRINCIPE |
| TUNISIA |
| TURKEY |
| TUVALU |
| TAIWAN |
| TURKMENISTAN |
| TANZANIA |
| UGANDA |
| UNITED KINGDOM |
| UKRAINE |
| UNITED STATES |
| BURKINA |
| URUGUAY |
| UZBEKISTAN |
| ST. VINCENT AND THE GRENADINES |
| VENEZUELA |
| BRITISH VIRGIN ISLANDS |
| VIETNAM |
| VIRGIN ISLANDS |
| NAMIBIA |
| WEST BANK |
| WALLIS AND FUTUNA |
| WESTERN SAHARA |
| WESTERN SAMOA |
| SWAZILAND |
| YEMEN |
| ZAMBIA |
| ZIMBABWE |

# Appendix B – Valid State Codes

|  |
| --- |
| State Names |
| Alabama |
| Alaska |
| American Samoa |
| Arizona |
| Arkansas |
| California |
| Colorado |
| Connecticut |
| Delaware |
| Dist. of Columbia |
| Florida |
| Georgia |
| Guam |
| Hawaii |
| Idaho |
| Illinois |
| Indiana |
| Iowa |
| Kansas |
| Kentucky |
| Louisiana |
| Maine |
| Maryland |
| Marshall Islands |
| Massachusetts |
| Michigan |
| Micronesia |
| Minnesota |
| Mississippi |
| Missouri |
| Montana |
| Nebraska |
| Nevada |
| New Hampshire |
| New Jersey |
| New Mexico |
| New York |
| North Carolina |
| North Dakota |
| Northern Marianas |
| Ohio |
| Oklahoma |
| Oregon |
| Palau |
| Pennsylvania |
| Puerto Rico |
| Rhode Island |
| South Carolina |
| South Dakota |
| Tennessee |
| Texas |
| Utah |
| Vermont |
| Virginia |
| Virgin Islands |
| Washington |

# Appendix C - Definitions, Acronyms, and Abbreviations

| Acronym | Full Name |
| --- | --- |
| CDX | Central Data Exchange |
| CDXHD | CDX Help Desk |
| eCSF | Electronic Confidential Statement of Formulation |
| EDT | Eastern Daylight Time |
| EPA | United States Environmental Protection Agency |
| EST | Eastern Standard Time |
| OPP | Office of Pesticide Programs |
| PDF | Portable Document Format |
| PSP | Pesticide Submissions Portal |
| UTF | Unicode Transformation Format |
| XML | Extensible Markup Language |