These are 9 common cases of Rejections from Volvo Group suppliers' IMDS submissions:

- 1. Material Classification
- 2. Part Name
- 3. Application Codes
- 4. Material Breakdown
- 5. Material Name
- 6. Part Structure
- 7. Presence of Substances in the Reach Annex XIV
- 8. Substance Portion Range Values
- 9. Preliminary Datasheets

Additional Information

- 1. Polymeric Parts Marking
- 2. Biocidal Product Regulation



1. Material Classification

1.1 Plastic Materials1.2 Metallic Materials



1.1 Material Classification – Plastic Materials

REJECTION REASON:	MATERIALDATA
Material PVC (affected component: TAF	PE (PN XXXXXX)) - You
have classified this material under 5.1.a	
but material contains no filler. If this m	Material language English M (2)
thermoplastic, filler must be disclo classification 5.1.b (Unfilled Thermoplas	osed, otherwise, use was
	Create Date 5/1/2013 (2)
	Check/Release Date 5/1/2013 🕐 📑 Recommendation
 ✓ ● 1* TAPE ✓ ● 62.4g ▷ ● 5.5 - 14.5% ✓ ● 79.75 - 99.75% PVC ● 69.0 - 75.0% PVC ● 21.0 - 24.0% Epoxy resin ● 2.0 - 5.0% Plasticizer, not to declare ● 0.3 - 3.0% Misc., not to declare 	Material Information Std. MatNo Symbol PVC Classification 5.1.a filled Thermoplastics Norms / Standards <u>Company Norm Norm Code</u> - 150 1043-1 Suppler
	This type of error can only be partially detected by the system through its checking functionality. Therefore, it is very important that "manual checking" must be done to avoid this type of rejection.
	intended purpose. This includes returns of material from the distribution chain

11

1.1 Material Classification – Plastic Materials

IMDS Recommendation Rule 4.4.2.G:

This entry is mandatory. For all materials a correct classification must be assigned independent of the material weight in the

part.

To identify, correct and avoid this type of rejection:

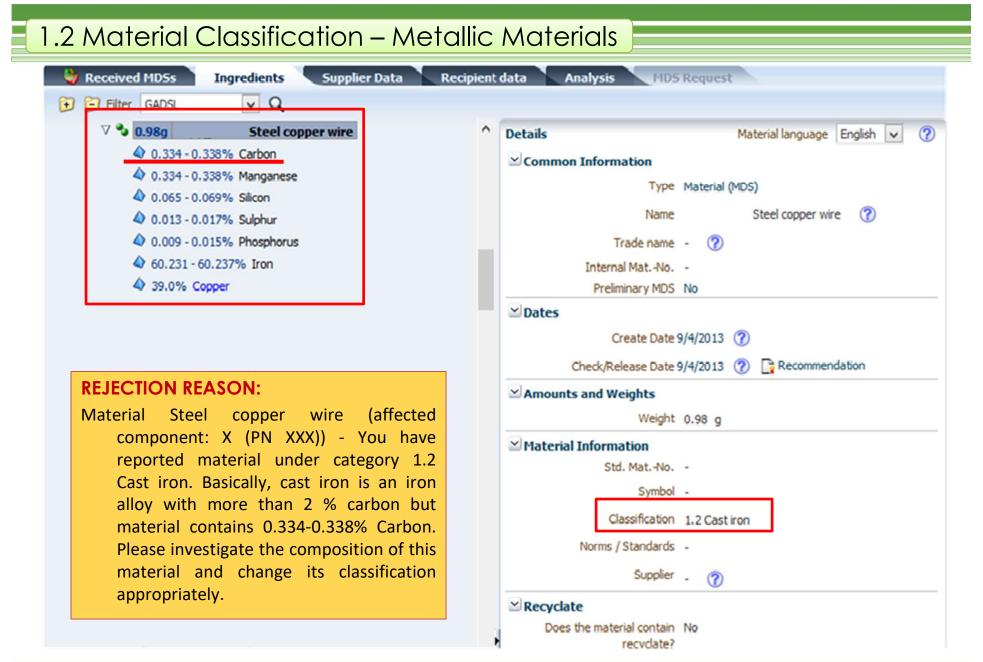
- 1. Check the basic substance breakdown of the material being called out. In some cases, the IMDS check will issue a warning on some materials with suspicious classification but not for all. Therefore, to ensure compliance, the owner has to manually check this field.
- 2. Use the IMDS Recommendation Annex **001a document** for guidance in checking if the classification used is appropriate against the basic substance breakdown of the material.
- 3. Correct the "Classification" of the affected material as necessary. If the material datasheet used came from your supplier, ask your supplier to make the necessary changes to the material data sheet and use the revised version to resubmit.

Annex I to the IMDS001 Recommendation

IMDS 001a

Classification	Descri	ption		Example / Designation
5.1.a Filled Thermoplastics	Thermoplastic materials containing substances according to the definition in ISO 1043-2.			
	Exampl	les for fillers:		
	Symbol	Material	Form / Structure	
	BD	Boron	powder	
	CD	Carbon, Graphite	powder	
	CF	Carbon	fiber	
	DD	Alumina trihydrate	powder	
	ED	Clay	powder	
	GB	Glass	beads, spheres, balls	
	GF	Glass	fiber	
	GM	Glass	mat (thick)	
	GS	Glass	flake	
	KD	Calcium Carbonate	powder	
	MD	Mineral, Metal	powder	
	MF	Mineral, Metal	fiber	
	RF	Aramid	fiber	
	SD	Synthetic organic	powder	
	TD	Talcum	powder	
	WD	Wood	powder	
	WF	Wood	fiber	







1.2 Material Classification – Metallic Materials

IMDS Recommendation Rule 4.4.2.G:

This entry is <u>mandatory</u>. For all materials a correct classification must be assigned independent of the material weight in the

part.

To identify, correct and avoid this type of rejection:

- 1. Check the basic substance breakdown of the material being called out. In some cases, the IMDS check will issue a warning on some materials with suspicious classification but not for all. Therefore, to ensure compliance, the owner has to manually check this field.
- 2. Use the IMDS Recommendation Annex 001a document for guidance in checking if the classification used is appropriate against the basic substance breakdown of the material.
- 3. Correct the "Classification" of the affected material as necessary. If the material datasheet used came from your supplier, ask your supplier to make the necessary changes to the material data sheet and use the revised version to resubmit.

Annex I to the IMDS001 Recommendation

IMDS 001a

Classification	Description	Example / Designation
1.1.2 Highly alloyed	 There are two definitions for highly alloyed steels. If the content of at least one alloying element is above 5 % you speak of highly alloyed steel. Highly alloyed steel consists of less than 95 % iron and more than 5 % further metallic alloying components. It is recommended to use definition 2 for IMDS matters. All metallic alloying components should be taken into account. 	X30Cr13, S42000, SUS420
1.2 Cast iron	Although a selectable classification, it should only be used when classifications 1.2.1, 1.2.2 or 1.2.3 are not appropriate. If there is more than 2 % carbon in an iron alloy it should be considered cast iron.	
1.2.1 Cast iron with lamellar graphite / tempered cast iron	Lamellar graphite is composed of lamellae, a thin flat scale, membrane, or layer of graphite (carbon) as opposed to nodular, which is approximately spherical.	EN-GJL-100 FC100
1.2.2 Cast iron with nodular graphite / vermicular cast iron	Nodular graphite flakes are used in approximately spherical cast iron part.	EN-GJS-400-15 FCD400-15
1.2.3 Highly alloyed cast iron	Highly alloyed cast iron consists of iron, 2 % or more of carbon and more than 5 % metallic alloying components (Carbon and silicon contents should not be taken into account). A commercial alloy of iron, with higher amounts of carbon, and silicon, etc., that is cast in a mould and is hard, brittle, non- malleable, and incapable of being hammer-welded, but more readily fusible than steel. Often used in high temperature application.	EN-GJSA-XNiCr20-2 (Synonym: EN-JS 3011) FCDA-NiCr 20 2
2 Light alloys, cast and wrought alloys	This classification cannot be used. Metals and metal alloys with a density of less than 5g/cm ⁹ are called light metals.	



2. Parts Description



2. Parts Description

	ipient data Analysis Hos Request	
Filter GADSL Q Ishow regulatory information	Details	🛃 Regulation Wizard
	Common Information Type Component (received MDS) ID / Version	
REJECTION REASON: Please indicate the prop description name. The p description used for MDS m describe the part correc	Description Türsystem VÖ-LI-LL-P2540-N Part/Item No	
According to our informat from KOLA, the part name WINDOWS LIFT KIT. Kindly ve this information and inform	ion es is Greate Date 11/27/2015 😨 rify Release Date 12/2/2015 🧭	
by email.	ounts and Weights Measured weight per item 4969.0 g Calculated weight per item 5033.214 g	



IMDS Recommendation Rule 4.2.1.C:

The top node component name must be descriptive and be in line with applicable customer specifications. If the component is a top node and will be sent to a customer, the recipient information controls the name the customer will see.

To identify, correct and avoid this type of rejection:

1. To identify this error, manually double-check the "Part name/description" using the Part Drawing (for single components) and Bill of Materials (for assemblies) as basis.

2. Create a new version of the datasheet and edit the Part Description according to what is in the Part Drawing or the Bill of Materials.

Important Note: This type of error is not detectable by the system through its checking functionality. Therefore, it is very important that "manual checking" must be done to avoid this type of rejection





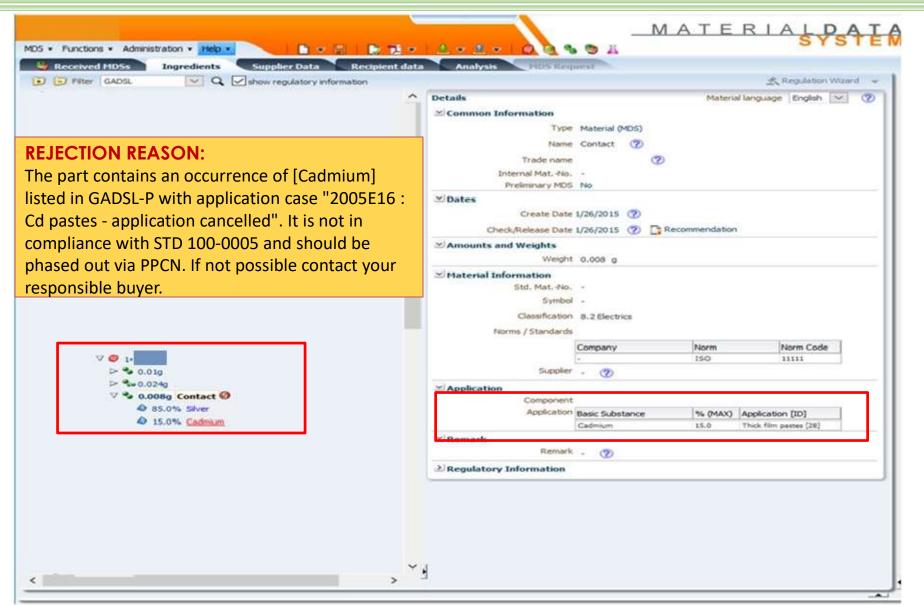
Received HDSs Ingredients Supplier Data		Analysis	PIDS Request				fation Wizar
	-	-	Name Trade name Internal MatNo. Preliminary MDS			22 1000	
		⊠ Dates	Greate Date Check/Release Date	6/26/2007 🕐 📑 R	ecommendation		
	∠ Application	Component	DIO SCHOTTKY	1A 600V 1.			
		Application	Basic Substance	% (MAX)	Application	[ID]	
V 🕏 0.0025g Solder 🕖			Lead	92.5	Solder in electronic boards and or applications [ther electric	
4 92.5% Lead			Supplier	- 🐨			
4 5.0% Tin 4 2.5% Silver		⊠ Recycle Doe	s the material contain recyclate?				
REJECTION REASON: The part contains an occurrence of Lead listed in GADSL-P with application case				Post-Industrial Recycli manufacturing process	ets that has been d . Excluded is reutile sted in a process an	amer recyclate (see 15 werted from the waste st aton of materials, such a d capable of being reclain ap recycling)	warn during a s rework,
008E08a&b : Pb in electr(on)ic - appli ncelled". It is not in compliance with 00-0005 and should be phased out via	STD			industrial and institutio	late has been gener nal facilities in their for its intended pur;	(see ISIO 14021) ated by households or by role as end-users of the p pose. This includes return	roduct which
CN. If not possible contact your respo		≌ Applica	Component	Basic Substance	la sua l		
uyer.						Application [ID]	

*application cancelled -Supplier needs to assess if some other application is applicable or if phase-out of the substance is needed.

Filter GADSL Q Show regulatory information					APTS
				<u> </u>	
		5/31/2001			
		5/31/2001 🕐 📑	Recommendation	16	-11
	∠ Amounts and Weights	0.071 g			- 11
	Material Information	0.071 g			- 11
	Std. Mat. No.				- 11
	Symbol	-			- 11
	Classification	1.1.2 highly alloyed			- 11
	Norms / Standards				- 11
		Company	Norm	Norm Code	- 18
 ✓ % 0.071g ✓ 0.28 - 0.36% Carbon ✓ 0.0 - 1.0% Silcon ✓ 0.0 - 1.0% Manganese 	Suppler	- 3	-		
	≅Recyclate				- 11
	Does the material contain - recyclate?				- 11
4 0.0 - 0.04% Phosphorus	Content of post-industrial/pre-consumer recyclate (see 150			- 17	
4 0.0 - 0.03% Sulphur	14021)				
4 12.0 - 14.0% Chromium 4 0.0 - 1.0% Nacked		Post-Industrial Recyclate that has been diverted from the waste stream during a manufacturing process. Excluded to reutilization of materials, such as revork, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it (home scrap			
4 Rest 85.145% Iron					
		recycling)			- 11
		Contrast of south of		- (150 14001)	- 11
				e (see ISO 14021) erated by households or by	. 11
CTION REASON:				cities in their role as end-users ad for its intended purpose. Th	
part contains an occurrence of Nickel listed ir		includes returns of m			
	Application				- 1
L-P with application case ""Ni release >		Druckfeder			
/cm2/week (touched surface))"". It is not in	Application	Basic Substance	% (MAX)	Application [ID] Component of a surface	- 11
		Nickel		likely to be routinely touched (eg. handles and	
liance with STD 100-0005 and should be			1.0	buckles), that have a	

*application cancelled -Supplier needs to assess if some other application is applicable or if phase-out of the substance is needed.





*application cancelled -Supplier needs to assess if some other application is applicable or if phase-out of the substance is needed.

IMDS Recommendation Rule 4.4.5.A :

If a substance in a material MDS is application-relevant, the correct application code must be assigned when the material MDS is referenced in a component MDS.

IMDS Recommendation Rule 4.4.5.B :

The application code must reflect the real use of the material within the component.

To identify, correct and avoid this type of rejection:

1. During checking, the Application Code will be used as the basis to determine if the "Use / Presence" of the said Prohibited substance is currently "Exempted or Not". For some basic substances (e.g. 4 Heavy Metals (Lead, Cadmium Hex Chrome, Mercury), an Application Code must be selected when the material containing one of these substances is first attached to a component type parent node. The substances requiring an application code are generally substances whose use in automotive products is limited to certain applications.

2. To correct this rejection, when choosing the appropriate application code, ensure that it must correspond with the type of "Part" and "Classification" of the material where the basic substance is present.

3. If you created the datasheet, investigate the material and consult the buyer for the appropriate application code. If the material was sent to you by a supplier ask them to investigate and change if necessary.

Important Note: There are some cases wherein this type of error is not detectable by the system through its checking functionality. Therefore, it is very important that "manual checking" must be done to avoid this type of rejection.



4. Material Breakdown

4.1 Mixed Materials

- 4.2 Confidential Substances
- 4.3 Liquids and Gases, Reactive Substances and Ions

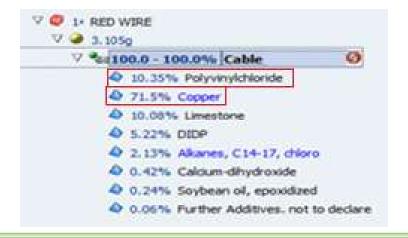


IDS + Functions + Administration + Help +	
	Details Material language English O
	REJECTION REASON: Material Cable (Affected Components: RED WIRE (PN XXXX))- You have reported a mixed material. Mixture of different substances in one material datasheet is not allowed. Every homogeneous material has to be described as a separate material. [IMDS Rec. 001, Rule 4.4.1.D]. For information about the definition of homogeneous, refer to IMDS Rec. 001 Annex I, section 1.1.
 ✓ Ø 1* RED WIRE ✓ Ø 3.105g ✓ Ø 100.0 - 100.0% Cable Ø 10.35% Polyvinykthoride Ø 71.5% Copper Ø 10.08% Limestone Ø 5.22% DIDP Ø 2.13% Akanes, C14-17, choro Ø 0.42% Cakium-sihydroxide Ø 0.24% Sovbean ol, epoxidzed 	Sub, Matt Hat Symbol - Classification :8.2 Electrics Norms / Standards - Supplier ⑦ Remark Remark : ⑦
 0.24% Soybean of, epoxidized 0.06% Further Additives, not to declare 	



4.1 Material Breakdown – Mixed Materials

LASTIC SU	BSTANCE	METAL SUBST	ANCE
Common Information		Common Information	
Type	Basic Substance	Type	Basic Substance
Name(s)	Polyvinylchloride	Name(s)	Copper
	Chloroethylene, polymer Ethylene, chloro-, polymer 9002-86-2	CAS No. EINECS-No. EU-Index	
EINECS-No. EU-Index		GADSL Category	
GADSL Category			
REACH-SVHC	No 🕐	REACH-SVHC	No 🕐
Amounts and Weights		Amounts and Weights	
Portion	10.35 %	Portion	71.5 %
Basic substance groups Basic substance groups		Basic substance groups Basic substance groups	





4.1 Material Breakdown – Mixed Materials

IMDS Recommendation Rule 4.4.2.G:

Every homogeneous material has to be described as a separate material. For information about the definition of "homogeneous", refer to IMDS 001 Annex I, section 1.1. If a material parent node has material child nodes, the material represented by the parent node must be homogeneous. Two or more materials forming layers cannot be regarded as homogeneous. **Example: Zinc coating on steel or paint layers cannot be reported as a material with sub-materials, as the top material is not homogeneous.**

To identify, correct and avoid this type of rejection:

- Check the basic substance breakdown of the material being called out. In some cases, the IMDS check will issue a warning on some materials with incorrect material breakdown(i.e. wildcards/jokers exceeding 10%). Therefore, to ensure compliance, the owner has to manually check this field.
- 2. Use the IMDS Recommendation 001a document for guidance in checking if the material breakdown is reported properly.
- **3. Correct the datasheet** of the affected material as necessary. If the material datasheet used came from your supplier, ask your supplier to make the necessary changes to the material data sheet and use the revised version to resubmit.

Important Note

Material Breakdown errors can only be partially detected by the system through its checking functionality. Therefore, it is very important that **"manual checking"** must be done to avoid this type of rejection.

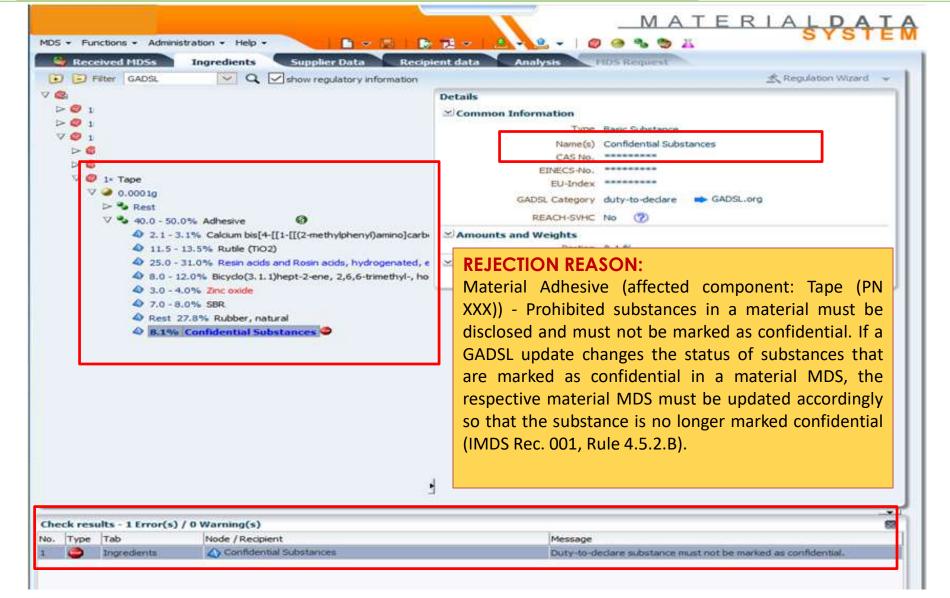


4.2 Material Breakdown – Confidential Substances

MDS - Functions - Administration - Help -	MATERIALDATA System
Received MD5s Ingredients Supplier Data Rec	
② Filter GADSL Q Show regulatory informatic	Regulation Wizard
	Details
▷ 🜍 1×	Common Information
	Туре
	ID / Version
	CHECK Node ID
	Node count
	MDS Supplier
> 🌍 1×	Description
	Part/Item No. Preliminary MDS No
	⊻ Dates
	Create Date 3/23/2017 ?
	Check/Release Date 3/23/2017 🕜 📑 Recommendation
	✓ Amounts and Weights
	Measured weight per item 110.0 g
	Calculated weight per item 106.8237 g
	Deviation -2.887545% ?



4.2 Material Breakdown – Confidential Substances





4.2 Material Breakdown – Confidential Substances

IMDS Recommendation Rule 4.5.2.B:

If a GADSL update changes the status of substances that are marked as confidential in a material MDS, the respective material MDS must be updated accordingly so that the substance is no longer marked confidential. MDSs containing this material MDS also must be up-dated along the supply chain (see section 3.2).

To identify, correct and avoid this type of rejection:

- Check the basic substance breakdown of the material being called out. In some cases, the IMDS check will issue a warning on some materials with incorrect material breakdown(i.e. wildcards/jokers exceeding 10%). Therefore, to ensure compliance, the owner has to manually check this field.
- 2. Use the IMDS Recommendation 001a document for guidance in checking if the material breakdown is reported properly .
- **3. Correct the datasheet of the affected material** as necessary. If the material datasheet used came from your supplier, ask your supplier to make the necessary changes to the material data sheet and use the revised version to resubmit.

Important Note

Material Breakdown errors can only be partially detected by the system through its checking functionality. Therefore, it is very important that **"manual checking"** must be done to avoid this type of rejection.



4.3 Material Breakdown – Liquids and Gases, Reactive Substances and Ions

Pliter GADSL Q Show regulatory information	
1*	Details
1. No 4.8g Rubber	⊠ Common Information
A colory 2 chlorobute 1 2 dece	Type Component (received MDS)
2.0% Antmonytrioxide EXECUTE CHECK	
Rest 8.0% Further Additives, not to declare	Node ID
	Node count MDS Supplier
	Description
	Part/Item No.
	Prelminary MDS No
	⊠Dates
	Create Date 5/25/2017 (7)
	Check/Release Date 5/25/2017 🕐 📑 Recommendation
	Measured weight per item 15.4 g
	Calculated weight per item 15.4 g
	Deviation 0.0% (7)



4.3 Material Breakdown – Liquids and Gases, Reactive Substances and Ions

		Details	
		Common Information	
V 4.8g	Rubber 🛦	Туре	Basic Substance
	2-Chlorobuta-1,3-diene	Name(s)	2-Chlorobuta-1, 3-diene
	0% Further Additives, not to declare		1.3-Butadiene, 2-chloro
and the second second second second			Chloropren
			Neoprene
REJECTIC	ON REASON:	CAS No.	126-99-8
		EINECS-No.	204-818-0
Material F	Rubber (affected component: XXX	EU-Index	602-036-00-8
XXX)) - You	have reported a liquid or gaseous	hasic GADSL Category	- GADSL.org
		DEACHLEUNEC	No 🕐
substances	s (90% 2-Chlorobuta-1,3-diene)	In a	
material v	with exception of classification 9.>	x. A Portion	90.0 %
	· · · · · · · · · · · · · · · · · · ·	Only Basic substance groups	
	nust be described in its end state.		Liquids and Gases
basic subs	stances contained in the final mat	terial	Process Chemicals
are to he r	eported (IMDS Rec. 001, Rule 4.4.1	B)	Renault Complete
	eported (111105 Nec. 001, Nule 4.4.1		and the second se
		Chemical presence type	Renault Gray
			-
		Chemical presence type	Ø
			0
			0
			0



IMDS Recommendation Rule 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 (example: cured adhesives or paint coatings are entered without the evaporating solvents).

To identify, correct and avoid this type of rejection:

- Check the basic substance breakdown of the material being called out. In some cases, the IMDS check will issue a warning on some materials with incorrect material breakdown(i.e. wildcards/jokers exceeding 10%). Therefore, to ensure compliance, the owner has to manually check this field.
- 2. Use the IMDS Recommendation 001a document for guidance in checking if the material breakdown is reported properly .
- **3. Correct the datasheet of the affected material** as necessary. If the material datasheet used came from your supplier, ask your supplier to make the necessary changes to the material data sheet and use the revised version to resubmit.

Important Note

Material Breakdown errors can only be partially detected by the system through its checking functionality. Therefore, it is very important that **"manual checking"** must be done to avoid this type of rejection.



5. Material Names



5. Material Names		
MDS • Functions • Administration • Help •		MATERIALDATA
Received HDSS Ingredients Supplier Data	Recipient data Analysis NDS Brightst	
D Filter GADSL Q	mation	🕂 Regulation Wizard 🐱
	Details Common Information Trade name Internal MatNo. Preliminary MD5 No	Material language English 💌 🕐
V 🕹 123.00 FCTG-3604 309227735 Ø	* Dates	
 	REJECTION REASON:	

Material FCTG-3604_309227735 attached under Affected components: Bushing Camshaft_309216429 (PN XXX-XXX)) -Using part numbers and trade names or generic names are not acceptable. Please indicate the proper material name. All material names should be clear, descriptive and should be closely related to the basic substance breakdown. You may indicate the equivalent material number but at the end of the proper material name.

For metals the material name should be according to international standards.

the of

For non-metals the material name should be according to international standards. If there is no such standard for the material in question the name should be descriptive of the material.

Regulatory Information



A Rest 58,5% Iron

5. Material Names

To identify, correct and avoid this type of rejection:

- 1.To identify this error, "<u>manually</u> " double-check the Material Names used in every part present in the datasheet. It must correspond to the Basic Substance Breakdown and Classification used in the material.
- -For Steels EN 10027, JIS norms, example: STM-C 540
- –For Aluminum Alloys EN 573, JIS norms, example: Al-Si12
- –For Copper Alloys ISO norms, example: CuAl5
- -For Plastics ISO 1043-1 and ISO 1043-2, example: PE-LD
- -For Elastomers ISO 1629, example: ACM
- –For Thermoplastic Elastomers ISO 18064, example: TPA-ES
- 2. If no name is available which is described in a public standard, then the name must be descriptive. Examples are:
 - Aluminum alloy
 - Adhesive layer
 - Basecoat, clear coat
 - Glass
 - Propellant, airbag
 - Lubricant
- 3.For a (non-standard) descriptive name, the material name should identify the category (example: metal, polymer, mineral, propellant, organic, lubricant).
- 4.To correct this rejection, If the material datasheet used came from your supplier, asked your supplier to make the necessary changes to the material name and used the revised version to resubmit.

IMDS Recommendation Rule 4.4.2.A :

The material name must be entered in English in the EN field. The added name translation in other languages is optional.

IMDS Recommendation Rule 4.4.2.B :

The material name must not be a trade name. Trade names can be entered in the field "Trade name".

IMDS Recommendation Rule 4.4.2.C:

If the material is described in a public standard, or if the nomenclature for materials of a certain type is described in a public standard (example: ISO 1043-1 and 2 for plastics, ISO 1629 for Elastomers or ISO 18064 for thermoplastic Elastomers), then the material name according to this public standard must be entered.

IMDS Recommendation Rule 4.4.2.D:

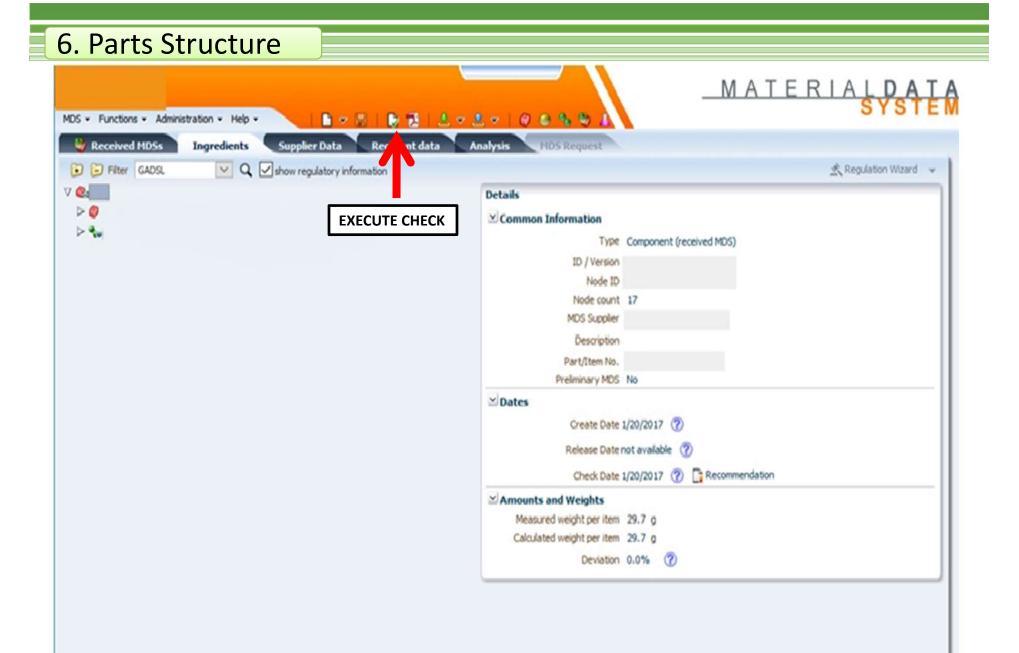
If no name is available which is described in a public standard, then the name must be descriptive.

Important Note: This type of error is not detectable by the system through its checking functionality. Therefore, it is very important that "<u>manual checking</u>" must be done to avoid this type of rejection



6. Part Structure







Centails Common Information Type Node 1D Node count Node count Node count Pertinities Description Preliminary MOS Preliminary MOS Create Date 1/20/2017 Preliminary MOS Create Date 1/20/2017 Deviation Deviation Deviation Deviation
Type Component (received MDS) ID / Version Node ID Node count 17 MDS Suppler Description Part/Item No. Preliminary MDS No Preliminary MDS No Create Date 1/20/2017 ⑦ Release Date not available ⑦ Check Date 1/20/2017 ⑦ Recommendation State State Not available ⑦ Check Date 1/20/2017 ⑦ Recommendation
ID / Version A Node ID Node Count 17 MDS Suppler Description Part/Item No. Preliminary MDS No Preliminary MDS No Preliminary MDS No Check Date 1/20/2017 () Release Date not available () Check Date 1/20/2017 () Release Date not available () Check Date 1/20/2017 () Release Date not available () Check Date 1/20/2017 () Recommendation
Node ID Node Count 17 MDS Suppler Description Part/Item No. Preliminary MDS No States Create Date 1/20/2017 (?) Release Date not available (?) Check Date 1/20/2017 (?) Resourced weight per item 29.7 g Calculated weight per item 29.7 g
Node count 17 MDS Suppler Description Part/Item No. Preliminary MDS No States Create Date 1/20/2017 (?) Release Date not available (?) Check Date 1/20/2017 (?) Mounts and Weights Messured weight per item 29.7 g Calculated weight per item 29.7 g
MDS Suppler Description Part/Item No. Preliminary MDS No Signature Create Date 1/20/2017 (?) Release Date not available (?) Check Date 1/20/2017 (?) Resurred weight per item 29.7 g Calculated weight per item 29.7 g
Part/Item No. Preliminary MOS No States Create Date 1/20/2017 (?) Release Date not available (?) Oteck Date 1/20/2017 (?) Resourced weight per item 29.7 g Calculated weight per item 29.7 g
Preliminary MDS No Dates Create Date 1/20/2017 ⑦ Release Date not available ⑦ Check Date 1/20/2017 ⑦ Recommendation SAmounts and Weights Measured weight per item 29.7 g Calculated weight per item 29.7 g
Create Date S: Create Date 1/20/2017 ⑦ Release Date not available ⑦ Check Date 1/20/2017 ⑦ Check Date 1/20/2017 ⑦ Resourced weight per item 29.7 g Calculated weight per item 29.7 g
Create Date 1/20/2017 ⑦ Release Date not available ⑦ Check Date 1/20/2017 ⑦ Recommendation SAmounts and Weights Measured weight per item 29.7 g Calculated weight per item 29.7 g
Release Date not available ⑦ Check Date 1/20/2017 ⑦ 🗈 Recommendation * Amounts and Weights Measured weight per item 29.7 g Calculated weight per item 29.7 g
Check Date 1/20/2017 ② CRecommendation
Amounts and Weights Measured weight per item 29.7 g Calculated weight per item 29.7 g
Measured weight per item 29.7 g Calculated weight per item 29.7 g
Calculated weight per item 29.7 g
Deviation 0.0% 🕐
, 1



6. Parts Structure

IMDS Recommendation Rule 4.1.A:

Child nodes of the same parent node must be of the same type (ex. a component parent node may consist of all component child nodes or all material child nodes, but not a mixture of component and material child nodes).

To identify, correct and avoid this type of rejection:

- 1. To identify this error, **click the "Execute Check"** functionality in IMDS.
- A "warning message" about the mixture of different types of nodes will appear in the "Check results" window. Double-click on the warning message to get to the affected component.
- 3. Correct the error on the Part Structure. **Refer to the IMDS Recommendation 001 document for guidance** in the proper creation of datasheet structures. Perform the "Execute Check" functionality in IMDS. The "warning message" should disappear after making the correction.



7. Presence of Substances in the Reach Annex XIV



REACH ANNEX XIV

- **REACH** authorization list
- It contains a list of substances subject to authorization under EU REACH regulation. These substances used in manufacturing located within EU after a given date called sunset date, unless authorization is granted or it is exempted from authorization.
- REACH (EC 1907/2006) aims to improve the protection of human health and the environment. This is done by the four processes of REACH, namely the registration, evaluation, authorization and restriction of chemical substances. REACH is a European legislation which is mandatory for all companies in EU. The Substances of Very High Concern (SVHC) defined by REACH will be restricted or banned. Suppliers are asked by Volvo to substitute these substances.



7. Presence of Substances in the REACH Annex XIV

Source: https://echa.europa.eu/authorisation-list

Substance Name			Sunset Date
Substance Name C	EC Number ©	CAS Number O	Sunset o
Pentazinc chromate octahydroxide	256-418-0	49663-84-5	22/01/2019
Potassium hydroxyoctaoxodizincatedichromate	234-329-8	11103-86-9	22/01/2019
Dichromium tris(chromate)	246-356-2	24613-89-6	22/01/2019
Strontium chromate	232-142-6	7789-06-2	22/01/2019
2,2'-dichloro-4,4'-methylenedianiline (MOCA)	202-918-9	101-14-4	22/11/2017
1,2-Dichloroethane (EDC)	203-458-1	107-06-2	22/11/2017
Ammonium dichromate	232-143-1	7789-09-5	21/09/2017
Potassium chromate	232-140-5	7789-00-6	21/09/2017



7. Presence of Substances in the REACH Annex XIV

W Received MDSs Ingredients Supplier Data Recipient data Analysis M	DS Request
🔁 🔁 Filter GADSL 🛛 🗹 🔍 🖸 show regulatory information	Regulation Wizard
Filter GADSL GadSL GadSL Show regulatory information Solution Solution </th <th>EU-Index 024-001-00-0 GADSI. Category duty-to-declare / prohibited ► GADSI.org REACH-SVHC Yes ⑦ Sunset date 9/21/2017 Lastest application date 3/21/2016 ✓ Amounts and Weights Portion 18.0 - 24.0 % Weighted mean 21.0% ✓ B.sic substance groups Basic substance groups Appl. rel. subst. Biocides (GADSL) California Proposition 65 Chromium(VI)-salts Process Chemicals REACH Annex XIV RNES B 00027 - Complete RNES B 00027 - Prohibited</th>	EU-Index 024-001-00-0 GADSI. Category duty-to-declare / prohibited ► GADSI.org REACH-SVHC Yes ⑦ Sunset date 9/21/2017 Lastest application date 3/21/2016 ✓ Amounts and Weights Portion 18.0 - 24.0 % Weighted mean 21.0% ✓ B.sic substance groups Basic substance groups Appl. rel. subst. Biocides (GADSL) California Proposition 65 Chromium(VI)-salts Process Chemicals REACH Annex XIV RNES B 00027 - Complete RNES B 00027 - Prohibited
	Chemical presence type Intended use 🕜

Substance name C expand / collapse	EC No. C	CAS No. 0	Entry No. 🔿	Latest application date 🤤	Sunset Date 🗘	
Chromium trioxide	215-607-8	1333-82-0	16	21/03/2016	21/09/2017	0



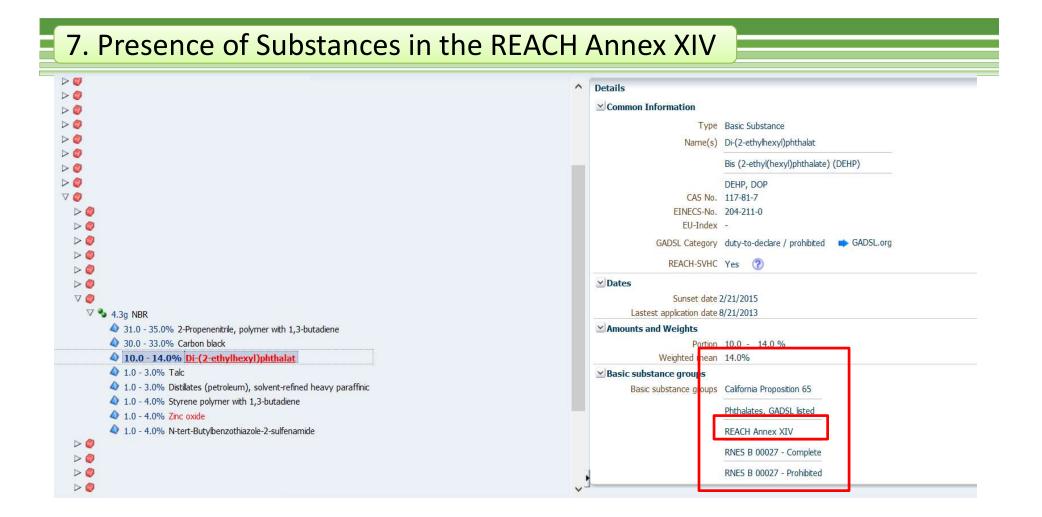
7. Presence of Substances in the REACH Annex XIV

Beceived MDSs Ingredients Supplier Data Recipient data Analysis	MDS Request				
🔁 🔁 Filter GADSL 🛛 🗹 🔍 GADSL					🖄 Regulation Wizard
		Chromium-trioxide	13(b) - Corro preventive cc 24 related to bol assemblies fo applications [-	atings t and nut r chassis	
 ► ► ▼ ■ 0.19mg Chromate film black Zn ▲ 0.0 - 0.5% Misc., not to declare 	Remark	Mass of the layer 1,6 g, containing CrVI)	/m²; Chromatized Zinc ar	d Zinc Alloy Coatings	(made by solutions
 0.0 - 0.4% Silver Rest 44.05% Zinc (metal) 31.0 - 38.0% Chromium-oxide 18.0 - 24.0% Chromium-trioxide 	Biocidal Product Regul History not ava Still in production? -				Regulation Wizard
REJECTION REASON:	Basic Substance		Added for biocidal property?	Biocidal property desired in finished article/product?	Product type
The part contains occurrences of Chromium-trioxide,					

CAS No. 1333-82-0 listed in REACH Annex XIV. The sunset date has passed and the substance is not allowed to be used in EU without authorization. Because of its very hazardous properties, Volvo expects that the substance will be phased out globally. You shall contact your buyer and initiate a PPCN. If you have an authorization please send a copy to volvogroup_imdsreport@i-ntrinsic.com.

Regulatory Inform	lation			
Biocidal Production?	not available			Regulation Wizar
		Added for biocidal	Biocidal property	
Basic Substance		property?	desired in finished article/product?	Product type
✓ REACH Annex >	CIV: Material not available		article/product?	Product type
✓ REACH Annex >	not available		article/product?	
✓ REACH Annex > History	not available		article/product?	





Substance name O	EC No. O	CAS No. 🗘	Entry No. 🗘	Latest application date 🗘	Sunset Date 🗘	
Bis(2-ethylhexyl) phthalate (DEHP)	204-211-0	117-81-7	04	21/08/2013	21/02/2015	0



7. Presence of Substances in the RE	ACH Annex XIV					
> 0 > 0	- % Application Component Application Basic Substance % (MAX) Application [ID] Distilates (petroleum), solvent- refined heavy paraffnic Remark Remark Remark Remark Biocidal Product Regulation History not available Stil in production? -					
 4.3g NBR 31.0 - 35.0% 2-Propenenitrile, polymer with 1,3-butadiene 30.0 - 33.0% Carbon black 	Basic Substance Added for biocidal property desired in finished article/product? Product type Zinc oxide * - - - *) no regulatory information available, because the reference is not included in this version of the regulatory information - -					
 10.0 - 14.0% <u>Di-(2-ethylhexyl)phthalat</u> 1.0 - 3.0% Talc 1.0 - 3.0% Distillates (petroleum), solvent-refined heavy paraffinic 1.0 - 4.0% Styrene polymer with 1,3-butadiene 1.0 - 4.0% Zinc oxide 	REACH Annex XIV: Material Action Wizard History not available Still in production? - EEA produced -					
 ♦ 1.0 - 4.0% N-tert-Butylbenzothiazole-2-sulfenamide ♥ ♥ ♥ ♥ ♥ ♥ ♥ 	Basic Substance Authorization status Di-(2-ethylhexyl)phthalat * - *) no regulatory information available, because the reference is not included in this version of the regulatory information					

REJECTION REASON:

Material NBR (affected component: X (PN XXX)) -The part contains occurrences of Di-(2-ethylhexyl)phthalat, CAS No. 117-81-7 listed in REACH Annex XIV. The sunset date has passed and the substance is not allowed to be used in EU without authorization. Because of its very hazardous properties, Volvo expects that the substance will be phased out globally. You shall contact your buyer and initiate a PPCN. If you have an authorization please send a copy to **volvogroup_imdsreport**@i-ntrinsic.com.

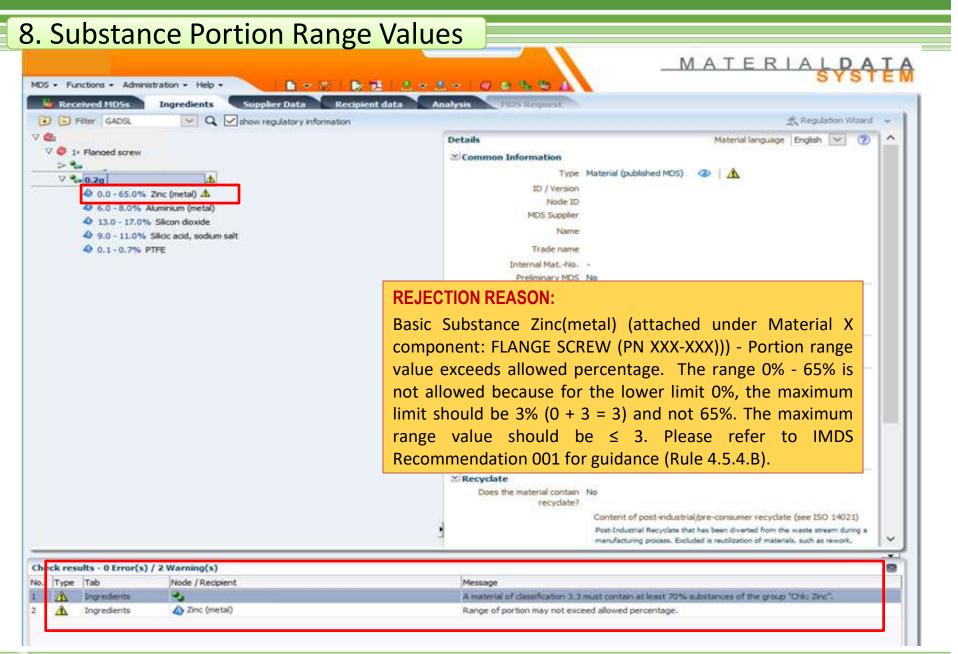
8. Substance Portion Range Values



8. Substance Portion Range Values

MATERIALD SYS	ATA
MDS ▼ Functions ▼ Administration ▼ Help ▼ WDS ▼ Functions ♥ Administration ▼ Help ▼ WDS ▼ Functions ♥ Administration ▼ Help ▼ WDS ♥ Functions ♥ Administration ♥ Help ▼ WDS ♥ Functions ♥ Administration ♥ Help ♥ WDS ♥ Functions ♥ Functions ♥ Administration ♥ Functions ♥ Administration ♥ Functions ♥ Functions ♥ Administration ♥ Functions ♥ Functions ♥ Functions ♥ Functions ♥ Functions ♥	
Improvements Supplier Data Rec ant data Analysis PDS Request Improvements Supplier Data Rec ant data Analysis PDS Request Improvements Show regulatory information Improvements Improvements Improvements	zard 👻
∇ 🗞 Details	
▷ 🥥 1× Flanged screw 🗹 Common Information	
Type Component (MDS)	
EXECUTE CHECK Description Flanged screw	
Part/Item No.	
Preliminary MDS No	
⊻Dates	
Create Date 7/17/2017 ?	
Release Date 9/29/2017 ?	
Check Date 7/17/2017 ⑦ 🕞 Recommendation	
✓Amounts and Weights	
Quantity 1 Measured weight per item 52.0 g	
Calculated weight per item 52.0 g	
Deviation 0.0%	







8. Substance Portion Range Values

To identify, correct and avoid this type of rejection:

- To identify this error, click the "Execute Check" functionality in IMDS.
- A "warning message" about the presence of substances with incorrect portion range in the material will appear in the "Check results" window. Double-click on the warning

message to get to the affected basic substance.

3. Correct the reported portion range by referring to the IMDS Recommendation 001.

IMDS Recommendation Rule 4.5.4.B:

If the portion type "range" is selected, the following maximum portion ranges apply:

Portion: from X % to Y %	Maximum M = Y % – X %
0 ≤ X ≤ 7.5	M ≤ 3
7.5 < X ≤ 20	M ≤ 5
20 < X ≤ 100	M ≤ 10

If ranges are used (example: 2 % - 8 %), the smaller number defines the row and M value in the table to be used. Consequently, the range 2 % - 8 % is not allowed because for the lower limit 2 %, the maximum Y value is 5 (2 + 3 = 5). *Exemptions from this rule:*

A basic substance as part of a material that is defined with a larger range in a public norm (although in this case, the respective material MDSs published by the IMDS Steering Committee should preferably be used when available).

A basic substance as part of a material is defined with a larger range in an inhouse specification (see 4.4.2 In-house Norms). This in-house specification must be part of the delivery conditions.

Basic substances in MDSs published by the Steering Committee (Supplier: IMDS-Committee, ID 423; IMDS-Committee/ILI Metals, ID 18986 or Stahl und Eisen Liste, ID 313).

Materials containing substances with a natural range higher than those given in the table.



9. Preliminary Datasheets



9. Preliminary Datasheets MATERIALDA MDS - Functions - Administration - Help -●○○ ●施 きっきゃ ○ ● をや Received MDSs Ingredients Supplier Data Recipient data Filter GADSL Show regulatory information Regulation Waard Details Material language English 🖂 (\mathcal{T}) Common Information Type Material (published MDS) CD) V to 50.00 Plastics (in polymeric compounds) 1D / Version Rest 100.0% not yet specified, not to declare. Node ID MDS Supplier Plastics (in polymeric compounds) 2 Name Trade name - (7) If you tick the box, this MDS will be a prelminary version. Prelminary MDS Yes Warningf You will need to send later a final version. ≥ Dates Create Date 1/17/2005 (2) nendation **REJECTION REASON:** Material Plastics (affected component: X (PN XXX-XXX)) -Preliminary data in a non-preliminary datasheet is not acceptable. Please answer NO on the "Development Sample Report" for final datasheets otherwise, indicate in the compounds) description field that this part is a preliminary datasheet if it is a preliminary datasheet. Please refer to IMDS Recommendation 023 for guidance. v A A A AND ADDA . Check results - 0 Error(s) / 0 Warning(s) 102 No. Type Tab Node / Recipient Message

The MDS successfully passed all checks.



9. Preliminary Datasheets

To identify, correct and avoid this type of rejection:

1. To identify this error, click the "Execute Check" functionality in IMDS.

2.A "warning message" about the presence of "Development Sample datasheet" will appear in the "Check results" window. Double-click on the warning message to get to the affected datasheet.

3. Correct the affected material as necessary. Ensure that the "Development Sample Report" field is answered "NO". Perform the "Execute Check" functionality in IMDS. The "warning message" should disappear after making the correction

Important Note: This type of error is not detectable by the system through its checking functionality. Therefore, it is very important that "<u>manual checking</u>" must be done to avoid this type of rejection

IMDS Recommendation Rule 4.4.4.A:

If the material is marked as "Preliminary" (shown by checking the box, Development Sample Report), whatever parent node it is attached to must also be marked "Preliminary".

IMDS Recommendation Rule 4.4.4.B:

The use of "Preliminary" material MDSs (including the ProtMats published by the IMDS Steering Committee) is allowed solely in "Preliminary" MDSs, pro-vided there are no GADSL (suppliers to Renault: BGO list) substances contained in the material.

IMDS Recommendation Rule 4.4.4.C:

The use of "Preliminary" material MDSs in final MDSs (representing production parts) is forbidden. In a final MDS (during PPAP/Initial Sample Report), the material composition must be known and has to be declared in accordance with this document. entered.



Additional Information



1. Polymeric Parts Marking



10. Polymeric Parts Marking

😥 🔁 Filter GADSL 🔍 🔍 🗋 show regulatory information			\land Regulation Wizard 👻
 ▷ ○ ○ □ □ □ □ □ □ ■ ■	^	Details ✓ Common Information Type Component (MDS) Description mirror plate Part/Item No. Preliminary MDS No ✓ Dates	
Component mirror plate (PN XXX-XXX) - Not in compliance with STD 103-0002, please contact your buyer responsible. Part is not appropriately marked to comply with recycling regulationsISO standards. Please check the actual part. If the part is marked, answer "Yes". If not, kindly verify with the buyer if the part is in compliance with Volvo Group's requirement for polymeric parts marking STD 103-0002.		Create Date 8/18/2020 ⑦ Check/Release Date 8/21/2020 ⑦ 🕞 Recommendation ✓ Amounts and Weights Quantity 1 Measured weight per item 500.0 g Calculated weight per item 500.0 g Deviation 0.0% ⑦ Parts Marking Polymeric part(s) marked No (Parts not marked as required.) ⑦ 👔	
Check results - 0 Error(s) / n Warning(s) No Type Tab Node / Recipient Mession	v -		

Weight of contained polymeric materials requires polymeric parts marking question to be answered with "Yes" or "Not Applicable"

v



Ingredients

mirror plate

10. Polymeric Parts Marking

To identify, correct and avoid this type of rejection:

- 1. To identify this error, click the "Execute Check" functionality in IMDS.
- 2. A "warning message" about the unanswered "Polymeric Parts Marking" field will appear in the "Check results" window. Double-click on the warning message to get to the affected component.
- 3. Please investigate if the part is actually marked and answer accordingly. "Yes" should be selected if the actual physical part has been marked. "No" should be chosen if there is a parts marking requirement (e.g. on the design drawing), but the part is not marked. "Not Applicable" can be selected if weight, dimensioning, or surface does not permit marking.
- 4. Correct the error on the "Polymeric Parts Marking" field by answering it by either Yes, No or Not Applicable . Perform the "Execute Check" functionality in IMDS. The "warning message" should disappear after making the correction.

Marking of polymeric parts:

If a component contains at least one polymeric material (classification 5.x), an additional question appears in the component details:

The answer is mandatory if the component contains

- 1) more than 100g of polymeric materials with the classification 5.1.x or
- 2) more than 200g of polymeric materials with the classification 5.3.
- Important Note: It is very important to check whether the answer to the polymeric parts marking field is appropriate to the described part.



2. How to update Biocidal Product Regulation



🔁 Filter GADSL 🔍 🔍 🖓 show r	egulatory information			🛃 Regulation Wizard
Front Axle	^ Details		Edit own Regulatory Information	Socidal Product Regulation
7 🥥 1:	⊠ Common	Information	View supplied Regulatory Information	REACH Annex XIV: Material
		Type Comp	onent (received MDS)	REACH Annex XIV: Semi-/Component
		ID / Version		
V 👩		Node ID		
▷ 🌯 0.02g		Node count		
⊳ Ø 1=		MDS Supplier		
≥ 0 1s		Description Front	Axle	
>0 2		Part/Item No.		
		Preliminary MDS No		
	∠ Dates.		27/ 4 /	
		Create Date 8/25/20	20 🕜	
>02		heck/Release Date 8/25/20	20 🕐 🔓 Recommendation	
> 0 1	⊻ Amounts	and Weights		
> 0 2		ed weight per item 663096	i.84 g	
D 💙 1*		ed weight p+ item 663096		

At the upper right side of your datasheet, you can click on the <u>Regulatory Wizard</u> tab. You will then have 3 options, whether it is for Biocidal Product Regulation (BPR), Reach Annex XIV: Material and Reach Annex XIV: Semi-/Component.

When you click BPR, you have two options, one is "Edit Own Regulatory Information". If you manufacture the material containing the potential biocide, this will be your option. But if you are supplied by a material manufacturer containing the potential biocide, you can click "View Supplied Regulatory Information".



egulation Wizard View 🔻 😥 📴 Filter	~								
	ID / Version	Part/Item No.	CAS No.	EINECS/ELINCS No.		Added for biocidal property?	Biocidal property desired in finished article/product?	Product type	Request upda regulatory information
Front Axle	900132190 / 3	23633134			1	0. 0.127	(10.13)		Ŷî.
🗸 🥥 Body.									
🗸 🍫 e-plate Ag (electrodepositec	757767 / 1								
The material classification 4.									
🗸 🌯 High Copper Alloy	158414641 / 3	UNS C19010							G
The material classification 3.:									
🗸 🍫 adhesive	932511 / 12								C
no more BPR substances incluc									
🗸 🍫 NBR Nitrile Butadiene Rubber					Yes				
2 Zinc oxide			1314-13-2			No			
V 🔩 NBR		902			Yes				D
2 Zinc oxide			1314-13-2			No			
A Ziram			137-30-4			No			
V 🌯 NBR		878			Yes				
🔌 Ziram			137-30-4			No			
	<								3
1									
				< P	revious > I	Vext 📴	Request update of re	gulatory informatic	on All MDSs/Modu

When you view supplied regulatory information, this box appears. You can click "Request Update Of Regulatory Information" for all or one by one for each material listed on the wizard.



Thank you!

