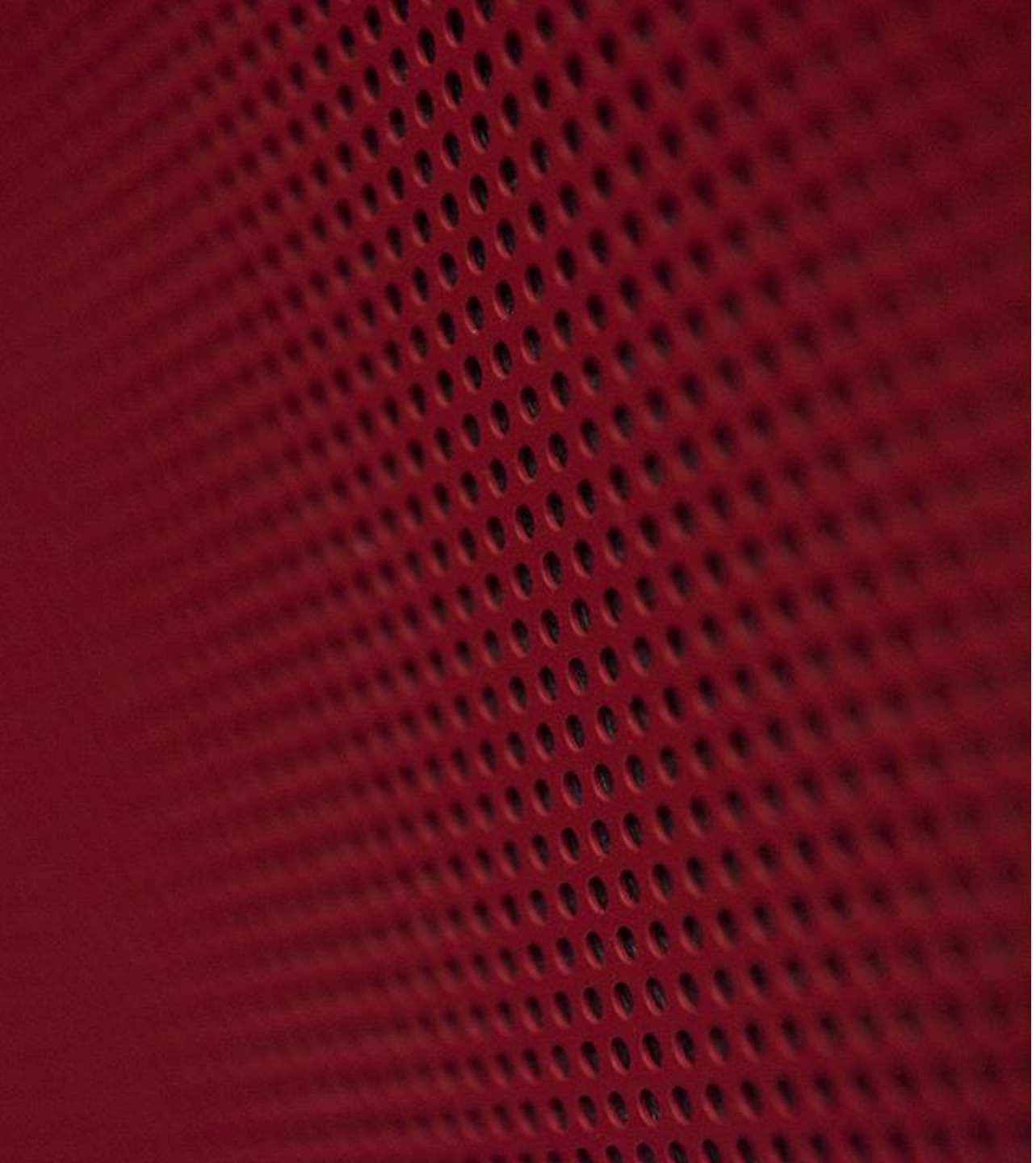

IMDS/CDX Training for Cummins Suppliers

2023

Public Use-Intended for Cummins Direct Suppliers

IMDS/CDX Training for Cummins Suppliers

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Course Features

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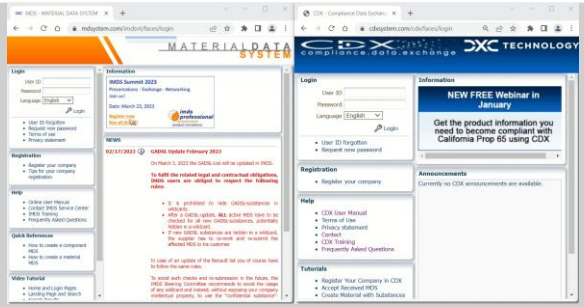
Course Features

Feature	Symbol	Description	Action	Practice
Text		This symbol will be present on the slide when there are no audio, video, or hyperlinks	Read the slide only	Symbols in the upper right corner indicate if the slide has just text or other features
Audio		This symbol will be present on the slide when there is an audio element	Read the slide, click the speaker icon and then play button to listen	
Video		This symbol will be present on the slide when there is a video element	Read the slide, click the video and then play button to watch	
Link		This symbol will be present on the slide when there is a hyperlink to a website	Read the slide and click the underlined word	We will learn about IMDS and CDX today

Introduction

Introduction

To sell products globally, Cummins must be able to demonstrate product compliance to global regulations and customer requirements. Cummins can assess compliance to multiple regulations/requirements without having to resurvey the supply chain by reviewing supplier products Full Material Declarations (FMDs); and in some cases, additional specific information.

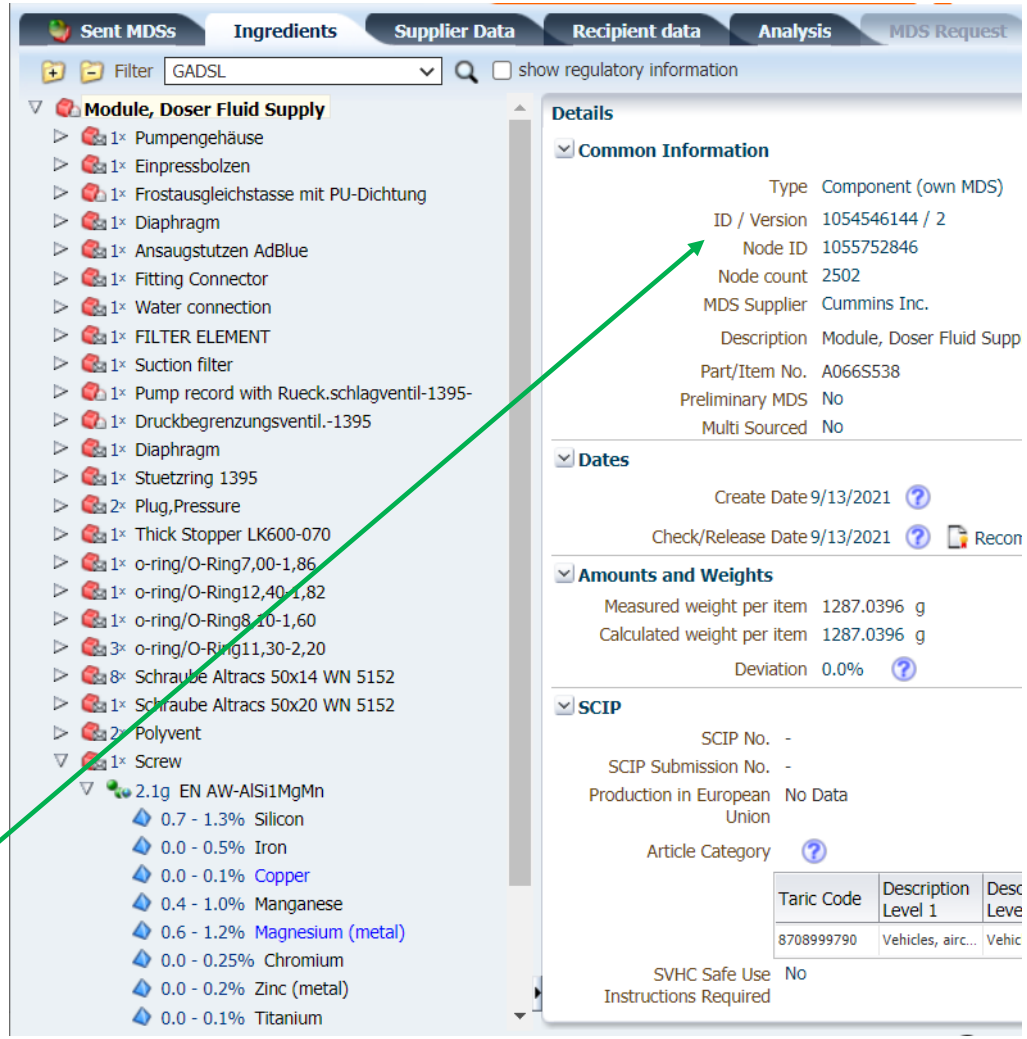
Purpose of this training is to:

- Provide an overview of the software tools (IMDS/CDX) Cummins requires supplier use for their FMD submissions
- Provide details regarding Cummins data requirements for acceptance

Unreported data leads to loss in market share as compliance cannot be verified.

What are IMDS & CDX?

- International Material Data System (IMDS)
- Compliance Data Exchange (CDX)
- Both are internet-based software by DXC Technology (DXC)
- IMDS was developed and financed by the automotive industry's OEMS and is free to suppliers
- CDX was developed by DXC to support other industries. It is financed by license purchases, but basic use is free
- Supports compliance to regulatory and other requirements
- Most customers require suppliers to report data in IMDS or CDX as part of PPAP
- Cummins requires Full Material Declaration (FMD) of the supplied product from each Tier 1 supplier (including distributors)
- IMDS and CDX assign an Identification Number (ID) for each entry. The ID of the salable product is entered on the PPAP Warrant

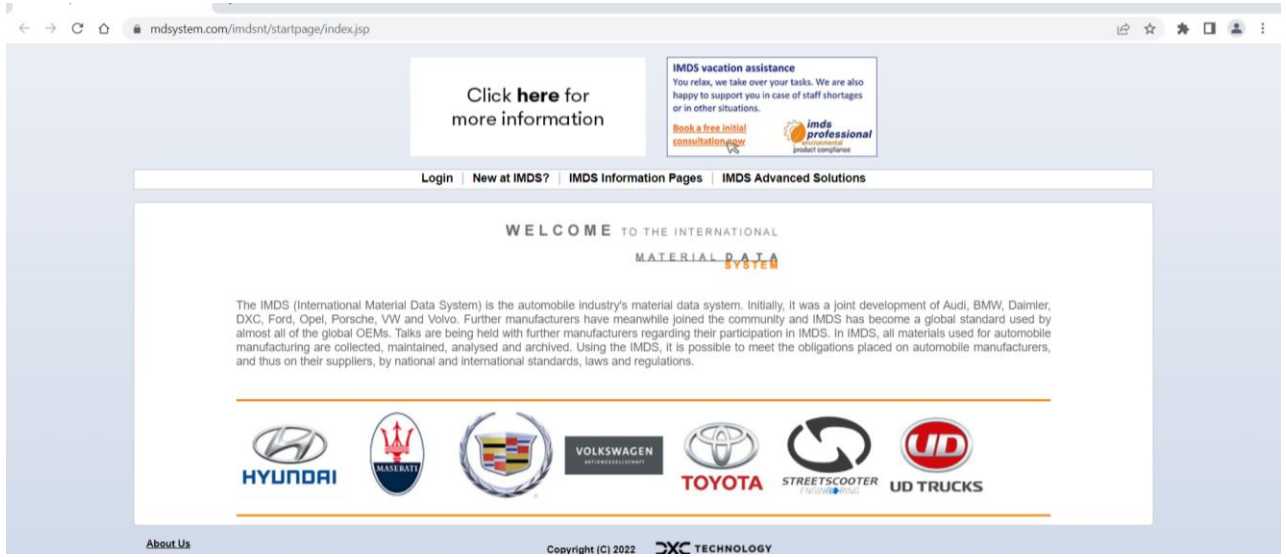


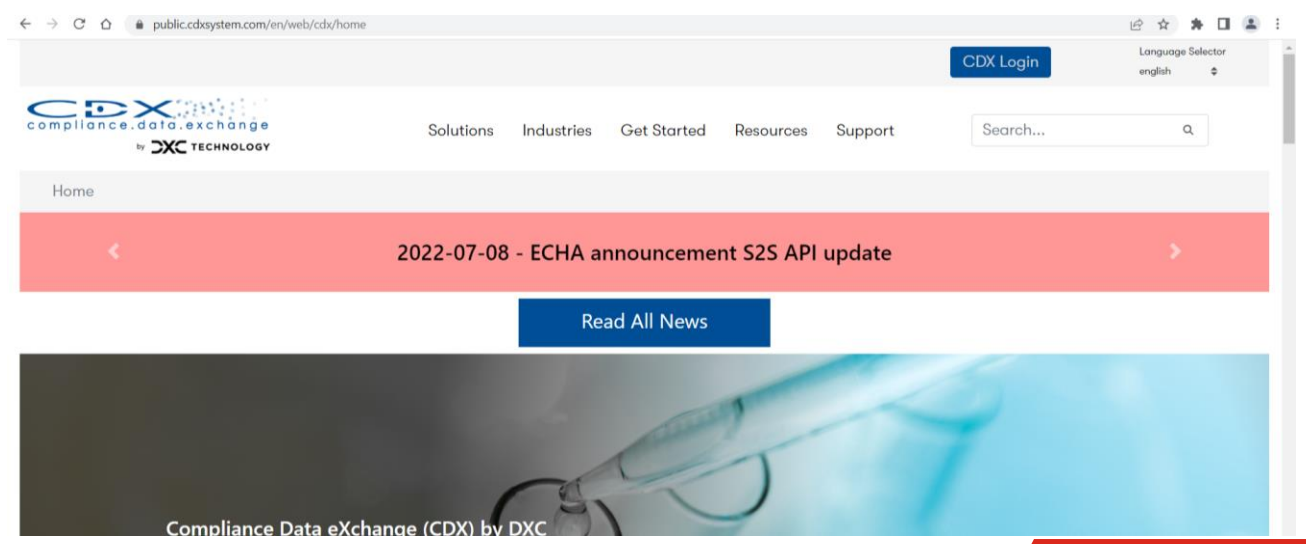
Accessing IMDS & CDX

Websites

www.mdsystem.com

www.cdxsystem.com





Key Concepts

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Key Concepts

Note: Substance restrictions can occur at various levels of the assembly, depending on the regulation.

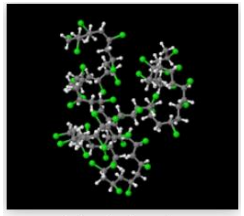
- Component (Assembly)

- Component (Sub-Component)

- Semi-Component (Bulk item)

- Material

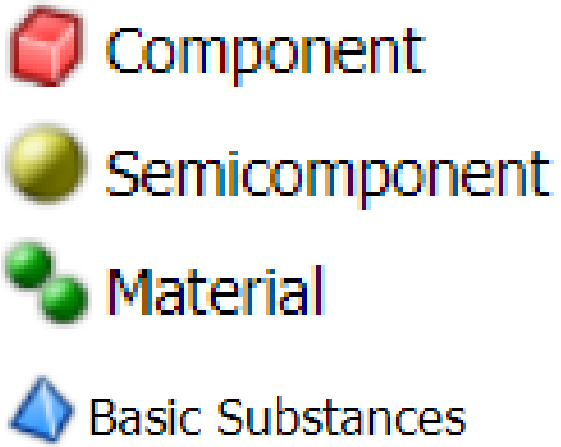
- Basic Substances (Chemicals)



PVC - Poly(vinyl chloride)

Copper - Wikipedia

Symbols Used in IMDS/CDX



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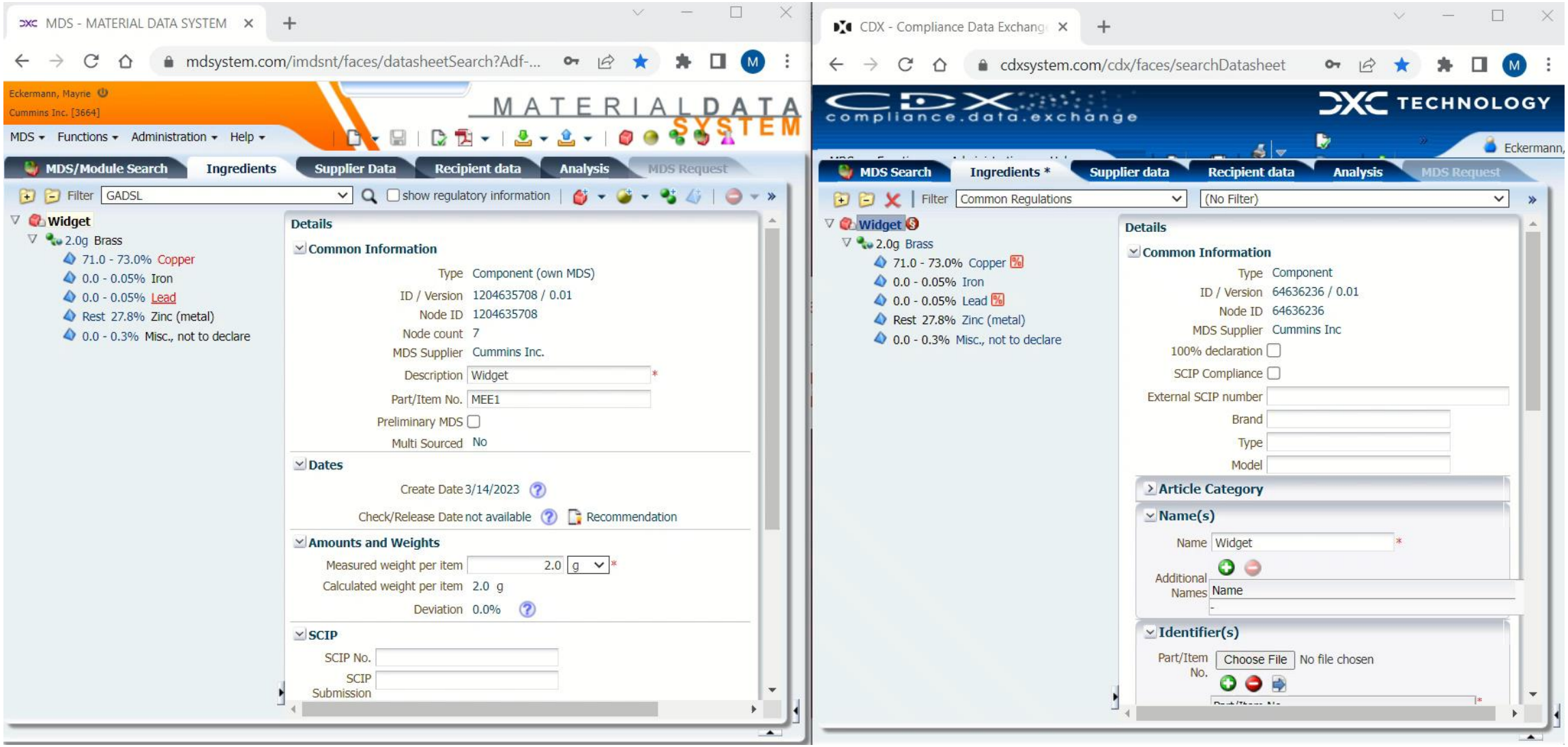
Basic Substances

- Represented by blue triangles
- Thousands of substances exist in IMDS/CDX
  - Substances with CAS/Einecs/EU Index Numbers
  - Substances without identification (pseudo-substances, generally polymers)
  - Wildcard substances (“system” as the CAS number)
- IMDS - Key substances are identified by blue text (GADSL* declarable), red text (GADSL prohibited), and/or underlined (REACH SVHC**)
- CDX – Identification of key substances is available only when using the filter in the ingredients part tree view

*GADSL: Global Automotive Declarable Substance List, www.gadsl.org

**SVHC: Substance of Very High Concern, echa.europa.eu/candidate-list-table

Basic Substances



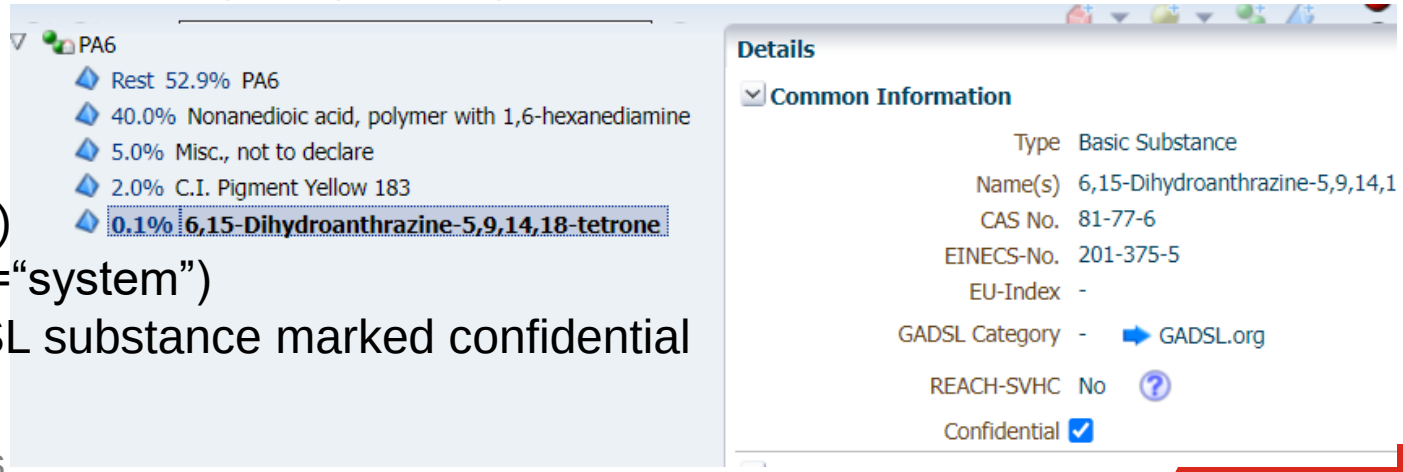
Materials

- Represented by 2 green dots
- Made from other materials (pigmented plastics) or basic substances
- IMDS – Must be pre-existing (cannot be created in part tree)
- Created Internally*, Submitted by Supplier, or Published (IMDS) / Standard (CDX)
- *CAUTION* - If you are not the material manufacturer, avoid creating the material
- Several IMDS Recommendation 001 (REC001) Requirements exist for materials (Note: Even though REC001 is specific to IMDS, Cummins considers REC001 as part of the CDX acceptance criteria.)

Materials

- Confidential substances in materials are considered:
  - Non-GADSL, Non-Regulated substances, marked as Confidential
  - A Wildcard Substance
- A pseudo-substance is not considered a “confidential substance”
- Users MUST update the material if/when confidential substances become declarable. Per the IMDS Rule:

  "The Data-Providing USER has the responsibility to disclose confidential substances if these are added to any legal regulation.”



Example
PA6 - Pseudo-substance (no CAS No.)
Misc., not to declare – Wildcard (CAS=“system”)
6,15-Dihydroanthrazine.. – Non-GADSL substance marked confidential

Semi-Components

- Represented by yellow circle
- Made from semi-components and/or materials
- Weight – weight/unit – Until attached to a component
- Examples: bulk wire or tubing (not cut to size), castings (before they are machined)

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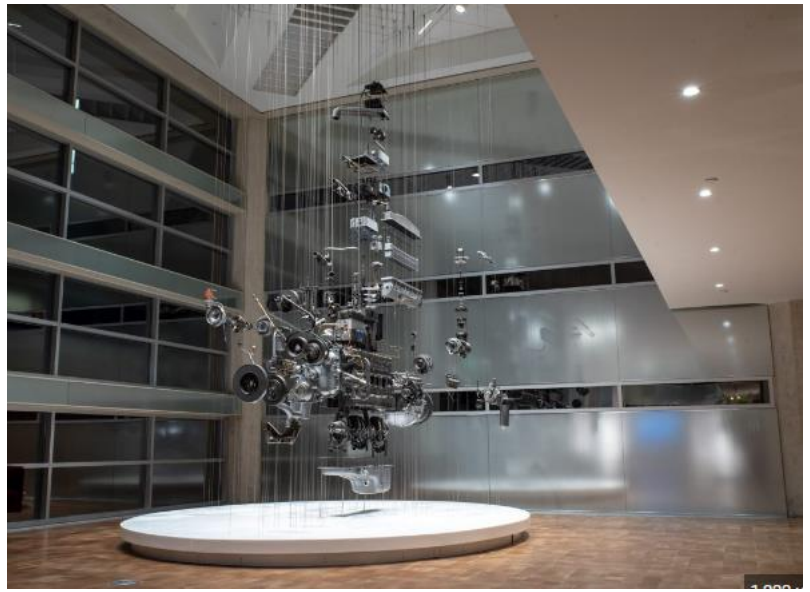
Components

- Represented by a red square
- Made from other components, semi-components, and/or materials
- Has a defined weight



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Key Concepts

- Material Data Sheet (MDS): The main “currency” of IMDS/CDX
- Ingredients (MDS & Module): Expanded Bill of Material of product, “Part Tree”
- Supplier Data (MDS): Internal Contact
- Recipient Data (MDS): Customer or Internal
- Node: An item in the part tree
- Referenced Node: Has its own ID. May be internally created data, supplier accepted data, or published (IMDS), or a standard material (CDX)

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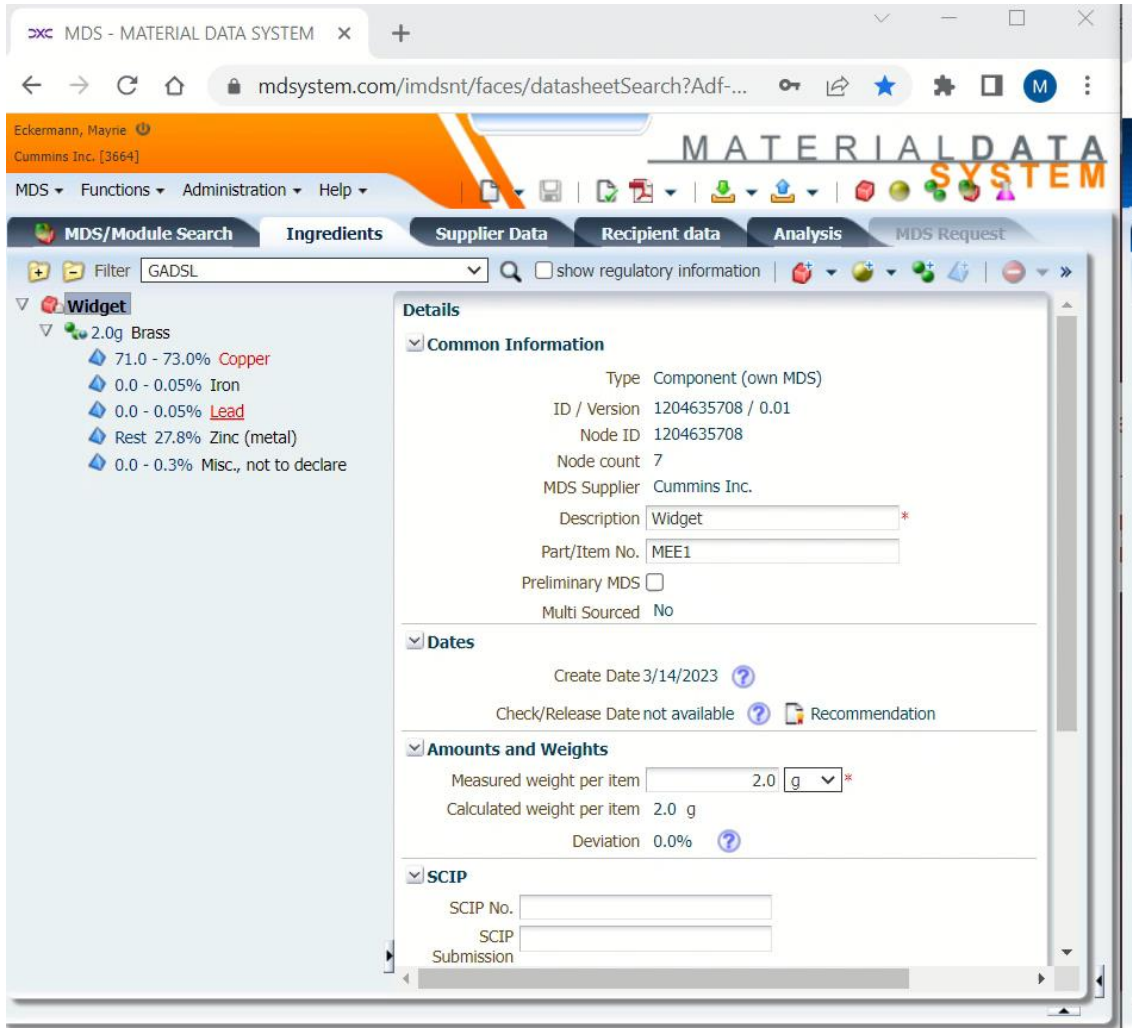
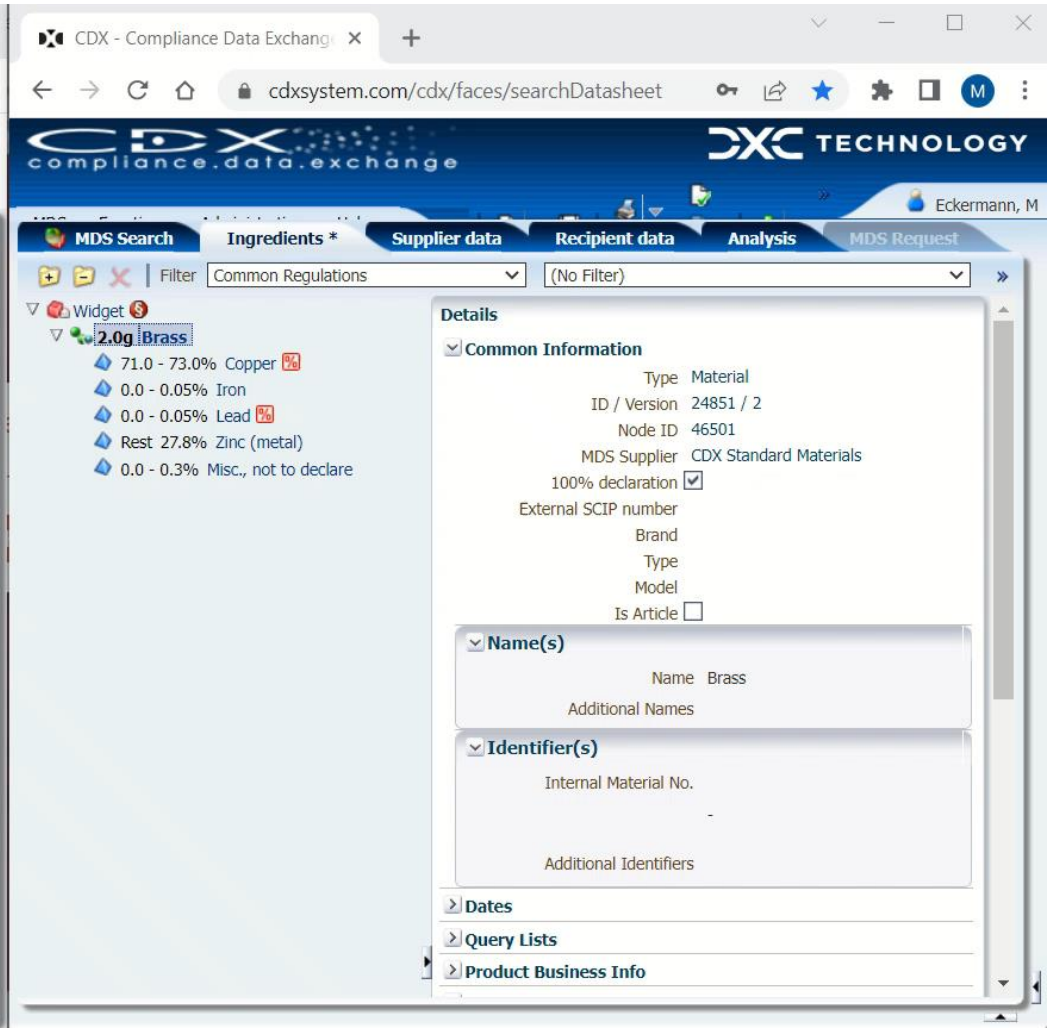
Key Concepts





Module vs. Material Data Sheet (MDS)

- Modules Only Exist in IMDS (Not CDX)
- Modules Do Not have a Supplier Data or Recipient Data Chapter
- Modules Can be Created from a Node
- Modules Cannot be tagged to Org Unit
- Modules Cannot be updated using the MDS Update Feature
- Modules Can be converted to an MDS (before it is internally released)
- Cummins suggests all datasheets be created as MDSs, instead of Modules

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Basic Navigation

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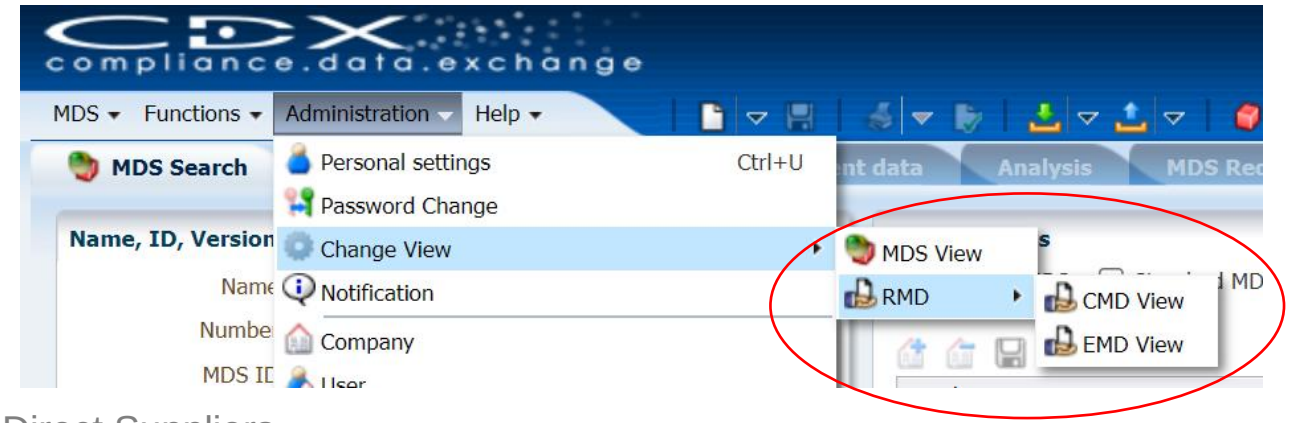
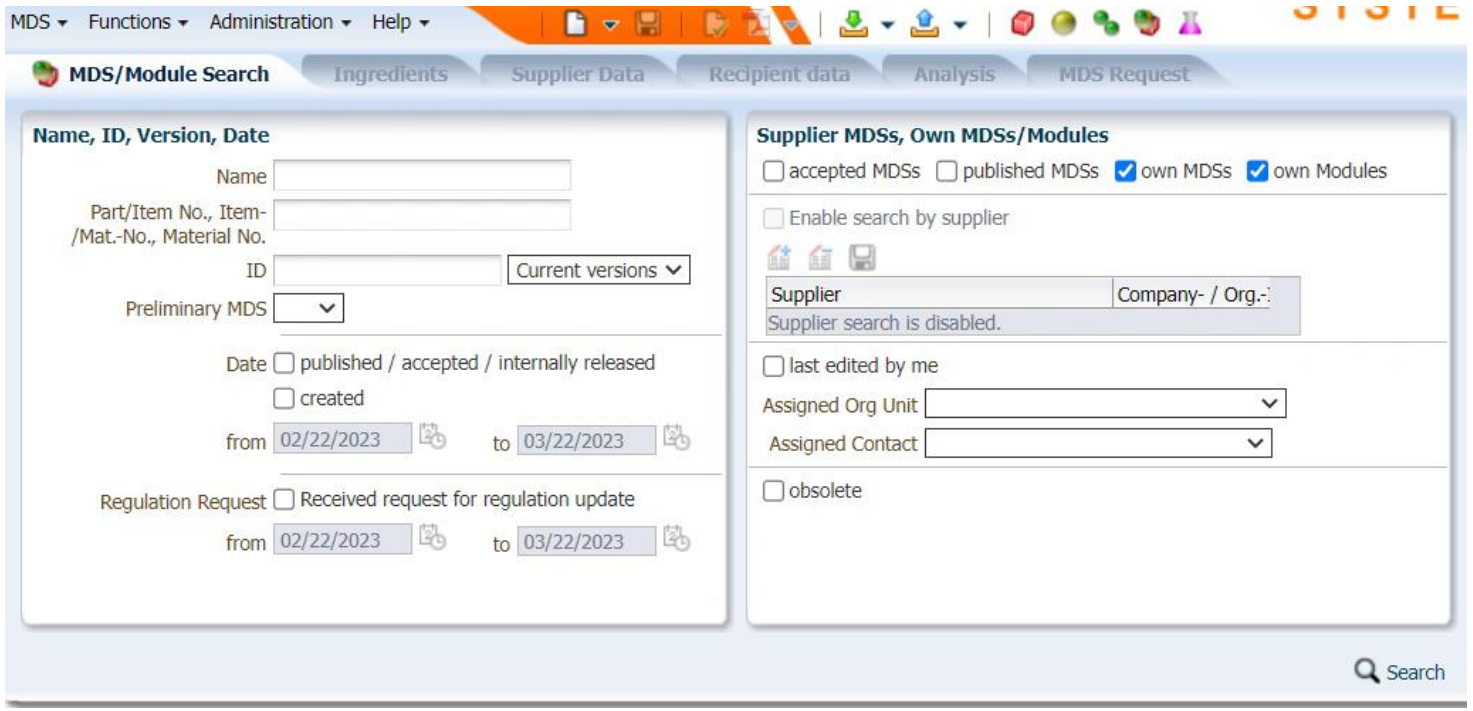
General

- Basic Entry - IMDS and CDX Similar Navigation
- Multiple Ways to Navigate the same action
- Menu Options Become Selectable When Appropriate
- CDX/IMDS – Additional menu options depending on the system and authorization profile
- Log Off – do NOT close (“X”) your browser without logging off first. “X”: If you close your browser without logging off, you may be able to log back in right away
- Do not use browser back button for navigation
- CDX – CMD (Conflict Minerals Declaration Manager) vs MDS Views



Searching

- Search fields – Different criteria for each datasheet type
- Flexible Searching – Use the asterisk *
- Data Location – Published/Standard, Own (Internal), Supplier “Accepted”
- Supplier data must be “Accepted” in order to find it in the search



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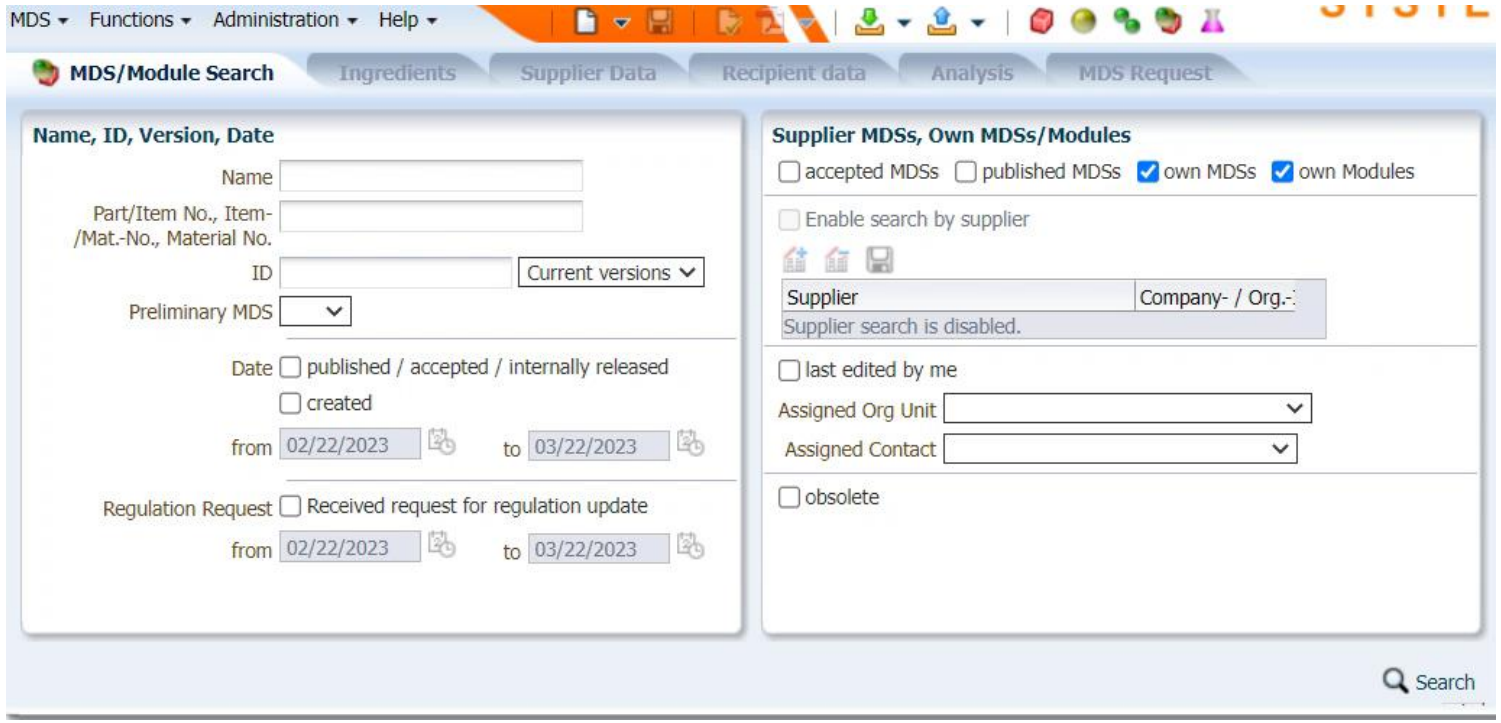
Receiving / Accepting / Rejecting

- Supplier Data comes into the Inbox
- Data must be viewed before the Accept or Reject buttons are available
- Reviewing Data
  - Check Feature – Serves as a “spell check” only
  - Part Tree Must be Expanded and all Nodes checked for Cummins acceptance standards



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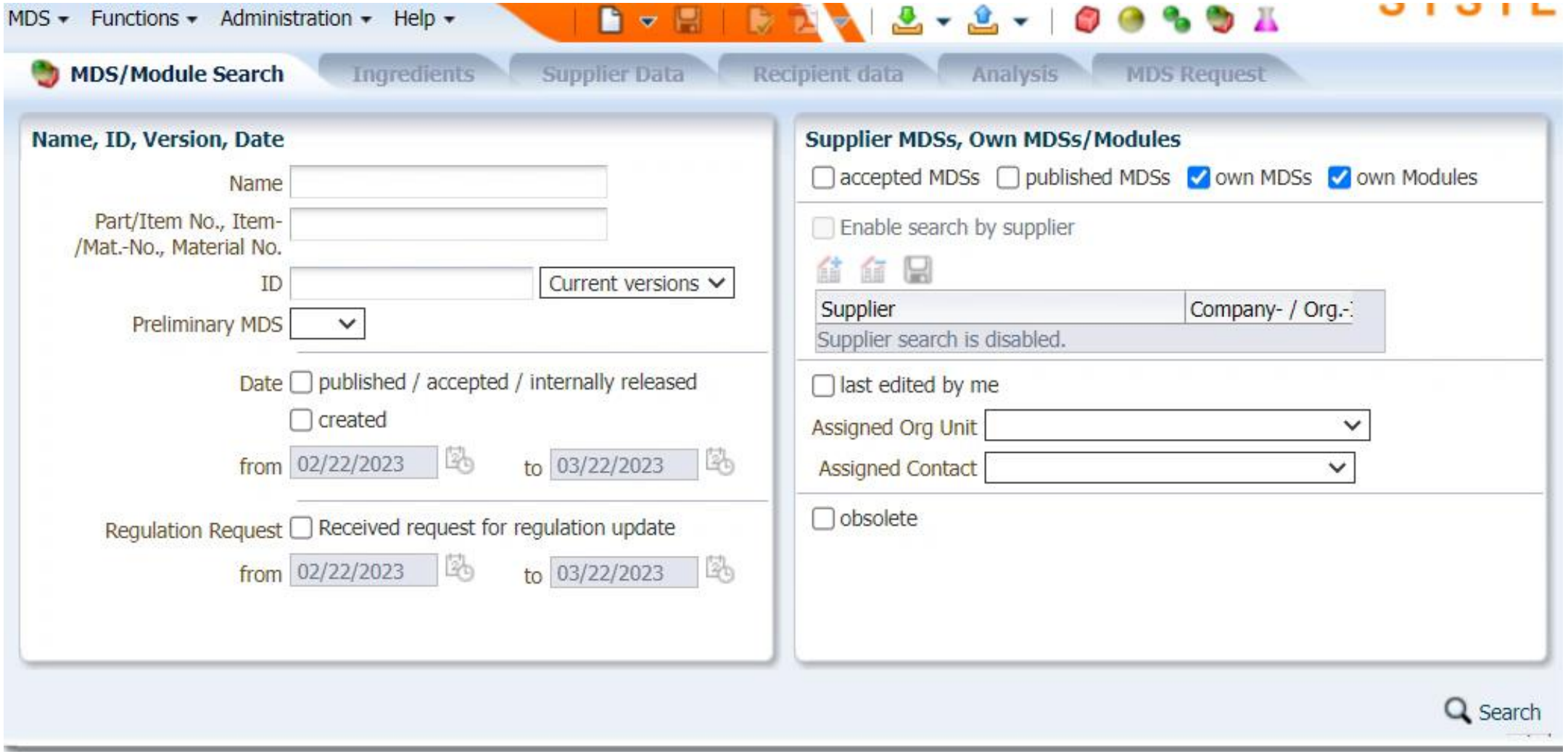
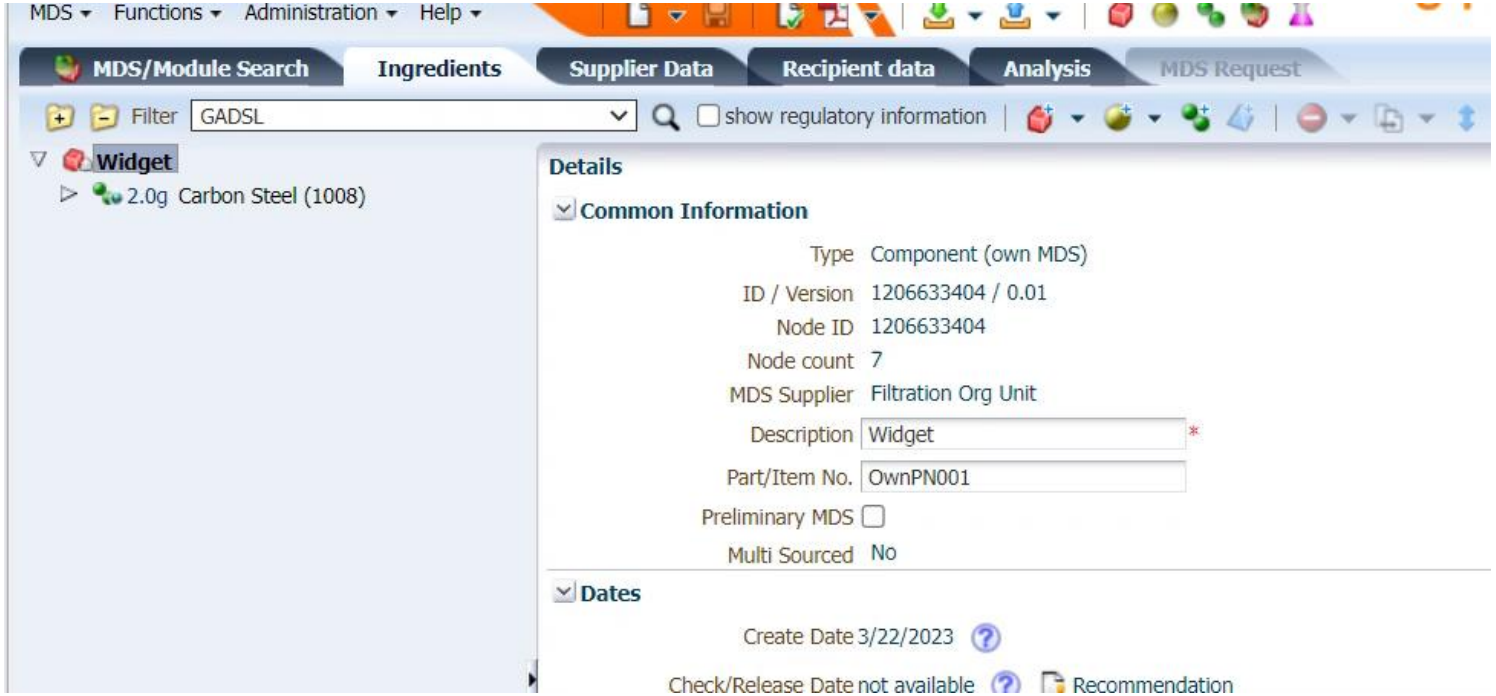
Creating MDSs



Submitting MDS

- Cummins Requests Proposing
- Propose
  - Internally Releases the MDS
  - Maintains Data History
  - Allows for Multiple Customers
- Sending
  - MDS stays in Edit mode, until Accepted
  - Additional customers cannot be added until first customer responds
  - No record of revisions due to rejections



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Revising – Editing, Modifying, Coping, New Version

- Editing – All MDS chapters can be edited, if datasheet is still in Edit mode (version a decimal)
  - Note: If MDS was Sent to a customer, and is waiting status, it CANNOT be Edited
- Modifying – If MDS was Rejected by Customer, the Company Data can be Edited (aka Modified) and re-Sent/Proposed (without having to make a New Version)
- Copy>New Version vs. Copy>New Datasheet (Refer to REC001)
  - New Version: Maintains the MDS ID (use this to update the ingredients page of an internally released/proposed MDS)
  - New Datasheet: Assigns a New MDS ID (to use as a template for a new part number)
- Ideally – One PN has One MDS ID

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Cummins Requirements

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KEY IMDS Recommendation 001 Rules

- Cummins Standard for both IMDS and CDX
- Datasheet Structure
- 10% max unspecified substances per homogenous material
- New Datasheets (new Cummins PN) vs New Version (updates/revisions to an existing MDS for the SAME PN)
- IMDS Recommendation 001 may be found under the Help menu after logging into IMDS
- Additional information may be found here: https://public.mdsystem.com/en/web/imds-public-pages/faq

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Before Submitting to Cummins

- Cummins PN and Supplier Code must be entered into the Recipient Data – Company Information Section
  - Note: Supplier Code = SIM ID, S360ID, Vendor Code, or Internal Supplier ID as referenced in the MDS Request e-mail notification
- Verify the integrity of the IMDS/CDX ID (One ID per Cummins PN)
- Materials: Naming, Classifications, and Compositions
- Hidden / Deleted Substances
  - Percent of Confidential Substances
  - Restricted / Prohibited Substances
  - Applications / Exemptions
- IMDS/CDX Check Feature – Serves as a “spell check” only. Passing the check does not guarantee the MDS will be Accepted by Cummins

IMDS/CDX Resources

IMDS/CDX Training

https://public.cdxsystem.com/en/web/cdx/training

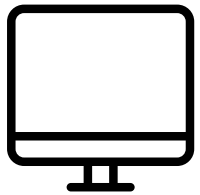
https://public.mdsystem.com/en/web/imds-public-pages/imds-training-courses

DXC IMDS/CDX Contacts

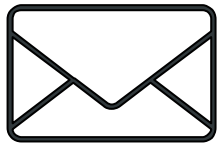
https://public.cdxsystem.com/en/web/cdx/contact

https://public.mdsystem.com/en/web/imds-public-pages/imds-service-centers

Cummins Resources

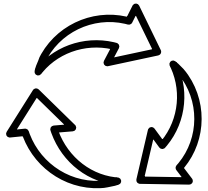


Cummins Supplier Portal



General Contacts for FMD (IMDS-CDX)
supplier.compliance@cummins.com

Conflict Materials
conflictminerals.reporting@cummins.com



Cummins Green Supply Chain
getenvolved@cummins.com

Thank you!

Cummins