

# DENSO IMDS creation manual for suppliers (Ver.2.30)

2023/12/13  
DENSO CORPORATION  
Engineering Development Promotion Division

## 1. Introduction

In this manual, there are the DENSO group company's requirements which should be necessary for IMDS creation/submission in addition to IMDS Recommendation.

If our Tier1 supplier need to inform their supplier (Tier2) about the requirements to improve the data quality, the Tier1 supplier can provide this document to their supplier (Tier2).

Tier1 supplier needs to comply with not only this document but also the "Suppliers Quality Assurance Manual(SQAM)" or any other DENSO CSRs.

[Note]

The "Additional Annex" which each DENSO group company can prepare and share as a regional detail requirement needs to be followed as well.

## 2. Scope

This document is applied with the IMDS / data communication of the following target.

Target company : Tier1 supplier of DENSO /DENSO group company(\*1)

Target product: The component / material which should be comply with DDS2004  
(If you receive any other special requirement from DENSO, follow it.)

## 3. Procedures of data communication

### (1)IMDS submission

The data communication procedures between DENSO and Tier1 supplier should be done according to the "Suppliers Quality Assurance Manual(SQAM)" or any other DENSO CSRs.

### (2)Contact person for IMDS request

Tier1 Supplier needs to inform us of the responsible person who deals with our IMDS request e-mail. (The update also should be informed timely.)

About the way of informing, consult with the DENSO group company.

## 4. The requirement about data creation/submission

About the data creation/submission, comply with the following requirements.

\*1 : The company which DENSO's capital contribution ratio is over 50%.

4-1. Transfer Information of recipient data

(1) In case of Component data type

Items	Contents
Description (DENSO Part Name)	Customer Description of request e-mail
Part No. (DENSO part No.)	Customer Part No of request e-mail (without hyphen)
Destination Org-ID	Organization ID of DENSO G company
Supplier code	Space (or Hyphen)
Forwarding allowed	Yes

Our request e-mail (In case of component type)

Sender: <XXXXX@denso.co.jp> →Our requestor's e-mail address  
 To : XXXXXXX@ SUPPLIER.co.jp →Your responsible person's e-mail address  
 Title: [Part no: 1234567890 Name: COMPUTER ASSY ]

Send to Org.-Unit      DENSO Corporation[206651] →Destination ID  
 MDS Type:              Component              →Data type  
 Due date:                2020/04/30              →Due date  
 Customer Part No      1234567890              →Part No.  
 Customer Description: COMPUTER ASSY →Part name

IMDS input screen

**Details**

**Transfer Information**

Company      DENSO Corporation [333]

Organisation unit      **DENSO CORPORATION [206651]**

Recip. Status

Supplier Code

Name      **COMPUTER ASSY**

Part/Item No.      **1234567890**

Legacy Spare Part

Transmission/Check Date

Forwarding allowed      Yes

4-1. Transfer Information of recipient data

(2)In case of material data type (for single material)

Items	Contents
Description (Material Name)	Input the material name according to IMDS Recommendation irrespective of "Customer Description" in our request. (Can not input the trade name)
Internal Mat No.	Customer Part No of request e-mail
Destination Org-ID	Organization ID of DENSO G company
Supplier code	Space (or Hyphen)
Forwarding allowed	Yes

Our request e-mail (In case of material data type)

Sender: <XXXXXX@denso.co.jp>  
 To : XXXXXXXX@ SUPPLIER.co.jp  
 Title: [Part no: 4X070255 Name: HAS-611 WHITE ]

Send to Org.-Unit: DENSO Corporation[206651] →Destination ID  
 MDS Type: Material →Data type  
 Due date: 2020/04/30 →Due date  
 Customer Part No 4X07006 →Internal Mat no  
 Customer Description: (Target material name, or trade name)

IMDS input screen

**Details**

**Transfer Information**

Company DENSO Corporation [333]

Organisation unit **DENSO CORPORATION [206651]**

Recip. Status

Supplier Code - (?)

Name **ink**

Internal Mat.-No. **4X07006** (?)

Transmission/Check Date

Forwarding allowed Yes

[Note]

When the "Customer Part No." item has multiple character strings (comma-delimited) in our request e-mail, you need to input all strings in "Internal Mat No" item of your IMDS. Do not copy the "Customer Description" contents into "Name". The "Name" should be considered according to IMDS Recommendation.

**4-1. Transfer Information of recipient data**

(3)In case of Semi Component data type (for multiple material)

Items	Contents
Name	Customer Description of request e-mail
Internal Mat No.	Customer Part No of request e-mail
Destination Org-ID	Organization ID of DENSO G company
Supplier code	Space (or Hyphen)
Forwarding allowed	Yes

Our request e-mail (In case of Semi component data type)

```

Sender: <XXXXX@denso.co.jp>
To : XXXXXXX@ SUPPLIER.co.jp
Title: [Part no: 71135XXXXX, SVGUS3U Name: TUBE, VARNISH ]

Send to Org.-Unit:    DENSO Corporation[206651] →Destination ID
MDS Type:            Semi Component →Data type
Due date:            2020/04/30 →Due date
•Customer Part No    71135XXXXX, SVGUS3U →Internal Mat No.
•Customer Description: TUBE, VARNISH →Name
    
```

IMDS input screen

**Details**

**Transfer Information**

Company DENSO Corporation[333]

Organisation unit **DENSO Corporation[206651]**

Recip. Status

Supplier Code

Name **TUBE, VARNISH**

Item- /Mat.-No. **71135XXXXX, SVGUS3U**

Legacy Spare Part

Transmission/Check Date

Forwarding allowed Yes

[Note]

When the “Customer Part No.” item has multiple character strings (comma-delimited) in our request e-mail, you need to input all strings in “Item-/Mat No” item of your IMDS.

**4-2 Data quality check**

Before submitting IMDS data to us, you need to confirm all warning messages. (Especially, pay attention to the following cases.)

Warning message in IMDS	Procedure / Action Item
Different types of nodes (components, semi-components, materials) are used at the same level.	Insert dummy component node to adjust the level to same data type node. But, A mixture of components with semi-components or materials on the same level is allowed, if the material or semi-component is not an article, but a coating, lubricant or similar, added to the component. About the detail, refer to [Recommendation001 4.1.A] <span style="color: blue;">[MUST]</span>
Deviation must not exceed X for components with a weight of Y	Correct the deviation by adjusting either the component's measured or calculated weight [IMDS manual 3.3.14] <span style="color: blue;">[MUST]</span>
Range of portion may not exceed allowed percentage.	Modify the portion so that the Min-Max range can be under the threshold of IMDS Recommendation. [Recommendation001 4.5.4.B] <span style="color: blue;">[WANT]</span>
More than 10% not specified substances. ("Not specified" are wild card or confidential substances).	The wild card or confidential substances should be under 10% except our special request. [Recommendation 4.5.3.E] <span style="color: blue;">[MUST]</span>
The substance has been deactivated, while references in previously created modules/MDSs are still valid and can be sent.	You are using an older material that contains a substance that has been deactivated. Contact your supplier and ask for a new version of the MDS with an updated reference. <span style="color: blue;">[WANT]</span>
The module/MDS has been deactivated, while references in previously created modules/MDSs are still valid and can be sent.	You have a module or MDS in your tree that the creating company has deleted. Contact your supplier and ask for a new version of the MDS with an updated reference. <span style="color: blue;">[WANT]</span>
A material of classification X must contain more than Y% substances of the group Z,	Select the applicable VDA Classification according to IMDS Recommendation, or <a href="#">IMDS manual</a> (Especially, the material of "VDA 1.x – 5.x" & "5 g or greater material weight" should meet with SC90 check) <span style="color: blue;">[WANT]</span>
Range of recyclete not exceeding 20%	Set the correct recyclete information by referring to the latest IMDS recommendation or IMDS manual. (Due to our OEM requirement. there are cases in which we ask the supplier to review the data.) <span style="color: blue;">[WANT]</span>

[MUST] => Need to modify / [WANT] => Without the correct evidence, need to modify.

4-2 Data quality check

<Remarks : About the Warning message of “[WANT]” >

(1) “hidden” substance existence

If the MDS has any hidden substance and there is replacement substance in IMDS, replace it to the valid substance.

In case of no replacement substance,

-insert the substance into the wild card (under 10%)

-apply for a new substance to IMDS and use it in your MDS.

**Search Basic Substance Changes**      **Details**

**Basic Substance** **Node ID 537505138**

CAS No. 67701-38-6    GADSL Category    REACH-SVHC No ?

EU-Index                      duty-to-declare Yes                      Status hidden

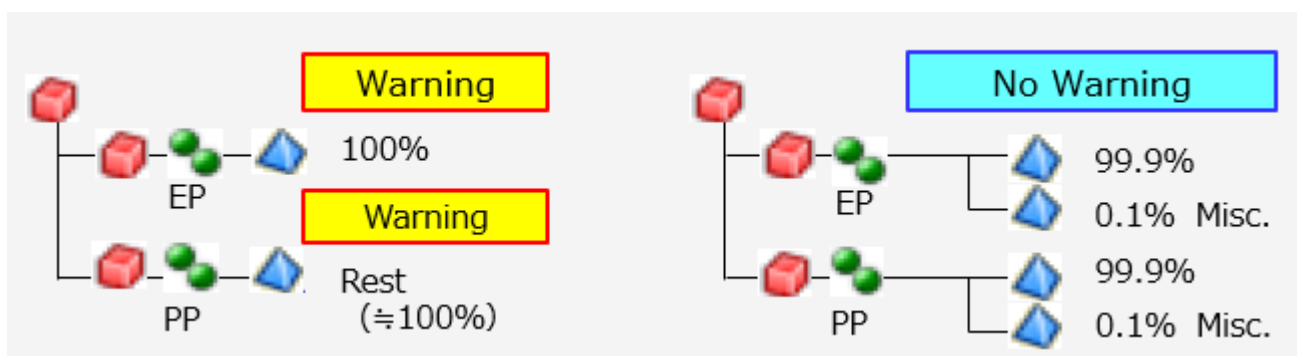
EINECS/ELINCS No. 228-587-0                      prohibited Yes

▼ **Replacement suggestions**

No.	Name	CAS No.	EU-Index	EINECS No.	Node ID	Synonym
1	C.I. Disperse Yellow 7 (7CI,8CI)	6300-37-4	-	228-587-0	483125501	4-((p-(Phenylazo)phenyl)azo)-o-cresol

(2) One substance for polymer material

If there is any substance except the polymer, it should be described in your MDS. If you use the wildcard, confirm that it is not “GADSL” substance. If the material MDS of VDA 5.x/6.x is described as one substance (Portion 100%), check the contents again and describe the correct substance without shortage.



If there is no additive/ reaction residue (the basic ingredient is polymerized completely), the warning of “polymer 100%” is no problem. When we ask you about the warning, inform us of it. (Not needed to correct it)

### 4-3. Note

#### (1) Development sample report

“Development sample report” is not allowed without our special request. Before submitting your IMDS to us, confirm that it has no “Development sample report”.

#### (2) MDS Update

Submit the latest version of the MDS. (One IMDS-ID for each part number)

Even if a previous MDS has already been submitted to us, in case of the followings you must update & resubmit the MDS.

Case 1: MDS data change due to GADSL update (Wildcard substance modification)

Case 2: Any containing material / substance change of delivery product

#### (3) Incorrect data

Should there be any problem (shortage/ excess/ mistake) of the submitted MDS, inform us (the requestor) of it ASAP. And confirm the same problem for other IMDS.

#### (4) Our IMDS request e-mail

When replying our request email, use “reply-to-all” surely and contact the requestor. (The source email address is for our internal system. The requestors address is in CC.)

#### (5) Response to IMDS update (function change)

For any IMDS update (function change), confirm [IMDS release note](#) or user manual and follow it after the release date.

About any question, contact help desk directly.

#### (6) Others

If there is any MDS modification from our customer, please cooperate with our confirmation/ update request of your IMDS.

(At least, according to IMDS recommendation /IMDS user manual)

We recommend that your MDS should be updated according to the latest contents of [IMDS release note](#). (Especially, for invalid application ID and deactivation target.)

Even before the applicability date of the release note, we may request the update of your MDS.



**5. Frequent errors**

The followings are some frequent errors. Pay attention to the mistakes.

(1) Invalid Application ID

Do not use the followings in you MDS.

Substance	Application ID	Content	EU ELV
Lead used as/in	13	Solder in electronic circuit boards and other electric applications	8
	16	Electrical components which contain lead in a glass or ceramic matrix compound except glass in bulbs and glaze of spark plugs	10
	58	Lead in compliant pin connector systems	8(f)
	20	Other application (potentially prohibited)	-
Hexavalent chromium used as/in	21	Corrosion preventive coatings	13(a)
	22	Absorption refrigerators in motor caravans	14.
	20	Other application (potentially prohibited)	-
Cadmium used as/in	49	Corrosion preventive coatings related to bolt and nut assemblies for chassis applications	13(b)
	29	Batteries for electrical vehicles	16
	28	Thick film pastes	-
	50	Optical component in a glass matrix used for Driver Assistance Systems	-
Mercury used as/in	20	Other application (potentially prohibited)	-
	25	Discharge lamps and instrument panel displays	15(a),15(b)

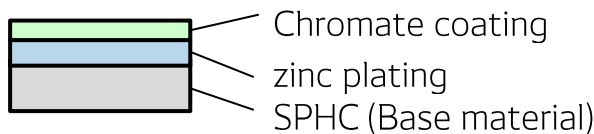
(2) Application ID "44", "45", "46", "47"

In case of Lead which is 0.1wt% or less / Cadmium which is 0.01wt% or less it can be included in Wildcard. Otherwise, use Application ID "44", "45", "46", "47".

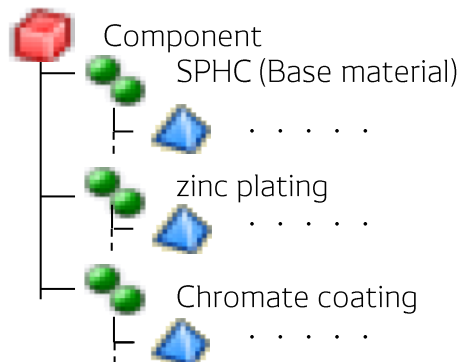
(3) As a homogeneous material

In IMDS, every homogeneous material has to be described as a separate material.

In case of Galvanized steel sheet  
input 3 materials per homogeneous material



Surface : MFZN1,H1,S



[Note]

- The number of material must comply with the surface treatment on the drawing.
- Each homogeneous material must be same structure level.

**5. Frequent errors**

(4) Substance description as final state

- A material must be described in its final state. (IMDS Recommendation Rule 4.4.1.B/C )  
(E.g. : Evaporating solvents, Reaction intermediates (intermediate ) )

And, if the MDS has any process chemical, you should set “chemical presence type”.

- For a resin without GADSL substance, use the Pseudo-Substance which is published in IMDS.

<Sample>

Material name	Material symbol (JISK6899-1)	Pseudo-Substance name
Acrylonitrile-butadiene-acrylate plastic	ABAK	Basic Polymer: ABAK
Acrylonitrile-butadiene-styrene plastic	ABS	Basic polymer: ABS
Acrylonitrile-chlorinated polyethylene-styrene	ACS	Basic Polymer: ACS
Acrylonitrile-(ethylene-propylene-diene)-styrene plastic	AEPDS	Basic Polymer: AEPDS
Acrylonitrile-methyl methacrylate plastic	AMMA	Basic Polymer: AMMA
Acrylonitrile-styrene-acrylate plastic	ASA	Basic Polymer: ASA
Cellulose acetate	CA	Basic Polymer: CA
Cellulose acetate butyrate	CAB	Basic Polymer: CAB
Cellulose acetate propionate	CAP	Basic polymer: CAP
Cellulose formaldehyde	CEF	Basic Polymer: CEF
Cresol-formaldehyde resin	CF	Basic Polymer: CF
Carboxymethyl cellulose	CMC	Basic Polymer: CMC
Cellulose nitrate	CN	Basic Polymer: CN
Cycloolefin copolymer	COC	Basic polymer: COC
Cellulose propionate	CP	Basic polymer: CP
Cellulose triacetate	CTA	Basic Polymer: CTA
Ethylene-acrylic acid plastic	EAA	Basic Polymer: EAA
Ethylene-butyl acrylate plastic	EBAK	Basic Polymer : EBAK
Ethyl cellulose	EC	Basic Polymer: EC
Ethylene-ethyl acrylate plastic	EEAK	Basic Polymer: EEAK
Ethylene-methacrylic acid plastic	EMA	Basic Polymer: EMA
Epoxide, epoxy resin or plastic	EP	Basic Polymer: EP
Ethylene-propylene plastic	E/P	Basic Polymer: E/P
Ethylene-tetrafluoroethylene plastic	ETFE	Basic Polymer: ETFE
Ethylene-vinyl acetate plastic	EVAC	Basic Polymer: EVAC
Ethylene-vinyl alcohol plastic	EVOH	Basic Polymer: EVOH
Perfuruoro (ethylene-propylene)plastic	FEP	Basic Polymer: FEP
Furan-formaldehyde resin	FF	Basic Polymer: FF
Liquid-crystal polymer	LCP	Basic Polymer: LCP

## 5. Frequent errors

### (5) MDS creation for glass, ceramic and enamel

- About the MDS creation for glass, ceramic and enamel, confirm and follow the chapter 2.6 of "IMDS recommendation 001a".

### (6) IMDS Rec019 materials

- Do not use the Rec019 materials in your MDS.  
(The MDS which has any Rec019 materials is rejected.)

About the detail, refer to the "Recommendation 019 Update from the IMDS Steering Committee, February 2020" in IMDS website.

### (7) Deactivation of Material Classifications

- VDA classification 1.2/ 5.5.1/ 5.4/ 8.X has been deactivated due to IMDS revision.  
In the future, you need to update about this according to IMDS recommendation.

### (8) Description of DENSO part number(without hyphen) / part name in case of ISIR

Fill the DENSO part number and part name according to the drawing.

In case of unclear characters, refer to the followings.

- Available character string is capital letter alphabet or number  
(half-width alphanumeric characters.)
- Space " " is used by only one character.  
(There can never be two consecutive spaces. )
- The back of comma "," needs one space character. (e.g. XXXX, YYY)

## 6. IMDS destination ID (Org-ID) inside japan

About the IMDS destination ID (org-ID) of DENSO G company , refer to the following.

- If IMDS submission is needed at ISIR, send to the org-ID of the company where your product is delivered at ISIR.
- In case of ordinary investigation request, follow the destination ID of the request.

Rejoin	Company name	Org-ID
JP	DENSO CORPORATION	206651
	HAMANAKODENSO CO.,LTD.	206652
	DENSO AIR SYSTEMS CO.,LTD.	206653
	DENSO WISETECH CORPORATION	206654
	DENSO DAISHIN CORPORATION	206655
	KYOSAN DENKI CO.,LTD.	206656
	DENSOTRIM CO.,LTD.	206658
	DENSO SANKYO CO.,LTD.	206659
	DENSO AIRCOOL CORPORATION	206660
	DENSO TEN LIMITED	207227
	DENSO ELECTRONICS CORPORATION	206661
	DENSO WIPER SYSTEMS, INC.	234631

## 7. Contact

- Contact about this document

DENSO COPORATION EPD(\*2) e-mail : epd-m4@jp.denso.com

- Contact for IMDS operations

IMDS help desk e-mail : jpimds-helpdesk@dx.com

URL: <https://public.mdsystem.com/ja/web/imds-public-pages/imds-service-centers>

\*2: Engineering Development Promotion Division of DENSO Japan

## 8. Revision

Version	Update	Page	Update contents	Editor
1.00	2020/06/16		1 <sup>st</sup> version	DNJP(*2)
1.01	2020/07/08	3,4,5	Modification of literal error (“DRNSO”)	DNJP
1.20	2020/07/31		Addition of detail explanation in (2)	DNJP
1.30	2020/08/18	2,8	Addition/Modification of detail explanation	DNJP
1.40	2020/09/01	2,10,11	Addition/Modification of detail explanation	DNJP
1.50	2020/10/08	6	Range of portion : [MUST] => [WANT]	DNJP
1.60	2020/12/21	8, 11	Addition of chapter 4-3 (5) & chapter 5 (7)	DNJP
1.70	2021/11/15	12	Addition of IMDS destination ID(Org-ID)	DNJP
1.80	2022/04/22	11	Chapter 5 (8) addition	DNJP
1.90	2022/05/26	9	Chapter 5 Notice of (3) addition	DNJP
2.00	2022/08/26	6	Chapter 4-2 Quality check item addition	DNJP
2.01	2022/10/10	11	Chapter 5 (8) modification	DNJP
2.10	2023/04/03	8	Chapter 4-3 (5) addition	DNJP
2.20	2023/09/05	8	Chapter 4-3 (2) modification & addition	DNJP
2.30	2023/12/13	8	Chapter 4-3 (4) modification	DNJP

\*2: Engineering Development Promotion Division of DENSO Japan