



CUMMINS PRODUCT COMPLIANCE MANUAL

Abstract

This manual covers Cummins submission requirements for confirmation of supplier materials and product compliance

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1. PURPOSE

The instructions and guidance outlined in this manual detail Cummins product chemical compliance requirements for suppliers. There are two sections of this manual – one for IMDS submissions and one for CDX submissions. The general information can be used for both IMDS and CDX.

These requirements apply to all production purchased products supplied to Cummins. In special cases, the requirements may be applied to prototype and aftermarket components, depending on the customer.

These guidelines have been compiled based on customer requirements and identified best practices.

2. BACKGROUND

2.1. The ELV Directive

In 2000, the European End-of-Life Vehicle Directive (ELV) 200/53/EC was published with the goal of preventing waste from vehicles at the end of their useful life. The purpose was to ensure that reuse, recycling, and other recovery efforts were implemented across the member states. The goal was to provide a mechanism to reduce the overall volume of waste being disposed.

ELV originally prohibited the use of cadmium, mercury, hexavalent chrome, and lead. It has been expanded multiple times since its initial release to include other identified Substances of Very High Concern (SVHC) including Per- and polyfluoroalkyl Substances (PFAS). In order to comply to the EU ELV directive, automotive industry developed Global Automotive Declarable Substance List (GADSL) which is reviewed regularly for inclusion of Substances of Very High Concern and other regulated substances.

2.2. Global Automotive Declarable Substance List (GADSL)

The automotive industry has its own list of prohibited and declarable substances built from ELV and other substances lists from countries that automotive manufacturers may do business in. This list consists of more items than the ELV, and includes substances determined by automotive OEMs, suppliers, and chemical manufacturers deemed to be harmful.

See www.gadsl.org

2.3. Compliance Data Exchange (CDX)

CDX is a data management system that is used to store information on product chemicals, materials, and components. Companies that cannot use IMDS per the IMDS Terms of Use may use CDX. A Material Data Sheet (MDS) is the electronic “currency” of the information. This information is used by the OEMs and their supply chain to show compliance to ELV, REACH, RoHS, TSCA, Prop 65 and other applicable regulations.

See <https://www.cdxsystem.com>

2.4. International Material Data systems (IMDS)

IMDS is an automotive industry data management system that is used to store information on product chemicals, materials, and components. A Material Data Sheet (MDS) is the electronic currency of the information. This information is used by the OEMs and their supply chain to show compliance to ELV, REACH, TSCA, Prop65 and other applicable regulations.

See <https://www.mdssystem.com/> for more information.

3. GENERAL REPORTING REQUIREMENTS

3.1. Reporting format

Cummins requires all components and materials to be compliant to Cummins Engineering Standard (CES 10903). All production parts must be reported in the format requested by the Restricted Substance and Product Disclosure group (RS&PD)

Materials Disclosure Requirements and Guide website URL:

<https://public.cummins.com/sites/CSP/en-us/Pages/Materials-Disclosure-Guide.aspx>

3.2. Use of Information

Information provided by suppliers is used per established IMDS, CDX, and Cummins Terms and Conditions.

3.3. Confidentiality

Cummins treats supplier data as confidential within the terms of the Supplier Confidentiality Agreements. Supplied data is used for the purpose of meeting customer restricted substances compliance reporting requirements.

3.4. Confidential Substances

When necessary, proprietary information/confidential recipes can be protected providing the substances are not listed in CES 10903 and GADSL as declarable or prohibited. Suppliers must monitor changes to prohibited and restricted substance lists as per CES 10903 and GADSL and update their submissions appropriately.

Many customers are prohibiting the use of the Joker/Wildcard in MDS submissions, Cummins prefers the substances be marked as “Confidential,” to prevent the recipient from seeing the basic substance details when viewing the MDS.

This information can be visible to Cummins or OEM users only if they have been granted “Trust User” status by your company.

If a confidential substance is added to GADSL or CES 10903 list at a later date, release of the confidential information will follow the established IMDS process per Recommendation 001.

3.5. Communication

Reporting in IMDS or CDX is a requirement for all Cummins direct materials and component suppliers, a contact name must be provided when requested. Suppliers are expected to become competent in the use of the Cummins approved reporting tools.

When sub-tier suppliers are involved, it is the responsibility of the direct suppliers to cascade information and requirements to those suppliers and ensure that they comply with these same requirements.

MDS submission is part of the new product development program, proof of the accepted submission shall be included in Section 19 of the PPAP. A PPAP will not be approved without an accepted MDS submission.

3.6. Noncompliant materials/components

If any materials/components are identified as noncompliant to Global Automotive Declarable Substance List (GADSL) or CES 10903 (i.e., they contain a prohibited substance or restricted substance over established thresholds) during the collection of sub-supplier data, the supplier must notify their Cummins Purchasing contact.

4. APPLICATION

- 4.1. The requirements in this manual apply to all components, materials, and semi-components that are supplied to Cummins.
 - 4.1.1. Surface preparations and coatings must be present on the material or component to be reported and are to be classified based on their main constituent.
 - 4.1.2. Report residual process materials that remain in the component after all processing is completed.
 - 4.1.3. Substances present in the finished product must be reported in the cured (dried) state.
 - 4.1.4. Solvents used in processing that evaporate or are reacted out of the part or material during/after processing are not reported in the MDS.
 - 4.1.5. Do not include substances that may be formed over the lifetime of the part or material but are not present when the product is sold.
 - 4.1.6. Do not include substances that are wiped or washed off the product before they are sold.
 - 4.1.7. Process chemical that are not contained in the end product must not be reported.

5. CHANGES AND MODIFICATIONS

- 5.1. Suppliers with design control responsibilities are expected to stay current with relevant legislation, rules and recommendations that may lead to product changes.
- 5.2. Approval must be received per Cummins Change Management program before undertaking any change to a supplied product.
- 5.3. It is suppliers' responsibility to ensure that submitted MDS are kept up to date. Anytime there is a change or modification related to mass, material, or substance content, the existing MDS must be modified and resubmitted.
 - 5.3.1. When it is necessary to change the MDS, this change must be made by revising the original MDS using the Copy – new version function.

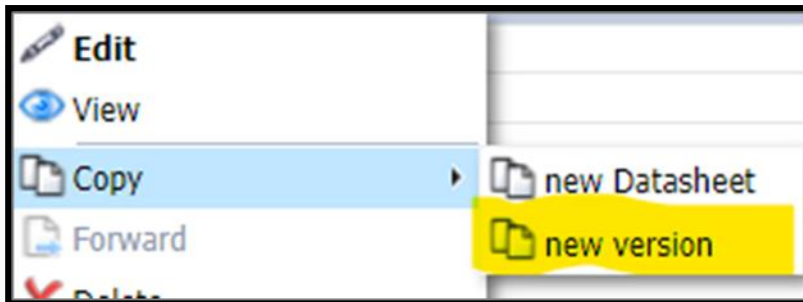


Figure 1 Dropdown Menu

- 5.3.1.1. Do not create a new data sheet if the part number has not changed.
 - 5.3.2. Changes that require revision of the MDS.
 - 5.3.2.1. Material composition change.
 - 5.3.2.2. Change to weight of finished part.
 - 5.3.2.3. Updates to GADSL that cause a material to become prohibited or declarable.
 - 5.3.2.4. Changes to IMDS Recommendations or rules.
 - 5.3.2.5. Changes in Application or Classification codes.

6. CUMMINS IMDS REQUIREMENTS

6.1. This section is intended to provide guidance on requirements for submitting MDS to Cummins via the IMDS tool. For more detailed information related to the creation and modification of MDS, see the IMDS user's manual located at:

https://public.mdssystem.com/documents/10906/16811/imds_usermanual_13.2_en.pdf

6.1.1. Follow requirements identified in IMDS001 General Rules and Guidelines for IMDS Material Data sheets and Annex 1 to the IMDS001 Recommendations when developing and verifying the accuracy of your submission.

6.1.2. Cummins validates supplier submission following the Rules and Recommendations in these documents in addition to any applicable customer requirements.

6.2. Cummins Material Data Sheet (MDS) requirements

6.2.1. Supplier number (Cummins Internal Supplier ID) must be included on all submissions to be processed correctly (See Section 9.2). The supplier number is the six-digit number found on the purchase order or in the parts list attached in the supplier request email. Different supplier locations within the same organization, may have different supplier codes.


	Supplier Name	ABC COMPANY INC													
	Cummins Internal Supplier ID	123456													
	Comment	Please use this Supplier name and number as Company Name and Company ID													
<table border="1"><thead><tr><th>Cummins Item Number</th><th>Cummins Item Name</th><th>Unit Of Measure</th></tr></thead><tbody><tr><td>FX21111</td><td>Widget 1</td><td>EA (each)</td></tr><tr><td>FX21112</td><td>Widget 2</td><td>EA (each)</td></tr><tr><td>FX21113</td><td>Widget 3</td><td>EA (each)</td></tr></tbody></table>				Cummins Item Number	Cummins Item Name	Unit Of Measure	FX21111	Widget 1	EA (each)	FX21112	Widget 2	EA (each)	FX21113	Widget 3	EA (each)
Cummins Item Number	Cummins Item Name	Unit Of Measure													
FX21111	Widget 1	EA (each)													
FX21112	Widget 2	EA (each)													
FX21113	Widget 3	EA (each)													

Figure 2 Example Parts List

6.2.1.1. If you do not receive this attachment with the request email, please notify the Compliance group at supplier.compliance@cummins.com

6.2.2. The part name, in the Recipient Data section must not contain the part number and must match the name that is listed in the purchase order system.

6.2.3. When updating an MDS submission, do not create new MDS. Use the “new version” function to maintain the IMDS ID number and part history.

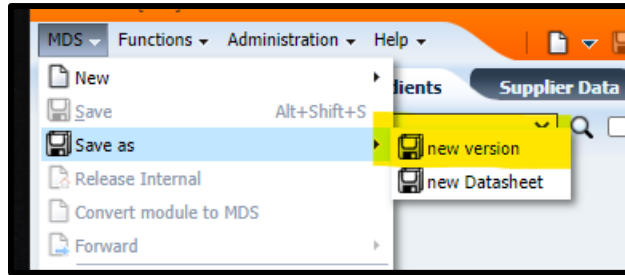


Figure 3 IMDS menu

6.2.4. The only time a new data sheet is necessary is if the data sheet is for a brand-new part number or if the initial part number has changed. A new datasheet received in place of a revised datasheet will result in a rejection of the submission.

6.2.5. Module or Material Data sheet?

When building in IMDS, the user needs to know if the submission is going to be used internally or submitted externally. If the information is going to be submitted externally, it should be created as an MDS. If the information is going to be used internally only, it could be created as a Module or MDS. Cummins suggests all data be created as MDS.

6.3. Component, semi-component, or material

6.3.1. Component, identified by a red box,  is the most common building block in IMDS.

A component can be a finished assembly, a sub-assembly or standalone part. When creating a component for an assembly, it should match the structure of the Bill of Materials (BoM) of the assembly being supplied. Component names should be descriptive. Do not include the part number or trade names in the component name. A component can be made of multiple materials.

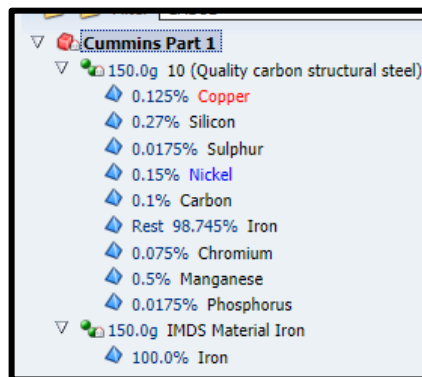

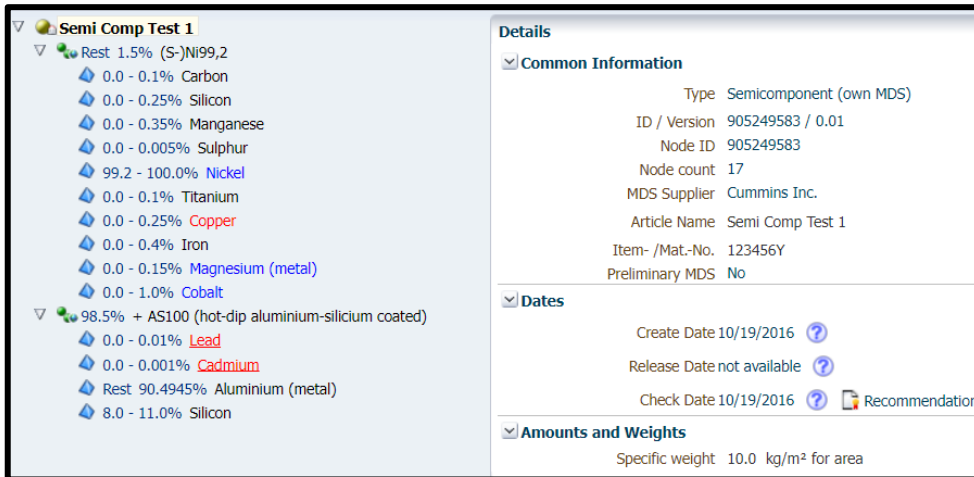


Figure 4 Simple Component Assembly

6.3.2. Semicomponent


A semicomponent, identified by a golden globe  is not a subassembly and therefore should not be used to represent one. A semicomponent is a part that requires additional processing or needs to be cut to size to before it becomes a component. Examples of semicomponents are filter material being cut to size, or casting requiring additional machining. A semicomponent can be made of one or more materials.



The screenshot displays a software interface for a semicomponent. On the left, a tree view shows the composition of 'Semi Comp Test 1'. It includes a 'Rest 1.5% (S-)Ni99,2' section with materials like Carbon, Silicon, Manganese, Sulphur, Nickel, Titanium, Copper, Iron, Magnesium (metal), and Cobalt. Below that is a '98.5% + AS100 (hot-dip aluminium-silicium coated)' section with Lead, Cadmium, Aluminium (metal), and Silicon. On the right, a 'Details' pane provides information under three sections: 'Common Information' (Type: Semicomponent (own MDS), ID / Version: 905249583 / 0.01, Node ID: 905249583, Node count: 17, MDS Supplier: Cummins Inc., Article Name: Semi Comp Test 1, Item- /Mat.-No.: 123456Y, Preliminary MDS: No), 'Dates' (Create Date: 10/19/2016, Release Date: not available, Check Date: 10/19/2016 with a Recommendation icon), and 'Amounts and Weights' (Specific weight: 10.0 kg/m² for area).

Figure 5 Semi-component example

6.3.3. Material

A Material identified by the green globes , is the basis of all components or semi-components. Note that depending on whether they are created internally, received from a supplier, or selected from the published reference list available in IMDS, the appearance of materials will vary slightly. Materials can be provider or IMDS Committee material created (reference materials). Do not try to create a material for your supplier or sub-supplier. A Safety Data Sheet (SDS) does not have enough information to create a material and a material certificate is just applicable to that material lot, the next material lot can be completely different. Cummins prefers that suppliers use Committee materials whenever possible. If there is no Committee material that matches your raw material blend, as a supplier, you are allowed to create your own material. When creating a new material, please add a note in the remark location that you are using a “Non-standard material.”

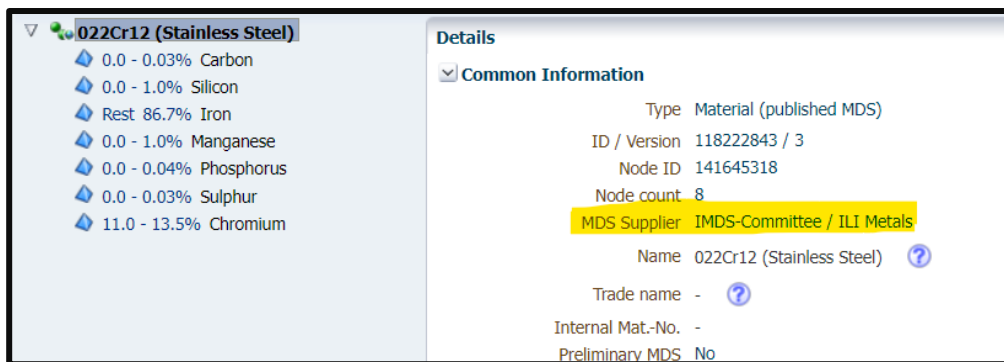


Figure 6 Example Committee Material

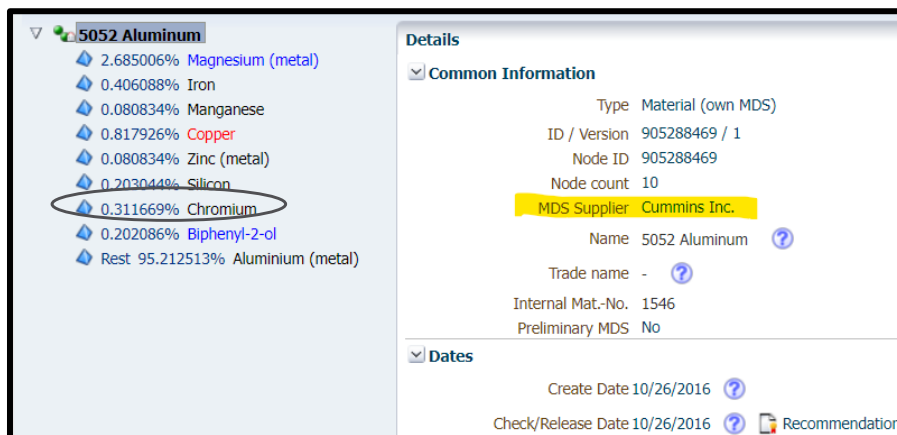



Figure 7 Example Own Material with basic substance circled.

A Material name must be descriptive, but that description/name must not be the trade name of that material. Materials are chemical or compound mixtures composed of different basic substances. Examples are metal alloys, plastics, or ceramics.

Components can be made up of multiple materials such as a screw made of base metal with a zinc plating. All basic substances in a material must be identified, and the aggregate sum of their ratios must add up to 100%.

Process materials such as paints, grease, adhesives, or surface treatments should be entered as materials. It is important to note that the MDS creator must report these types of materials in their cured or dried state, i.e., in the final state as found on the sold part, not in the liquid or wet composition as applied to the component. For example: do not include the solvent content of the wet paint as it will evaporate during the drying process. If any process chemicals residual trace amounts are left on the finished part, there is an option to mark these as residuals in the material Details screen under the "Ingredients" tab. In some rare cases, you can mark process chemicals as intentionally used. Be aware this most likely will raise a flag during our reviewing process.

6.3.3.1. Basic Substances

Basic substances identified by blue pyramids  , are the chemical elements that make up each material. Committee materials in IMDS already have the basic substances applied in the appropriate proportions.

7. CREATING THE SUBMISSION

7.1. Building the Material Data Sheet

There are a variety of ways to build up your material data sheet. The method chosen will depend on whether supplier data is being used and how much of the data sheet you need to create yourself.

For specifics on data sheet creation and the different methods that can be used, refer to the IMDS Quick reference guides located at URL: <https://www.mdssystem.com>

7.1.1. Material Field Descriptions

Details

Common Information

Type: Material (own MDS)
ID / Version: 2000374619 / 0.01
Node ID: 2000374619
Node count: 1
MDS Supplier: Cummins Inc.
Name: Material2000374619 *
Trade name:
Internal Mat.-No.:
Preliminary MDS:

Dates

Create Date: 3/1/2023
Check/Release Date: not available
Recommendation:

Material Information

Std. Mat.-No.:
Symbol:
Classification: 2.1 Aluminium and aluminium alloys *
SCIP Material Category:
Identifier: 66380 | Type: Material category | Descriptions Levels 1 - 3: metal > aluminium (and alloys of)
Additional Material Characteristics:
Norms / Standards:
Company: | Norm: | Norm Code:
Supplier:

Figure 8 Own material.

Details Material language: English

Common Information

Type: Material (published MDS)
ID / Version: 140935179 / 1
Node ID: 140935179
MDS Supplier: IMDS-Committee / ILLI Metals
Name: 00Cr12 (Stainless Steel, Cold rolled sheet)
Trade name: -
Internal Mat.-No.: -
Preliminary MDS: No

Dates

Create Date: 9/7/2010
Check/Release Date: 9/7/2010
Recommendation:

Amounts and Weights

Portion: from - to
0.0 - 0.0 %
Weighted mean: 0.0%

Material Information

Std. Mat.-No.: C-UNS S11203
Symbol: -
Classification: 1.1.2 highly alloyed
SCIP Material Category: -
Additional Material Characteristics: -
Norms / Standards:
Company: - | Norm: GB | Norm Code: T4239
Supplier: -

Figure 9 Committee material

- When using a published IMDS Committee material the fields detailed below will already be populated as shown in Figure 9.
 - **Name** - Must be descriptive of material type and follow rules outlined in REC001, do not use trade names.
 - **Trade name** - Optional
 - **Internal Mat. No.** – Optional, can be part number assigned to this material in your in-house system.
 - **Preliminary MDS** – This should be “No” in most cases, unless a preliminary MDS is specifically requested.
 - **Create & Check/Release Dates** – Fields Auto-populate.

- The fields below must be completed for any material whether Own or IMDS Committee material.

Amounts and Weights

- **Portion** - Can set as be a fixed amount, range of percentages or rest of material content.
- **Weighted mean** - Calculates from the information provided in portion.

Material Information

- **Std. Mat. -No** – To be completed based on the material number described in the public standards.
- **Symbol** - For use with plastics, thermoplastics, and elastomers as defined in ISO standards.
- **Classification** – This entry is mandatory. Proper material classification must be assigned no matter the weight of the material. Classifications can be found in REC001a.
- **SCIP Material Category** – Optional (may become a required field in upcoming versions).
- **Additional Material Characteristics** – Optional
- **Norms/Standards** – Use the public standards that define the material composition (i.e., ISO, EN, DIN, ASTM)
- **Supplier** – Optional, use care when filling in this field as the full supply chain can see this information.

SVHC/GADSL Content

- **Substance name/CAS No./ Portion** – Populate for all declarable and prohibited substances. All GADSL listed substances are required to be disclosed in the supplier submission.

Remark

- **Remark** - This is an optional field where additional information can be provided.

Details

Common Information

Type Component (own MDS)
 ID / Version 2000374618 / 0.01
 Node ID 2000374618
 Node count 1
 MDS Supplier Cummins Inc.
 Description Component_2000374618 *
 Part/Item No.
 Preliminary MDS
 Multi Sourced No

Dates

Create Date 3/1/2023 ?
 Check/Release Date not available ? Recommendation

Amounts and Weights

Measured weight per item g *
 Calculated weight per item 0.0 g
 Deviation 0.0% ?

SCIP

SCIP No.
 SCIP Submission No.
 Production in European Union
 Article Category

Taric Code	Description Level 1	Description Level 2	Description Level 3	Descriptions Levels 4 - 10
8708999790	Vehicles, airc...	Vehicles othe...	Parts and ac...	Other parts and accessories > Other > Oth...

Figure 10 Component Fields

7.1.2. Component Field Descriptions

The component field descriptions are similar to the fields mentioned in Materials above. There are a few differences that will be detailed in this section.

- **Description** - Must be descriptive of component type and follow rules outlined in REC001, do not use trade names. (Note: your internal part description/name might be different from the Cummins Part-Item No. located in the Recipient data tab once you have added Cummins' IMDS Company ID as recipient. This will have to be overwritten to match the Cummins Part Name.)
- **Part/Item No.** - This can be your internal or customer part number. (Note: your internal part number might be different from the Cummins Part-Item No. located in the Recipient data tab once you have added Cummins' IMDS Company ID as recipient. This will have to be overwritten to match the Cummins Part Number.)
- **Preliminary MDS** – This should be “No” in most cases, unless a preliminary MDS is specifically requested.
- **Multi Sourced** – Are you sourcing from more than one supplier? Yes/No response. (Note: in this case, you will be able to select the same part from multiple referenced sources, i.e., different supplier-accepted entries. You will have to select which is your preferred entry via a checkbox.)
- **Create, Release, & Check Dates** – Fields Auto-populate.

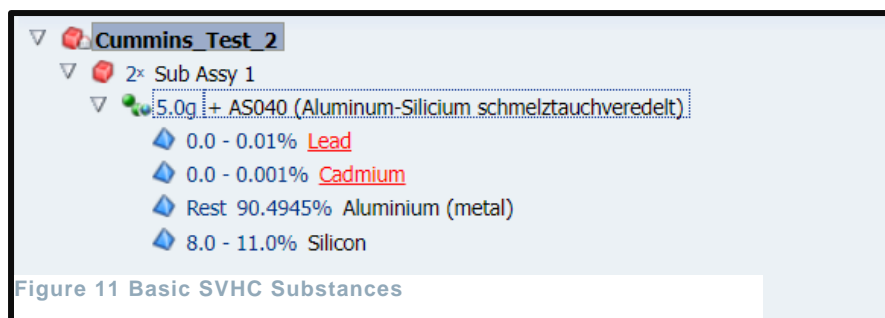
Amounts and Weights

- **Measured Weight per item** – Actual weight of the component.
- **Calculated Weight per item** – The sum of the weight of the nodes used to create the component.
- **Deviation** – Deviation must be within permitted range for weight of the component per REC001 Rule 4.2.2.C.

Weight of Component (X)	Maximum deviation %
X < 1g	100%
1g < X ≤ 100g	10%
100g ≤ X < 1kg	5%
1kg ≤ X < 10kg	2%
10kg ≤ X < 100kg	1%
X ≥ 100kg	0.5%

SCIP

- Information in the SCIP section is optional. Certain customers do require Cummins to request this information from our suppliers. If the information is available, please provide it.



7.1.3. Basic Substances

Basic substances are the chemical elements or mixtures that make up a material. All substances listed on the Global Automotive Declarable Substance List (GADSL) must be included in an MDS. Prohibited substances appear in red as shown in Figure 11, declarable substances appear in blue.

GADSL substances cannot be hidden. They cannot be a Joker/Wildcard or Confidential substance.

7.1.4. Application codes

Application codes are required for certain GADSL substances that are included in a component. In most cases, the Application codes are related to an ELV exemption. Supplier must assign the proper substance application code per REC001a IMDS Recommendation 001 Annex. This code allows the use of the substance provide it meets application code requirements for that substance. (Note: to activate the Application Code

pop-up wizards, you will have to click on the blank cell below the “Application [ID] column header if that field is not already filled. Please be aware application codes are connected to ELV and do not represent RoHS exemptions, and therefore do not match the RoHS exemption nomenclature).

7.1.5. Plastics and Elastomer Materials

Use a common material type when naming plastic or elastomer materials. Follow the

Application	Basic Substance	% (MIN)	% (MAX)	Application [ID]
	Nickel	0.8	1.2	Not applicable [34]

Figure 12 Application code field

proper ISO requirements when identifying the symbol for the material. No material is ever made up of 100% of one substance as impurities always remain. These materials include basic polymers, colorants, pigments, fillers, plasticizers, and other substances. Reporting a polymer at 100% of a single substance is cause for rejection.

Reactive substances (process chemicals) should not be reported in the MDS if they are not included in the final reported material unless there is a potential for residues. A field exists in IMDS for residues and allows for a selection to be filled.

7.1.6. Recycled materials

The question “Does this material contain Recyclate?” must be answered Yes or No for material classifications 1 – 5, 7.1 & 7.2. If “No” is selected, recyclate details are not needed. If “Yes” is selected, additional recyclate details will need to be entered.

Instructions for entering recyclate data can be found in the Recommendations available at the following URL: <https://www.mdsystem.com>. A range of recycled materials over 20% will result in a warning. This is not cause for rejection.

8. JOKERS/WILDCARDS & CONFIDENTIAL SUBSTANCES

8.1.

Many prohibiting the supplier

Proactively, suppliers do

Wildcards in their submissions, but instead use confidential substances.

Figure 13 Recyclate fields

Jokers/Wildcards

customers are use of Jokers in any submission.

Cummins prefers that not use Jokers or

However, if used, this will not be a cause for rejection, but the supplier may be required to resubmit the MDS without the Joker or Wildcard if the OEM or end customer rejects the final submission.

If Jokers or Wildcards are used in the supplier submission, they are not permitted to hide a GADSL substance. No more than 10% of the total substance content can be made up of Jokers or Wildcards.

The current list of available jokers/wildcards are:

- Flame retardant, not to declare
- Further Additives, not to declare
- Impact modifier, not to declare
- Inorganic Ingredient, not to declare
- Misc., not to declare
- Not yet specified, not to declare: Preliminary MDS only
- Organic Ingredient, not to declare
- Pigment portion, not to declare
- Plasticizer, not to declare

8.2. Confidential substances


Substances that are not listed on the GADSL list and do not require an application code can be listed as *Confidential substances*. Once substances are marked as confidential, they can only be seen by personnel marked as “Trust Users” by the organization. In the supply chain, only those with Trusted User status can see the substances.

If a substance is marked as Confidential but is later added to GADSL or the REACH SVHC, confidentiality ends two weeks after the GADSL/REACH SVHC list update in IMDS. The creating company is notified that a change needs to be made to the MDS, if no update is made the confidential substance is released, and the substance name is revealed.

9. SUBMITTING MDS TO CUMMINS

9.1. Pre-submission Checks

Before submitting any MDS to a customer, check the submission by using green check at the

top of the MDS page . This will verify your submission against the standard IMDS checks. You may see warnings or errors at the bottom of the page. You can access the location of the issue by clicking on the line item, this will take you to the tree location in need of correction.

This is not the only verification of your submission that must be completed. The submission must also be checked manually to verify it meets the Rules and Recommendations within REC001 and REC001 Annex.

Most rejections occur from violations of the Rules and Recommendations. Cummins includes the Rule or Recommendation section numbers in our rejection response within IMDS. You can see those notes in the Recipient data tab.

9.2. Submitting an MDS

In the Supplier Data tab, please check to make sure a contact name is selected. An MDS will not send, and an error will appear if a current contact is not listed.

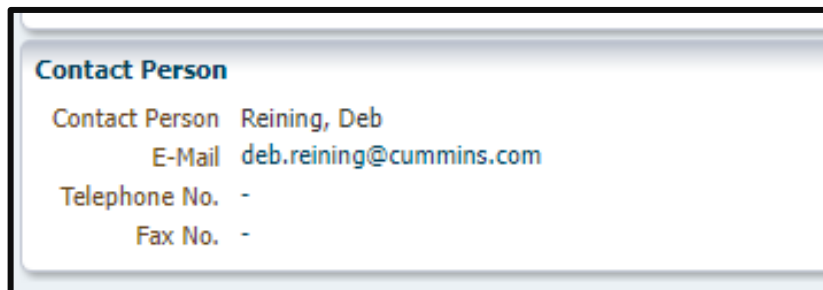


Figure 14 Contact Name field



- Go to the Recipient Tab
- Select Cummins IMDS ID to send the MDS submission, click on the building with the plus sign next to it . A search box will appear, type 3664 into the Company ID field, press Search button. Once the appropriate Cummins location appears, click the Apply button on the bottom right of the window.

Figure 15 Recipient Search window

If you select an incorrect customer location, you can remove them by clicking  the stop sign with a minus symbol.

On the right side of the Recipient tab, you will see the Transfer Information:

Figure 16 Transfer Information details

- **Company** – will auto populate with company chosen from drop down.

- **Supplier Code** – use the six-digit Cummins Supplier ID number assigned to your organization by the Purchasing group.
- **Name** – part name per the Cummins drawing or purchase order
- **Part/Item No.** – part number per the Cummins drawing or purchase order
- **Legacy Spare Part** – only check this box if this submission is for a spare part.
- **Transmission/Check date** - will autopopulate during processing
- **Forwarding allowed** – check mark this box if it is okay for Cummins to forward your MDS.
- **Drawing No.** – input the Cummins drawing number, if available
- **Drawing dated** – input drawing date, if available
- **Drawing Change Level** - input drawing change level, if available
- **Purchase Order No.**– optional field
- **Bill of Delivery No.** – optional field
- **Report No.**– optional field
- **Date of Report** – optional field

9.3. Sending/Proposing Material Data sheets

Suppliers should use the “Propose” function when submitting MDS to Cummins. Do not use the “Publish” function, this makes the MDS submission viewable to anyone in the IMDS system.

9.4. Review of MDS submissions

Cummins reviews supplier MDS submissions in the order that they are received. Due to the volume of MDS received at Cummins, you may not receive an immediate response.

If you have questions related to your submission, please email Cummins Supplier Compliance at supplier.compliance@cummins.com

10. CUMMINS CDX REQUIREMENTS

This section is intended to provide guidance to those suppliers using CDX to submit their full materials disclosure MDS. For additional training and information, see the Help section at the following URL: <https://www.cdxsystem.com> . Many of the Cummins supplier expectations for CDX mirror those of IMDS submissions so references to previous sections of this manual will be made to assist the user.

- 10.1. The CDX system is used for the non-automotive portion of the Cummins business. Suppliers are still required to meet full material disclosure requirements and regulatory compliance even though their parts are not being used in an on-highway or automotive application. Following requirements established in CES10903, Cummins validates supplier submissions based on the substances in the concentrations identified and the format of the MDS specified.
- 10.2. CES 10903 prohibited substance list and other training material can be found at URL: <https://public.cummins.com/sites/CSP/en-us/Pages/Materials-Disclosure-Guide.aspx>
- 10.3. CDX has the same tree structure as IMDS, information must be broken down to the same level as a standard IMDS submission.
- 10.4. Cummins Material Data Sheet Submission Requirements
Supplier number (Cummins Internal Supplier ID) must be included on all submissions to be processed correctly. The supplier number is the six-digit number found on the purchase order or in the parts list attached in the supplier request email.


	Supplier Name	ABC COMPANY INC												
	Cummins Internal Supplier ID	123456												
	Comment	Please use this Supplier name and number as Company Name and Company ID												
<table border="1"><thead><tr><th>Cummins Item Number</th><th>Cummins Item Name</th><th>Unit Of Measure</th></tr></thead><tbody><tr><td>FX21111</td><td>Widget 1</td><td>EA (each)</td></tr><tr><td>FX21112</td><td>Widget 2</td><td>EA (each)</td></tr><tr><td>FX21113</td><td>Widget 3</td><td>EA (each)</td></tr></tbody></table>			Cummins Item Number	Cummins Item Name	Unit Of Measure	FX21111	Widget 1	EA (each)	FX21112	Widget 2	EA (each)	FX21113	Widget 3	EA (each)
Cummins Item Number	Cummins Item Name	Unit Of Measure												
FX21111	Widget 1	EA (each)												
FX21112	Widget 2	EA (each)												
FX21113	Widget 3	EA (each)												

Figure 17 Example Part List

If you do not receive this attachment with the request email, please notify the Compliance group at supplier.compliance@cummins.com

The part name, in the Recipient data Section, must not contain the part number and must match the name that is listed in the purchase order system.

- 10.5. When updating an MDS submission, do not create new MDS. Use the “new version” function to maintain the CDX ID number and part history.

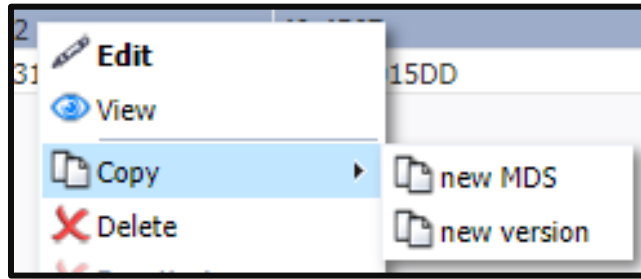


Figure 18 CDX Copy New menu.

10.6. The only time a new data sheet is necessary is if the part is for a brand-new part number or if the initial part number has changed. A new datasheet received in place of a revised datasheet will result in a rejection of the submission.

10.7. Building the MDS

10.7.1. The tree structure and composition of MDS in CDX are the same as IMDS, for more information on this, see **Section 6.3**.

10.7.2. Component Level Details and Common Information

Figure 19 Common Information

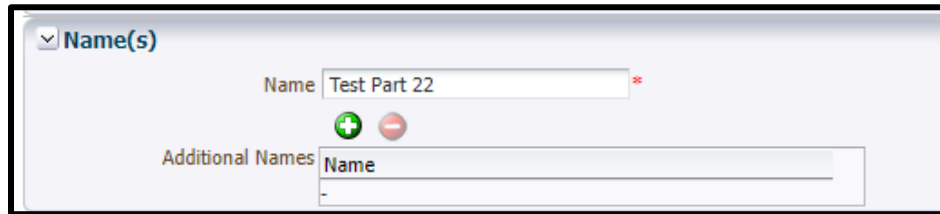
Check box must be marked for 100% Declaration. SCIP data can be provided, if available, but it is not required for submission to be accepted.

Figure 20 CDX Details – Article Category

Click the magnifying glass to search for the SCIP article category if information is available. SCIP is not required for the submission.

10.7.3. Naming

Part name must be in English and should be descriptive. A Material number may be included in the name such as “304 Stainless steel”. Additional Names section is optional.



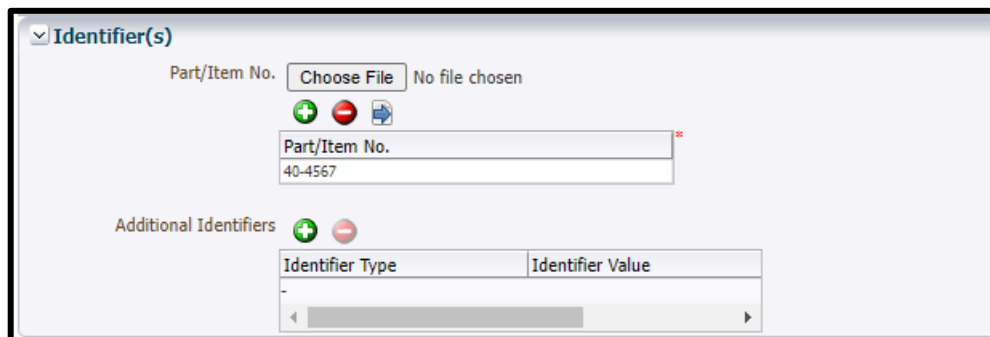
The screenshot shows a web form titled "Name(s)". It contains a "Name" field with the text "Test Part 22" and a red asterisk indicating it is required. Below this are two circular buttons, a green plus and a red minus. Underneath is an "Additional Names" section with a table header "Name" and a single empty row.

Figure 21 Naming details

Component or Semicomponent name should be in descriptive English. Do not include part number in the Component/Semicomponent name.

10.7.4. Part Number

Part number should match information on part drawing or Purchase Order provided. Submission requires the Cummins part number be used, do not use your internal part number. Part numbers are verified to the Cummins Purchasing data as part of the approval process.



The screenshot shows a web form titled "Identifier(s)". It features a "Part/Item No." field with a "Choose File" button and the text "No file chosen". Below this are two circular buttons, a green plus and a red minus, and a document icon. The "Part/Item No." field contains the text "40-4567" and has a red asterisk. Underneath is an "Additional Identifiers" section with two circular buttons, a green plus and a red minus. Below this is a table with two columns: "Identifier Type" and "Identifier Value". The table has one empty row.

Figure 22 Identifiers

10.7.5. Product Business Info

This section is optional for the user to complete.

10.7.6. Amounts and Weights

Completing the Amounts and Weights section is a requirement. Permitted deviation can be found in Section 7.2.1 of this manual.



The screenshot shows two sections in a software interface. The first section, 'Amounts and Weights', contains the following fields: 'Measured weight per item' with a value of 5.0 and a unit dropdown set to 'g'; 'Tolerance +/- 5.0%*'; 'Calculated weight per item' with a value of 5.0 g; and 'Deviation' with a value of 0.0%. The second section, 'Parts Marking', contains a 'Required by law' dropdown menu and a 'Polymeric part(s) marked' checkbox.

Figure 24 Amounts and weights, Parts Marking sections.

10.7.7. Part Marking

Choose Yes or No based on the requirements of the part being submitted. Check the box if the part is Polymetric Classification 5.1.x & 5.3.x. Not completing this section accurately will be cause for rejection.

10.7.8. Remark

Remark is an optional field for the user to provide additional information on the component. Be aware information shared in this area is visible throughout the supply chain receiving the MDS.



The screenshot shows the 'Common Information' section with the following fields: 'Type' set to 'Material'; 'ID / Version' set to '26797 / 2'; 'Node ID' set to '43420'; 'MDS Supplier' set to 'CDX Standard Materials'; '100% declaration' checkbox checked; 'External SCIP number' field; 'Brand' field; 'Type' field; 'Model' field; and 'Is Article' checkbox.

Figure 25 Material Common Information

10.8. Material Level Common Information

Check box must be marked for 100% Declaration.

10.8.1. Name(s)

Material name must be in descriptive English. Do not include the part number in the material name. Use of material code is acceptable, such as 304 Stainless steel or 304 SS.

10.8.2. Materials related fields,

The screenshot shows a form with several sections:

- Amounts and Weights:** Weight: 5.0 g
- Classifications:** Classification table:

List	Classification
IMDS	3.2: Copper alloys
- Material Information:** Standard Material No. UNS C18150, Symbol -
- Norms / Standards:** Norms / Standards -
- Recyclate:** Does the material contain recycle?
 - Content of post-industrial/pre-consumer recyclate (see ISO 14021): 0.0 - 0.0 %
 - Content of post consumer recyclate (see ISO 14021): 0.0 - 0.0 %
- Remark:** Safety Data Sheet required? Basic Substance/-mixture contained (liquid, spray, (cooling) lubricant, grease) Remark: Copper Alloy

Figure 26 Material Related Fields

- **Amounts and Weights:** Material weight in g or kg.
- **Classification:** This field is required for all materials
- **Material Information:** Must be completed for Classification 1 -4 materials, if non-standard material is being used, add a note in Remarks.
- **Norms/Standards:** Must be completed for Classification 1 -4 materials unless non-standard material is used.
- **Recyclate:** Answer Yes or No is required. If yes, please add percentage of Post-industrial or Post consumer recyclate used.
- **Remark:** Optional field for user.

10.8.3. Process Chemical

This field should be marked No, unless process chemical residue is included in material formula.

10.8.4. Regulation Section of Ingredients Tab

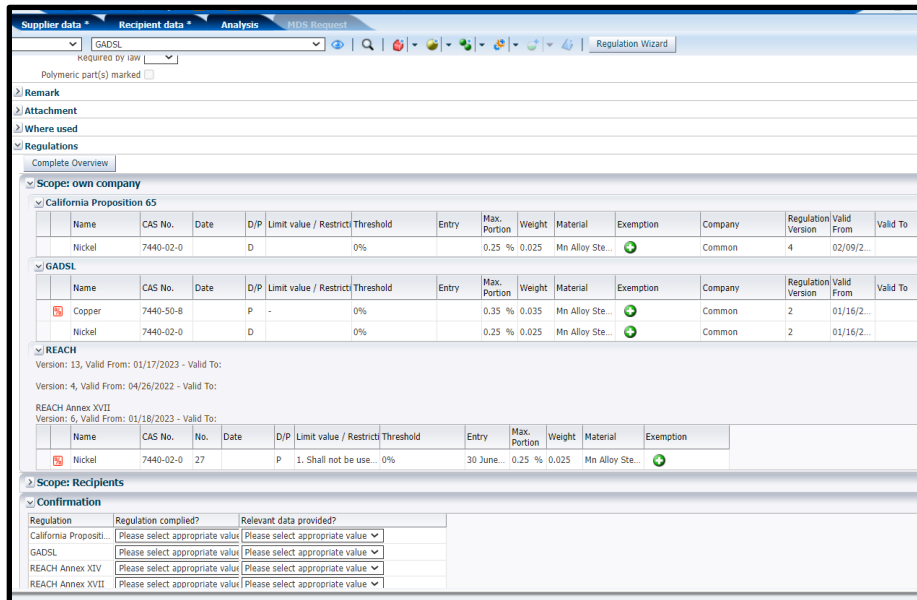


Figure 28 Regulation window

Open the Regulations window, look for any basic substance that is showing under a regulation. Any substance that is actionable is noted with white plus sign in a green



circle. Click on the white plus sign, a window will open with exemptions for that substance. In this window, click the magnifying glass to see exemption choices.

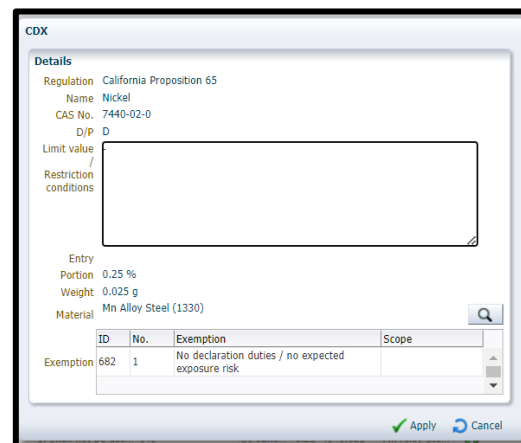
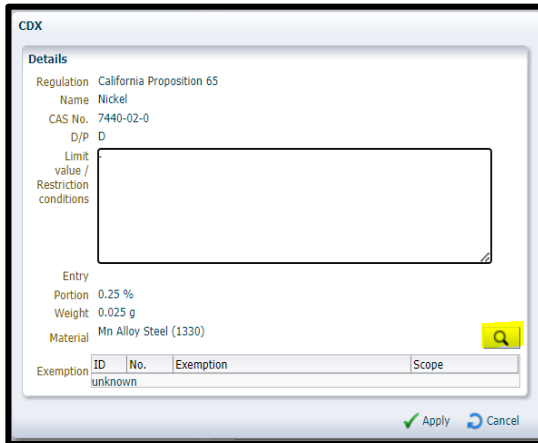


Figure 27 Exemption Windows

Click Apply twice to attach to the exemption to the substance. Regulation information must be added at the semicomponent and component levels when using semicomponents. Once a regulation is added, occasionally there are delays in the

seeing the information on your screen, saving the updated MDS can speed up the screen refresh process.

It is possible to complete the same process using the Complete Overview button also. Use the process that is easiest for you.

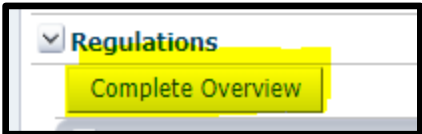
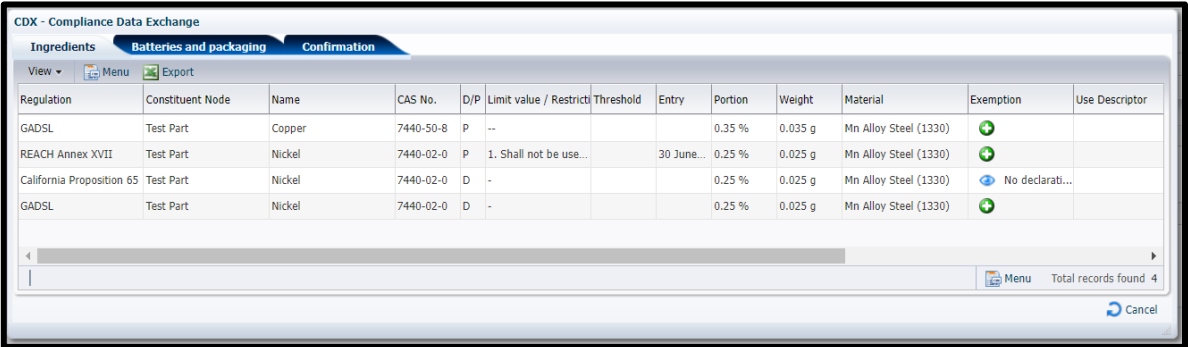


Figure 29 Complete Overview Button



CDX - Compliance Data Exchange

Ingredients Batteries and packaging Confirmation

View Menu Export

Regulation	Constituent Node	Name	CAS No.	D/P	Limit value / Restrict	Threshold	Entry	Portion	Weight	Material	Exemption	Use Descriptor
GADSL	Test Part	Copper	7440-50-8	P	--			0.35 %	0.035 g	Mn Alloy Steel (1330)	+	
REACH Annex XVII	Test Part	Nickel	7440-02-0	P	1. Shall not be use...		30 June...	0.25 %	0.025 g	Mn Alloy Steel (1330)	+	
California Proposition 65	Test Part	Nickel	7440-02-0	D	-			0.25 %	0.025 g	Mn Alloy Steel (1330)	ⓘ No declarati...	
GADSL	Test Part	Nickel	7440-02-0	D	-			0.25 %	0.025 g	Mn Alloy Steel (1330)	+	


Menu Total records found 4

Cancel

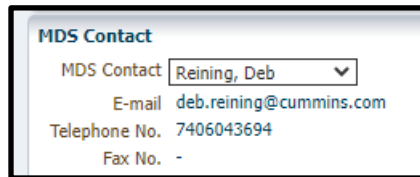
Figure 30 Complete Overview screen

11. SUBMITTING TO CUMMINS VIA CDX

11.1. Pre-submission Checks

Before submitting a MDS to Cummins via CDX, place the Cummins CDX ID 13170 into the recipient tab. Click the green check mark  at the top of the page, to run the Cummins specific MDS checks. Correct any items identified before submitting.

This is not the only verification of your submission that must be completed. The submission must also be checked manually to verify it meets the Rules and Recommendations within REC 001 and REC 001 Annex.



MDS Contact

MDS Contact

E-mail deb.reining@cummins.com

Telephone No. 7406043694

Fax No. -

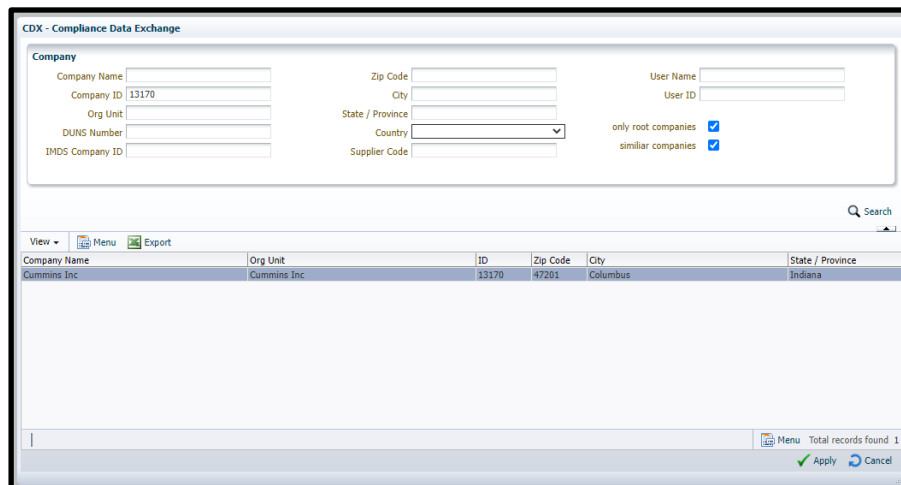
Figure 31 Contact

Most rejections occur from violations of the Rules and Recommendations. Cummins includes the Rule or Recommendation section numbers in our rejection response within IMDS. You can see those notes in the Recipient data tab.

11.2. Submitting an MDS

In the Supplier tab, confirm that contact information is correct and current. If contact is no longer active, replace with correct contact.

In the Recipient tab, click on the House+  and type the Cummins CDX ID in the Company ID location. Click Search, highlight Cummins Inc., click Apply.



CDX - Compliance Data Exchange

Company

Company Name

Company ID

Org Unit

DUNS Number

IMDS Company ID

Zip Code

City

State / Province

Country

Supplier Code

User Name

User ID

only root companies

similar companies

Search

View Menu Export

Company Name	Org Unit	ID	Zip Code	City	State / Province
Cummins Inc	Cummins Inc	13170	H7201	Columbus	Indiana

Menu Total records found 1

Apply Cancel

Figure 32 Company Search Window

On the right side of the Recipient Data tab, you will see the Transfer Information.

The screenshot shows a software interface titled 'Details' with a 'Transfer Information' section. The fields are as follows:

- Company: [Dropdown]
- Organisation unit: -
- Recipient status: edit mode
- Automatically accepted:
- Name: Test Part 22 *
- Additional Names: [Add] [Remove] [Name: -]
- Supplier Codes: [Add] [Remove] [Company Supplier Codes: No data to display] [Admin Supplier Codes: No Admin Supplier Codes]
- Part/Item No.: [Choose File] No file chosen
- Additional Identifiers: [Add] [Remove] [Table with Identifier Type and Identifier Value columns]
- Forwarding allowed:
- MDS Revision: [Text Box]
- Brand: [Text Box]
- Type: [Text Box]
- Model: [Text Box]

Below the main form are four expandable sections: Drawing, Purchase Order, Report, and Company specific.

Figure 33 Transfer Information

- **Company** – will auto populate with company chosen from drop down.
- **Name** – part name per the Cummins drawing or purchase order
- **Supplier Code** – use the six-digit Cummins Supplier ID number assigned to your organization by the Purchasing function.
- **Part/Item No.** – part number per the Cummins drawing or purchase order
- **Additional Identifiers** – optional field
- **Forwarding allowed** – confirm this box is check marked.
- **Drawing No.** – input the Cummins drawing number, if available
- **Drawing dated** – input drawing date, if available
- **Drawing Change Level** - input drawing change level, if available
- **Purchase Order No., Bill of Delivery No., Report No., Date of Report** – are optional fields.

11.3. Sending/Proposing Material Data sheets

Suppliers should use the “Send” function when submitting MDS to Cummins. Do not use the “Publish” function, this makes the MDS submission viewable to anyone in the IMDS system.

11.4. Review of MDS submissions

Cummins reviews supplier MDS submissions in the order that they are received. Due to the volume of MDS received at Cummins, you may not receive an immediate response.

If you have questions related to your submission, please email Cummins Supplier Compliance at supplier.compliance@cummins.com

12. OTHER MDS SUBMISSION OPTIONS

If neither of these types of MDS submission are possible for your organization, please contact Cummins at supplier.compliance@cummins.com to discuss alternative methods, such as BOMcheck or Anthesis templates. Additional information on may be found at

<https://public.cummins.com/sites/CSP/en-us/Pages/Materials-Disclosure-Guide.aspx>