IMDS Recommendation IMDS 004

Textiles/Fibres

1 Purpose

This recommendation outlines the general requirements for the creation of Material Data Sheets (MDS) for fibre products. Products can be e.g. textiles, fabrics, fleece which are used for seats or seat belts. The recommendation covers also fibre reinforcements for plastic (see Recommendation IMDS 010) or elastomer components like tires or fuel hoses (see Recommendation IMDS 003). The recommendation describes **Man-made Fibres** and **Natural Fibres** in accordance with ISO 2076 and ISO 6938. It shall be used to report comprehensive fibre product compositions thus enabling the automobile manufacturers to demonstrate compliance with legal and proprietary requirements. The description of a fibre material product should include the base fibre substances, pigment portions, flame retardants or water/dust repelling substances as they remain in/on the product. Substances which do not remain on the product, e.g. if they are washed out in a washing process, need not be declared.

2 References

IMDS 001, IMDS 003 (Elastomers), IMDS 010 (Polymers), IMDS 017 (FRPs, Fibre reinforced plastic products, Thermosets), ISO 2076 (Man-made fibres), ISO 6938 (Natural fibres)

3 Definitions

3.1 Base Material (Fibre)

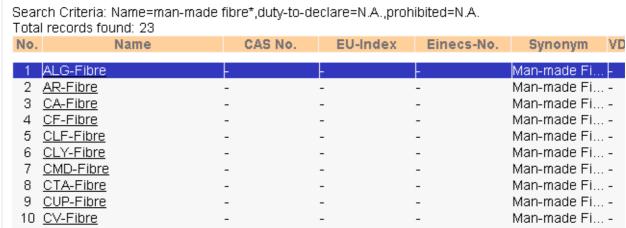
For textiles often man-made fibres or natural fibres are used. You can find these substances in the IMDS-substance list by searching "man-made fibre" or "natural fibre".



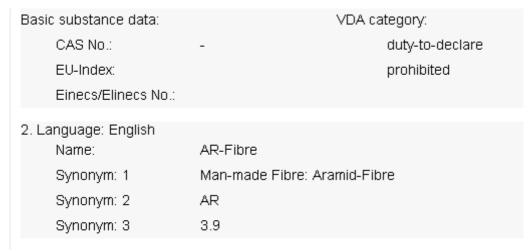
Search for "Man-made fibre" in the substance list of IMDS.

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Result: List of 23 different kind of man-made fibres in accordance with ISO 2076.



Aramid-Fibre as an example for a man-made fibre



Search for "Natural Fibre" in the substance list of IMDS.



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Search Criteria: Name=natural fibre*,duty-to-declare=N.A.,prohibited=N.A. Total records found: 60

No.	Name	CAS No.	EU-Index	Einecs-No.	Synonym VD
4	Alfa-fibre	_	_	_	Natural Fibre:
5	Aloe-fibre	-	-	-	Natural Fibre:
6	Alpaca-wool	-	-	_	Natural Fibre:
7	Anaphe-fibre	-	-	-	Natural Fibre:
8	Angora-wool	-	-	-	Natural Fibre:
9	Arctic Fox-hair	-	-	-	Natural Fibre:
10	Bear-hair	-	-	-	Natural Fibre:
11	Beaver-hair	-	-	-	Natural Fibre:
12	Bluish Dogbane-fibre	-	-	-	Natural Fibre:
13	Broom-fibre	-	-	-	Natural Fibre:
14	Byssus-fibre	-	-	-	Natural Fibre:
15	<u>Camel-hair</u>	-	-	-	Natural Fibre:

Result: List of 60 different kind of natural fibres in accordance with ISO 6938

Please note that natural fibres are often called ",?-hair" or ",?-wool" and not only ",?-fibre".

3.2 Pigments

In many cases the fibres have a content of pigments (man-made fibres) or they are coloured by a colouring agent. The content of this agent/pigments which remains on (or in) the fibre has to be declared. If the substance is part of the GADSL-list, it has to be declared with his scientific name (Example: *Cobalt chromite blue spinell* as pigment).

Basic substance data:	VDA category:		
CAS No.:	68187-11-1	✓ duty-to-declare	
EU-Index:	-	□ prohibited	
Einecs/Elinecs No.:	269-072-0		
Language: English			
Name:	Cobalt chromite blue green spinel		
Synonym: 1	C.I. Pigment Blue 36		
Synonym: 2			
Synonym: 3			

Cobalt chromite blue spinell as pigment. This pigment has to be declared on the substance level.

Otherwise, if the substance is not part of the GADSL-list, the substance can be declared as wild card "Pigment portion". In this case the **sum** of "wild cards" must **NOT exceed 5%** of the material (colored fibre). In the case you have different types of colour (e.g. light and dark), you can describe the material by using the highest content of colour/pigments (worst case).

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3.3 Further Additives

Additives like flame retardants or water/dust repelling substances as they remain on the product have to be declared. If they are part of the GADSL-list, they have to be declared with their scientific name. Otherwise the following wild cards can be used:

Search Criteria: CAS No.=system,duty-to-declare=N.A.,prohibited=N.A.

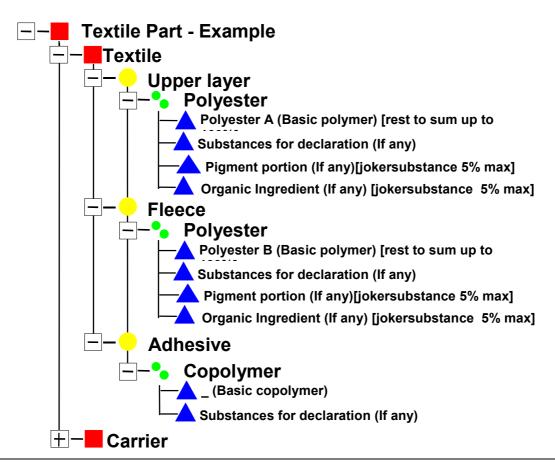
Total records found: 9

No. Name CAS No. EU-Index Einecs-

No.	. Name	CAS No.	EU-Index	Einecs-No.	Synonym
4	Clause Detaudent	t			
1	<u>Flame Retardant</u>	system	system	system	-
2	Further Additives	system	system	system	Additives -
3-	Impactmodifier	eyetem	system	system	
4	Inorganic Ingredient	sýstem	system	sýstem	Mineral Mater
5	Misc.	system	system	system	Misc.
6	not yet specified	system	system	system	
7	Organic Ingredient	system	system	system	Natural Ingre
8	Pigment portion	system	system	system	colorant -

Wild cards which can be used to describe non declarable substances of the GADSL-list. Please make shure that the sum of the wild cards doesnt exceed 5% of the material (by weight).

4 Examples





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5 This document is recommended by

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6 Release and Revisions

6.1 Release

The recommendation was first approved and released on February 2003.

6.2 Revision

Rev.	Date	Description / Reason	Originating Organization / Committee
02	June 2005	ILRS to GADSL	IMDS Material Services
01	July 2004	Man-made fibres and natural fibres added as basic substances in the data base, editorial changes.	IMDS-SC

7 Cooperation and Assistance

Expert group Textil Michael Pöhlig, Textil Association Fr. Dr. Oldenburg-Nazaruk, BMW Dr. Helmut Traiser, EDS