

Questions and answers about MDS reporting

1. Which parts shall be reported?

In order to fulfill the legislation we want you to report all parts that you supply us with and are active (exists in the production today and/or spare parts).

Start to report parts that contain substances listed in the Scania STD 4400 lists as well as parts in production and/or spare parts.

We are obliged to inform what our products contain to our customers.

For new articles which are missing order yet, please wait for orders before MDS submission. Old parts which will be used in the new projects, need a new MDS if the documentation has been changed.

Items that do not have orders will be "rejected". MDS for the article that is not required anymore and is no longer in spare part stock will be "rejected" with motivation that it is no longer current part.

2. How shall I start to report?

Start to report a few parts (less than five) into the system in order to have them checked and approved before you continue your reporting. When the few parts are approved, continue to report the current parts with high volumes as well as parts which contain substances from the STD 4400.

3. Is it possible to get a User id and a password to the IMDS system if we don't have one.

Check whether your company is not already registered at IMDS.

Go to www.mdsystem.com, choose "Public IMDS Pages", then menu point <https://public.mdsystem.com/en/web/imds-public-pages/new2imds> and "Company Registration"

Why shall I use the IMDS system for report? Which legislation we have?

ELV-Directive

The European End-of-Life-Vehicles (ELV) Directive 2000/53/EC that became valid on October 21, 2000.

REACH

REACH is the Regulation for **R**egistration, **E**valuation, **A**uthorization and **R**estriction of **C**hemicals. It entered into force on 1st June 2007 to

streamline and improve the former legislative framework on chemicals of the European Union (EU).

Presence of SVHC substances must always be reported in IMDS for products/chemicals used in Europe.

IMDS is the tool for those legislations. We have possibility to check the MDS against that legislation.

The IMDS system is also applicable for the REACH legislation in order to find parts that contain substances which are listed in the Candidate List. The Candidate List is updated regularly and will be driven into force the same date as the list is published on ECHA homepage, http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp. Our way of working is to collect all the information from the beginning in order to eliminate the administrative work for Scania but also for our suppliers. Heavy Duty Vehicle Manufacturers are now represented in the IMDS system and the system will harmonize with heavy vehicle legislations in the future.

Scania has production in Europe and South America. The quality of the trucks and parts has to be same or exchangeable. For that reason Scania has requirement on IMDS reporting.

4. We are complying with the requirement as a downstream user.

Why are we required to report data into the IMDS system?

The demand is also to provide the customer with information about the material composition in your product. If you don't provide us with that information we are not able to inform our customers and cannot fulfill the legislation.

5. The parts that we supply you with are only produced parts and are not defined as substances. Why do we have to report into the IMDS system?

There is a legal requirement when we supply articles (e.g. truck, engine, exhaust pipe, bolt etc.) on the European market that we provide the recipient (customer) of that article with information on the content of substances of very high concern (SVHC) in a concentration above 0,1% (w/w). This information shall be provided "automatically" in business to business relations.

You have to report in IMDS even if you are only a part assembly company.

6. What is the Scania ID name and number in the IMDS system?

Scania IMDS id name and number is:
Name: SCANIA CV AB, No: 46016

7. Why shall I report the ECO number?

ECO stands for Engineering Change Order. The ECO number is for traceability and is connected to the development version of the part. If we

have a part which is defined, described by a STD , TR or are a very old part and it's difficult to find the ECO, the supplier can use the figure 0.

8. Which ECO version shall I report?

Report always the latest ECO version.

9. Which supplier code do I use to report to Scania in IMDS?

Check with the part purchaser what your **7-digits supplier code** is. Do not use 4-digit codes or DUNS-no

10. How shall I report the part number in IMDS?

Scania part number can be finding on the current Scania drawing. The part number will contain only digits ,eg. 1234567. Do not use space or special characters. It's not possible for us to identify the part if you have entered a wrong Scania part number.

11. Where can I get information about IMDS specific product families.

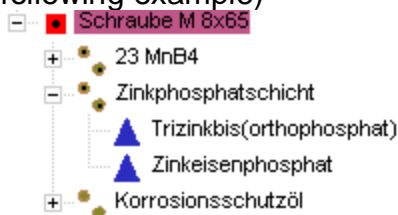
In IMDS recommendation REC001, which can be found on IMDS homepage.

<http://www.mdsystem.com>. REC 001.

12. How to report surface treatment?

Surface treatment

If there is a surface treatment on the product (e.g. varnish, galvanize), the volumes of the substances have to be calculated and recorded (see the following example)



You will get support how to calculate the volumes in the IMDS chapter FAQ.

The composition of standard processes of surface protection is available as MDS, created by IMDS-Committee (call as supplier). These MDS should be used preferably. If you created a new, you have to detail the MDS in a similar way like the given.

Remark: You do not have to record substances which are not part of the surface treatment after production (e.g. solvent, catalyst). Information will be found on the IMDS homepage.

<http://www.mdsystem.com>. REC 011.

13. Lead in soldering points

According to the EU-specification for the disposal of cars the maximum volume of lead in soldering points is about 60g/vehicle (Release 07/02). Therefore the volume of the added used solder-tin has to be recorded separately (see example enclosed)



<http://www.mdsystem.com>. REC 018 and 019

14. When is a new MDS necessary?

If you want to change a data-set of the MDS in the IMDS, you have to copy the old one, do the changes and archive the new one. The old version will be archived to in the IMDS and because of the release counter we have always a complete documentation of the history.



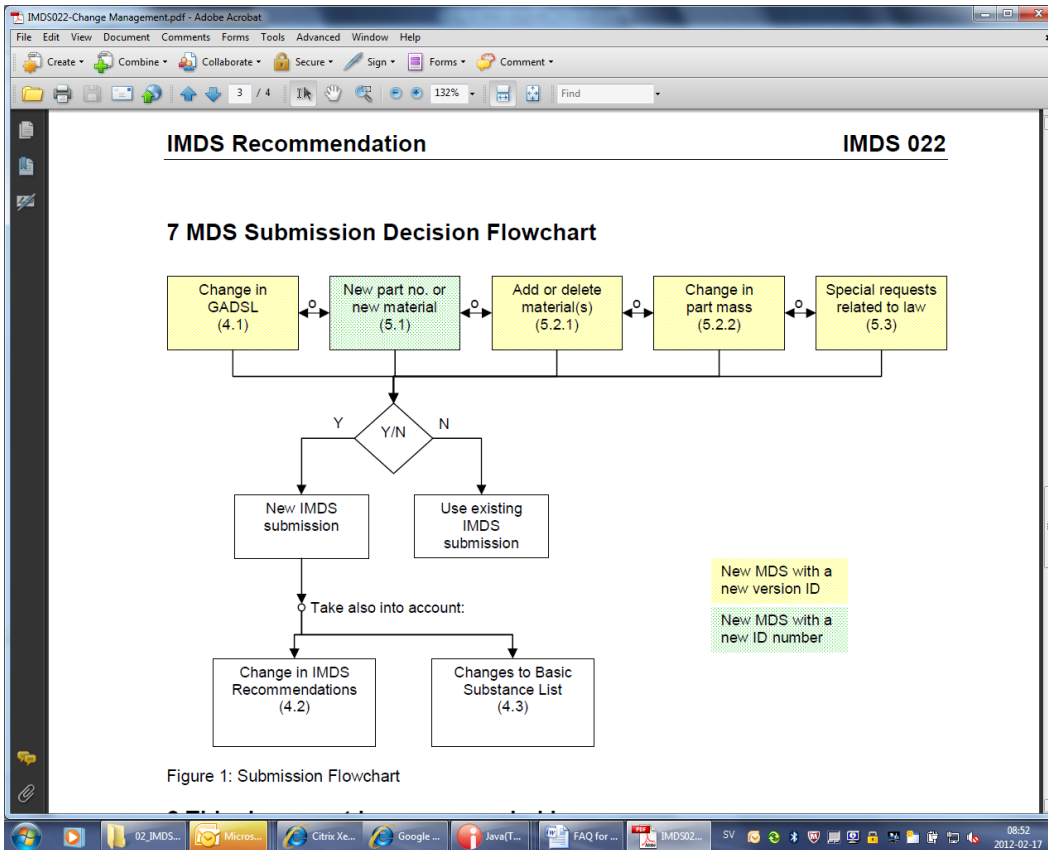
Choose copy type:



Info can be found under:

<http://www.mdsystem.com>. REC 022. or in STD 4325 on the Scania Portal.

See Flowchart in REC 022:



15. Calculation of weight.

The IMDS requires the calculation of the weight per part. The actual weight is the average of 10 different measured parts.

16. Who is responsible for MDS for the assigned parts?

The same rules will be valid as for PPAP.

Tier 2 supplier has to send MDS to Scania for acceptance and for the Tier 1 supplier for assembly MDS. (See the Assigned Letter)

Tier 2 supplier is responsible to deliver MDS for both companies. Tier 1 either send a request for the assigned part to Tier 2 or make an agreement with them to send it. Scania can help Tier 1 supplier to push Tier 2 for the reporting.

This is a Scania specific requirement so look at the STD 3868.

17. How will be the pre-series reported?

For pre-series don't need to report MDS only if the supplier will warn about a restricted substance. In that case the supplier can use a Declaration of substances form which can be found on the Supplier Portal.

18. MDS for LH/RH parts.

Send MDS for each part number.

19. I have a cast strand which will be further machined by Scania. Should I create the (top-level node of the) MDS of the part as Component or Semi-component?

- If the weight unit of the Scania part is defined as “ST” (pieces) then it shall be reported as Component
- If the weight unit of the Scania part is defined as “MM” (length), “DM2” (area) or “CM3” (volume) then it shall be reported as Semi-Component
- If the weight unit of the Scania part is defined as “G” (grams) then it shall be reported as Material.

20. Shall I report even for VRS (Vehicle Related Samples) ?

Yes, It should be MDS for all VRS articles because REACH requirements that applies to all types of Article suppliers (manufacturers, importers and also distributor under REACH Article 33 requirements for notification of candidate list substances in the article to the customer).

21. How can we handle parts which Scania has on the store but the supplier doesn't exist anymore?

If the articles are in production (low demand or unusual variant), MDS will be create by Tier 1.

If the articles are not used in production anymore but are parts it will be a follow-up question:

- If Tier 1 exists outside of EU, Norway, Liechtenstein or Island: MDS will be create by Tier 1
- If Tier 1 exists inside EU, Norway, Liechtenstein or Island it may be possible to deviate from MDS reporting requirements in the given case, but only after a risk assessment from YDRE

To could make a risk assessment YDRE will need some data:

- Ingredients of the part. Part number?
- Is the supplier ISO14000 certificated or is documented its ability to live up to substance-related product regulatory requirements such as REACH?

23. MDS Request

Since IMDS Release 4.0 it is possible to request material data sheets from suppliers via IMDS. Scania will use this feature to demand the MDS which are still missing. Please pay attention to this menu item. With the function in menu item “settings” it is possible to get an email when your company receives a MDS Request. Therefore point “**MDS**”

Request received has to be activated. Furthermore the supplier is still responsible for providing final MDS for the first sampling process in due time and without request .

The requests should be edited under menu point “MDS Request” (see IMDS user manual point 5.3 MDS Request). In that case an optimal tracking of request can be assured. Furthermore the recipient data, given by Scania, can be taken over.

22. How shall the paint be reported?

Standard color will be reported as a Semi Component with basis weight. In this case YDRE has opportunity to make legal requirements analysis to find the hazardous substances.

The painted parts shall be reported in the endured state as a Component and the color shall be the most common color which the supplier use for Scania parts.

23. Available wildcards for highly confidential substances in IMDS.

Currently, there are nine different wildcards available in order to characterize the type(s) of highly confidential substance(s).

4.5.3 Jokers/Wildcards	
Jokers/Wildcards in IMDS:	Accepted and not-accepted wildcards
a) Flame retardant, not to declare	a) Not accepted (phased-out)
b) Further additives, not to declare	b) Accepted until further notice
c) Impact modifier, not to declare	c) Not accepted (phased-out)
d) Inorganic ingredient, not to declare	d) Accepted until further notice
e) Misc., not to declare	e) Accepted until further notice
f) Not yet specified, not to declare	f) Not accepted in final MDS
g) Organic ingredients, not to declare	g) Accepted until further notice
h) Pigment portion, not to declare	h) Accepted until further notice
i) Plasticiser, not to declare	i) Not accepted (phased-out)

The most serious is f). This Joker can only be present in Development Sample Reports.

See Rules 4.5.3.A – 4.5.3.H, Guidelines 4.5.3.a -4.5.3.d and the picture from page 19 for more information.

Special Cases (Highly) Confidential Substances in Plastics

Masterbatches. Plastics masterbatches generally consist of a basic polymer and a (coloured) pigment ,see rule (5.1A) and an example on page 20-21.

More info can be found in REC 001 pages 16 to 21.

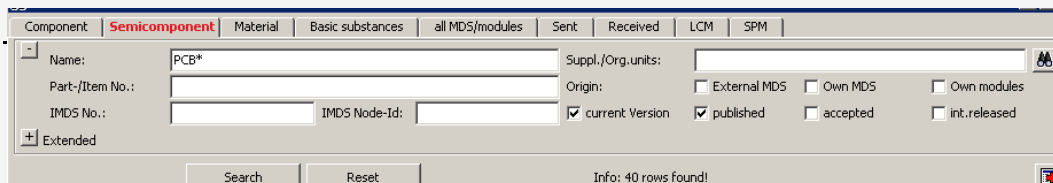
25. How to close Event in Fras?

The responsible purchaser will update the Event in Fras and inform POL about the solution from supplier.

26. How many MDS will Scania receive from the supplier if one article has several suppliers?

For one part number only one MDS can be sent. The supplier has to choose the "worst-case" MDS but ensure that all substances with duty to declare are reported.

27. Ny PCB STD can be found in IMDS under Semicomponent.



The screenshot shows the IMDS search interface with the following details:

- Component: **Semicomponent** (selected)
- Material: Basic substances
- all MDS/modules: Sent
- Received: LCM
- SPM
- Name: PCB*
- Part-/Item No.:
- IMDS No.:
- IMDS Node-Id:
- Suppl./Org. units:
- Origin: External MDS Own MDS Own modules
- current Version published accepted int. released
- Buttons: Search, Reset
- Info: 40 rows found!

28. Please read carefully the Scania requirements that apply for IMDS reporting and the prohibited respective restricted substances in Scania's products.

See Scania STD3868 - SCANIA CUSTOMER SPECIFIC REQUIREMENTS, section Specific Environmental Demands, 7.1 Restricted substances in delivered parts and components.

List of Scania Standards with requirements:

- a) Scania Standard [STD4352](#) – Reporting of substances and material composition of product-related parts to IMDS
- b) Scania Standard [STD4400](#) – Prohibited and restricted substances in Scania's products [since 2012!]
- c) In addition to STD4400 even Scania Standard [STD4158](#) (Chemical substances which must not be used – Scania Black list) and [STD4159](#) (Chemical substances with limited use - Scania Grey list) for chemicals/mixtures (like grease, oil) in the Scania product.

Scania Standard STD4158/4159 changed scope in 2012 and is only valid for chemical products/mixtures.

In the following, deviations from those requirements are explained briefly.

a) **STD4352 rejection issues:**

Scania's IMDS reporting requirements are based on IMDS Recommendation 001 issued by the IMDS steering group which is generally applied by all OEMs. In order to avoid MDS rejections from your customers you should implement IMDS Rec001 checks and reject submitted MDS from your suppliers if their MDS are not compliant. We as

your customer have no business relation with your supplier and will only discuss MDS rejection reasons with you but not with your suppliers. That is your task.

1) Rule 4.5.4.B – Range of substance in material outside acceptable limits Rule 4.5.4.B in IMDS Rec001 is a mandatory requirement in STD4400 and also for all other OEM. The rule was developed together with suppliers (CLEPA) inclusive material manufacturers and is well known in the automotive supply chain.

....
STD4352 - Page 14:

4.5.4 Portion (Percentage) Ranges		
4.5.4.A	The portion type "range" must be used solely to reflect real variations of a basic substance in a material. Ranges must not be used as a means to avoid declaring the full composition of a material.	Mandatory Rule
4.5.5.B	If the portion type "range" is selected, the following maximum portion ranges (from X% to Y%) apply: $0\% \leq X \leq 7.5\% \rightarrow Y\% - X\% \leq 3\%$ $7.5\% < X \leq 20\% \rightarrow Y\% - X\% \leq 5\%$ $20\% < X \leq 100\% \rightarrow Y\% - X\% \leq 10\%$	Mandatory Rule ^{E5} Recommendation ^{E6} for small parts < 5g

Example case in your MDS 466729211 / 0.01:

■	VALVE ASSY (1 EA)
+	■ Support washer (1 EA)
+	■ Intake Spring (1 EA)
+	■ Intake Valve (2 EA)
■	■ PISTON MET.RIA (1 EA)
+	■ Piston (1 EA)
■	■ Piston Ring (1 EA)
■	● F90-U4-6.6 (1 g)
	▲ Iron (92.9 - 97.3 %)
	▲ Carbon (0.7 - 1.1 %)
	▲ Copper (2 - 6 %)

Copper: $(0\% < X \leq 7.5\%)$

$Y\% - X\% = 6\% - 2\% = 4\% > \text{max } 3\% \rightarrow \text{NOT ACCEPTABLE!}$

However, since in this particular case the part (Piston Ring) is a small part because it weighs less than 5g, Scania will accept this deviation, because Scania has decided that for small part the rule 4.5.4.B is only a recommendation.

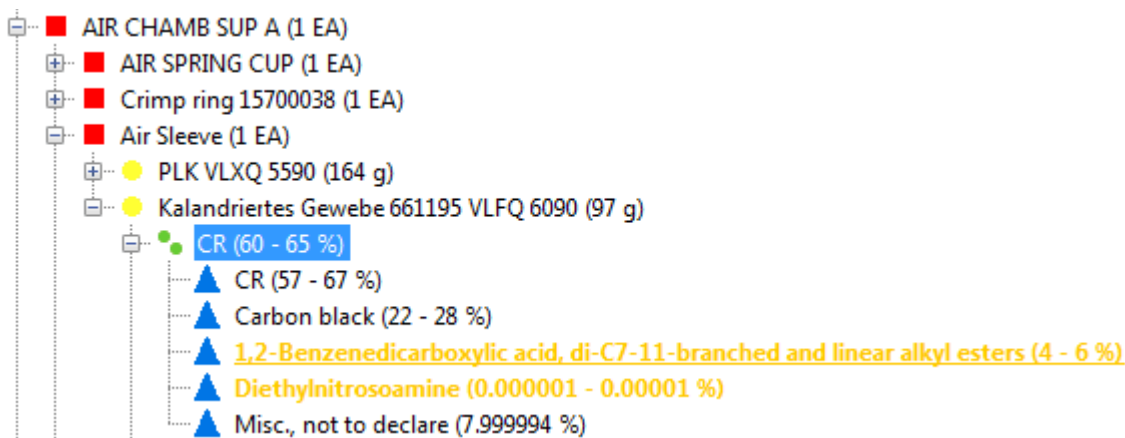
FYI: In the case that the reported (sub-)part/component is heavier than 5g then compliance with rule 4.5.4.B is mandatory and a deviations will not be accepted by Scania!

2) Rule 4.5.2.C/4.5.3.E/5.1.A - Total amount of confidential substances and Wild cards exceeds maximum

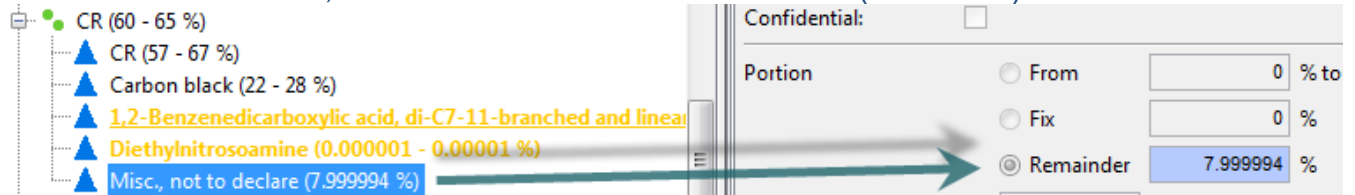
This rule is a mandatory requirement in STD4400 and also for all other OEM. The rule was developed together with suppliers (CLEPA) inclusive material manufacturers and is well known in the automotive supply chain.

4.5.2.C	The sum of confidential substances, including wildcards for highly confidential substances must not exceed 10 % of a material. If substance ranges are used, the respective maximum values of the ranges are applied for calculating this sum. Exemption: Masterbatches (see 5.1)	Mandatory Rule ^{E1,E2,E3}
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Example case in your MDS 466729211 / 0.01:



Joker substance “Misc., not to declare” is declared as “Rest” (remainder):



The maximum range “rest” portion of the joker substance is calculated like following:

$$\begin{aligned}
 > \text{MAX} (\text{“Misc., not to declare”}) &= 100\% - \text{MIN} (\text{“CR”}) - \text{MIN} (\text{“Carbon Black”}) - \text{MIN} (\text{“1,2-Benzenedicarboxylic...”}) - \text{MIN} (\text{“Diethylnitrosamine”}) \\
 &= 100\% - 57\% - 22\% - 6\% - 0,00001\% = 14,999\% \\
 > \text{MAX} (\text{WILDCARD}) &= 14,999\% > 10\% \text{ ---> NOT ACCEPTABLE!}
 \end{aligned}$$

In order to avoid rejection follow recommendation 4.5.3.d:

4.5.3.d	Guideline: Do not use the portion type <i>Rest</i> for wildcards if portions are used for other substances as it may lead to a warning that there are more than 10 % undeclared substances in a material.	Recommendation
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3) Incorrect reporting Substances (reactive, liquid or a gaseous basic substances) which are usually not present in the part

The material shall be reported in its end state after drying, curing etc. according to IMDS Rec 001 rules 4.4.1.B/C:

4.4.1.B	A material must be described in its end state. Only basic substances contained in the final material are to be reported.	Mandatory Rule
4.4.1.C	Process chemicals used in the production of a material/part that are not contained in the end material/part must not be reported.	Mandatory Rule

Information in Safety data sheets are usually not sufficient or contain substances which are not present in the material in its end state. Follow guideline 4.4.1.b.

4.4.1.b	<i>Guideline:</i> A material supplier SDS (safety data sheet) usually does not provide sufficient data for the creation of MDSs. MDSs must be descriptive of all substances found in the end state material (i.e. final product), including additives, excluding process chemicals.	Recommendation
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Re-check and provide feedback to imds@scania.com if the reported substance is really present in the material in its end state which is correct in special cases (e.g. explosives, lubricant oils)

b) STD4400 rejection issues:

Supplier have to check substance use in delivered parts against Scania Standard STD4400 – Prohibited and restricted substances in Scania's products.

In case of deviations the responsible Scania purchaser must be informed at request for quotation.

1) Prohibited substances

above defined specific thresholds must not be used. No exemptions from use of prohibited substances above threshold can be given.

2) Restricted substances

above specific threshold should not be used. Exemptions can be granted in certain cases by Scania responsible part design department if no other technical/economical solutions are available. In this case, the exemption must be stated in the Scania product specification, i.e. in the Scania part drawing. In case the restricted substance is subject for authorization under REACH legislation no exemption can be granted.

See STD4400, page 2:

In special cases when functional requirements dictate that a substance with restrictions has to be used, exemptions can be granted. In such cases, this shall be evident in the requirement specification.

If no exemption is not stated in the product specification then the received MDS with deviation from STD4400 – restricted substance – is put on hold internally and a deviation report is issued by the MDS reviewer to the responsible designer who is then in charge of further investigations.

In a transition period Scania accepts MDS with deviations due to use of restricted substances listed in STD4400 for existing parts which were introduced in production (or as spare part) or changed before 2012-04-01. As a standard procedure, all deviations from STD4400 are documented in the reject text reason (without difference for existing or new parts) to make suppliers aware of the deviations from Scania requirements. However, if other, remaining quality deviations from STD4352 were resolved in newer MDS submissions and only deviations from restricted substances in STD4400 are remaining then the MDS for an existing parts will be accepted (with deviation). Those deviating MDS will be followed up and suppliers will be contacted later if the restricted substances will be prohibited or requires authorization under REACH.

Newer or changed parts with introduction dates after April 2012 are not accepted if deviations from STD4400 (due to use of restricted substances) are discovered at MDS review and will lead to internal deviation reports to part responsible Scania design department and/or rejection if no exemption from requirement is stated on the Scania part drawing/product description document.

C) Substances of very high concern in REACH Candidate List

The error message "SVHC complete part: The reported part contains at least on substance from the REACH Candidate List in concentrations above 0.1% weight by part weight." informs you that you have the obligation to inform your customers about the safe use of this substance in the part/article (if you have information available from your supply chain). This is required according to [REACH](#) article 33(1):

Article 33

Duty to communicate information on substances in articles

1. Any supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0,1 % weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance.

Please send available information about safe use of this substance in your supplied part to imds@scania.com.

After approval the MDS reviewers will initiate a process which makes sure that our customers will be informed about the existence of this SVHC according to REACH article 33 if Scania is selling this part separately as spare part or in a spare part kit. We use own developed, so-called-REACH-information sheets for this purpose.

You as Scania supplier of this part must ask and inform Scania via the Supplier Change Request (SCR) process if you plan to substitute or reduce the amount of this substance in the part so that the total amount of the substance is below 01,% w/w of the part. In this case we have to change the part number for the changed part in order to ensure part change traceability in our aftermarket operation.


MATERIAL DATA SYSTEM
International Material Data System
IMDS OEM acceptance criteria

IMDS OEM acceptance criteria	
Chapter 1 in IMDS - Creation of component	
IMDS-ID	One IMDS ID for every part number Coloured parts: Representative MDS possible for BMW, Daimler
Measured weight	Mandatory Measured weight; if not available, weight on drawing
Tolerance	Mandatory max. allowed tolerances OEM-specific
Development sample	OEM-specific
Parts marking	Optional Mandatory for BMW, Fiat, Ford, Mazda, Renault, Suzuki, Toyota
Application ID	Mandatory
Language	English
Chapter 1 in IMDS Creation of material	
Name (metal)	According to international standards
Name (non metal)	According to international standards If no official name exists, material name must explain the material name clearly
Trade name	According to IMDS 001 Mandatory for Renault
Material number	According to IMDS 001
Symbol	According to IMDS 001
Classification	Mandatory According to VDA 231-106
Norms / Standards	Optional Mandatory for Daimler (metals), Mitsubishi, Porsche, Toyota
House norms / standards	Optional Mandatory for Mitsubishi, Toyota
Supplier	Optional
Basic substances	
Range	According to IMDS Recommendations
Joker (Wild Cards)	According to IMDS Recommendations
Confidential substances	According to IMDS Recommendations
GADSL	According to IMDS Recommendations

29). The article order should contain the last ECO number. This applies to all items regardless of whether they are described on the table drawing, drawing, standard or other product descriptive document.

30). Assigned parts MDS should be prioritized

31). The Part Material Composition shall be reported into IMDS by the supplier after ordering and 4 weeks prior to the PPAP request date and according to Scania IMDS Reporting Standard STD4352, to assure a full approved PPAP at start of production

TERMINOLOGY

Dictionary

BOM Bill Of Material

EC European Community

ELV End of Life Vehicle

EU Europe

FAQ Frequently Asked Questions

FBOM Flat Bill Of Material

GADSL Global Automotive Declarable Substance List

IMDS International Material Data System

MDS Material Data Sheet

OEM Original Equipment Manufacturer

PPAP Production Part Approval Process

REACH Registration, Evaluation, Authorization and Restriction of Chemicals

RFQ Request For Quotation

SVHC Substances of Very High Concern (REACH)

TR Technical requirement

CONTACTS

The supplier can always contact the Sourcing Manager Manager, or the responsible SQA or IMDS Team on imds@scania.com.