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REACH Compliance in the Automotive Industry

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DAF Trucks**

History: Automotive Substance legislation

- End-Of-Life Directive Vehicles (ELV 2000/53/EC)
 - Prove recyclability above (progressive) target
 - 2015: re-use and recovery 95% ; re-use and recycling 85%
 - Prove absence of heavy metals
 - States shall ensure that materials and components of vehicles put on the market after 1 July 2003 do not contain lead, mercury, cadmium or hexavalent chromium other than in cases listed in Annex II under the conditions specified therein.
 - Limited to passenger cars & vans <3,5t (cat M1, N1)

Automotive compliance to ELV directive

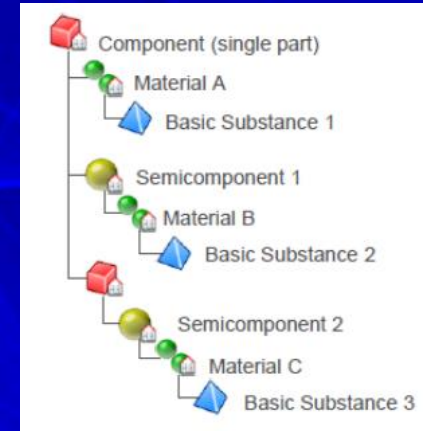
- Initiative by consortium of 9 OEM's → currently 51 OEM's
- June 2000: Setup of International Materials Data System (IMDS, www.mdssystem.com)
 - Online database for materials declarations from the complete supply chain
 - From 2005 onwards also includes declaration of GADSL substances
 - (Global Automotive Declarable Substance List, www.gadsl.org)
 - Since inception of REACH, includes REACH SVHC List
- *Challenge:* supplier cooperation (down the supply chain)
 - Often coupled to PPAP to enhance supplier responsiveness

PS... Other online material declaration database systems:

- BOMcheck : mostly electronics industry
- CAMDS = China Automotive Materials Data System

IMDS basics

- Request your suppliers to fill in IMDS sheet per part – or part family
- Complete supply chain involved. Cascade down to next Tier.
- Use BOM structure (flat BOM allowed for for instance PCB's)
- Generic base materials (i.e. steels, aluminium, dry coating compositions etc) already available in IMDS
- Suppliers can use max 10% wildcards/confidential substances, those cannot be on GADSL or REACH SVHC List
- No visibility of Supply Chain beyond 1st Tier
- Free of Charge for Suppliers; OEM's pay subscription fees



IMDS example - bolt

Bolt

Bolt material

EC coating

Passivation

Sealer

CAS #

Weight

SVHC

Tree Level	Description Article Name Name Substance name Bout	Part/Item No. Item-/Mat.-No. Material-No. CAS No.	OS ID / Version	Quantity	Weight [g]	Portion [g]	Portion (from - to) [%]	Classif. GADSL, SVHC	Parts Marking Recycle Product/Consumer Application [ID]
└-3					20				
└-4	08 (Cold rolled quality carbon steel sheets and strips)		147801007 / 1						No
└-5	Carbon	7440-44-0				0.085	0.05 - 0.12		
└-5	Silicon	7440-21-3				0.27	0.17 - 0.37		
└-5	Iron	7439-89-6				98.81			
└-5	Manganese	7439-96-5				0.5	0.35 - 0.65		
└-5	Chromium	7440-47-3				0.05	0 - 0.1		
└-5	Nickel	7440-02-0				0.125	0 - 0.25	D	Not applicable [34]
└-5	Copper	7440-50-8				0.125	0 - 0.25	D	
└-5	Phosphorus	7723-14-0				0.0175	0 - 0.035		
└-5	Sulphur	7704-34-9				0.0175	0 - 0.035		
└-4	Z15 FBR_ZnFe Coating+ Cr III White Pas.+Sealer	Z15 FBR_ZnFe Coating+ Cr III White Pas.+Sealer	570609516 / 1		0.005			3.3	No
└-5	e-plate ZnFe (electrodeposited Zinc-Iron Coatings)		213579 / 4			98.99		3.3	
└-6	Carbon	7440-44-0				0.15	0 - 0.3		
└-6	Nitrogen	7727-37-9				0.2	0 - 0.4		
└-6	Iron	7439-89-6				0.65	0.3 - 1		
└-6	Zinc (metal)	7440-66-6				99			
└-5	Passivation thick layer Zn/ZnFe/ZnNi		204690180 / 1			0.01		7.3	
└-6	Misc., not to declare	system				1	0 - 2		
└-6	Cobalt	7440-48-4				1.2		D	
└-6	Zinc (metal)	7440-66-6				38.6			
└-6	Chromium-oxide	11118-57-3				59.2			
└-5	Coating film inorg./org. PAK (Sealant inorganic/organic with content of polyacrylat)		974826 / 6			1		6.1	
└-6	Silicon dioxide	7631-86-9				35	20 - 50		
└-6	PAK	-				65			

REACH Legislation Art 33 (SVHC communication)

- REACH Text: Communication required if article contains >0,1% SVHC
 - B2B : immediate
 - End-customer: upon request within 45 days
- Definition of ‘article’ as per European Court of Justice sept 2015:
 - *“each of the articles, incorporated as a component of a complex product, is covered by the relevant duties to notify and provide information, when they contain an SVHC in a concentration above 0.1% of their mass.”*
- Automotive implementation of ECJ ruling:
 - Communication to customers if a part contains >0,1% SVHC in a so-called node (=sub-(sub-sub- ..)-component) in its IMDS Sheet

REACH communication Automotive

- Supply chain to OEM's: via IMDS
- OEM to customers
 - Statement at point of sales of vehicle
 - Statement at point of sales of Part

Example Vehicle SVHC Communication

VOLVO V90 - CANDIDATE LIST SUBSTANCE INFORMATION (REACH ARTICLE 33)



Updated 25-11-2019

The REACH Regulation (Reg. EC 1907/2006) Article 33.1 is aimed at enabling professional customers of supplied products to take any relevant risk management measures that may arise from the presence in articles of Substances of Very High Concern (SVHCs) listed on the current Candidate List (CL) for Authorisation, in order to guarantee their safe use.

Presence of Candidate List Substances

To the best of our knowledge based on information received from our supply chain and our own product data, the Candidate List substances present in component articles at greater than 0.1% w/w are those shown on the relevant "Candidate List Substances Table" for the specific vehicle.

CL Substances Table

Candidate List substances present in articles at greater than 0.1% by weight	CAS No
C,C'-azodi(formamide)	123-77-3
N,N-Dimethylacetamide	127-19-5

Example.. Part of tekst from:

<https://www.volvocars.com/ph/support/topics/use-your-car/licenses-and-type-approvals>

15 SVHC's in total in a Volvo V90

Example Parts SVHC Communication

Home ← PC » VW » TIGUAN ALLSPACE (BW2), 03/17 - » 2.0 TDI 4motion, 06/17 -, 176kW »
Q Search result » **Joint Kit, drive shaft**

SVHC

VW TIGUAN ALLSPACE (BW2) 2.0 TDI 4motion, 06/17 -

771 0567 30 Joint Kit, drive shaft



General information

EAN	4014870393670
Article status	Normal
Packing Unit	1

Article information

Fitting Position	Front Axle Wheel Side
6-Speed Manual Transmission	
Material	Thermoplastic
SVHC	No SVHC present!

OE References

VW	3C0 498 099
VW	3C0 498 099 X
VW	3C0498099
VW	3C0498099X
VW	5N0 498 099
VW	5N0 498 099 AY

PC

VW TIGUAN ALLSPACE (BW2) 2.0 TDI 4motion, 176kW

Year of Construction	06/17 -
Engine Output [HP/kW]	240/176
Fuel Type	Diesel
Displacement [cc]	1968
Engine Code	CUAA
Number of Cylinders	4
TecDoc Vehicle No.	128193

Add to comparison

Add to watch list

Print view

Communication by Automotive supplier Schaeffler: <https://webcat.schaeffler.com/>

Example Parts SVHC Communication

Product details [Print data sheet](#) [Recommend page](#)

Socket

Article number: 8JB 001 935-001

Superseded by: [8JB 001 935-031](#)

Images



Description

Brief information
only supplied in parts list

General

EAN: 4082300074482

Criteria

Protection Type (IP Code):	IP54
Capacity at 24V:	300A
Getters:	None
Plug Type:	Crimp Contact; Soldered Pin Contact
SVHC:	68648-93-1; 1,2-benzenedicarboxylic acid, di-C6-10-alkyl...

Communication by Automotive supplier Hella: <https://cat.hella.com/>

Upcoming related Legislation

Waste Frame Directive



SCIP is the database for information on **Substances of Concern** in articles as such or in complex objects (**Products**) established under the Waste Framework Directive (WFD).

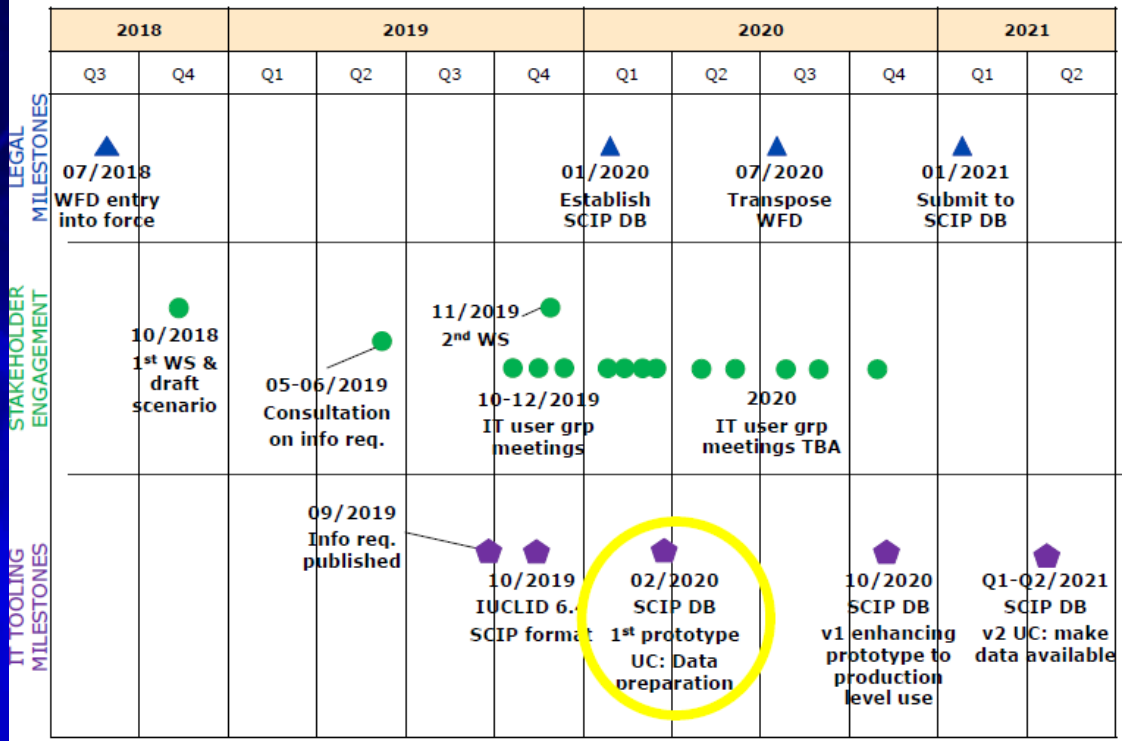
Companies supplying articles containing substances of very high concern (SVHCs) on the Candidate List in a concentration above 0.1% weight by weight (w/w) on the EU market have to submit information on these articles to ECHA, as from 5 January 2021. The SCIP database ensures that the information on articles containing Candidate List substances is available throughout the whole lifecycle of products and materials, including at the waste stage. The information in the database is then made available to waste operators and consumers.

To support the circular economy:

- **SVHC content of articles to be put in new SCIP Database as per Jan '21**
- **Industry input ongoing**

SCIP database planning EU

Overall timelines



Industry Feedback

i.e. from German industry Associations to German Bundesamt Umwelt

1) SCIP requires much more info as compared to REACH Art 33

2) For Automotive Industry: current IMDS tool by far insufficient.

Sweeping changes needed in IMDS including reentry of current data

Industry lobby ongoing.. Also in NL

4.2 Pflichtfelder in der SCIP-Datenbank

für die oberste Erzeugnisebene und Untererzeugnisse

NEU!

Concern element

Candidate List substance	✓
Concentration range	✗
Candidate List version	✗
Material category (EuPCS)	✗
Mixture category	✗

Safe use information

Safe use instruction text	✓
Flag "No need to provide safe use information [...]"	✓

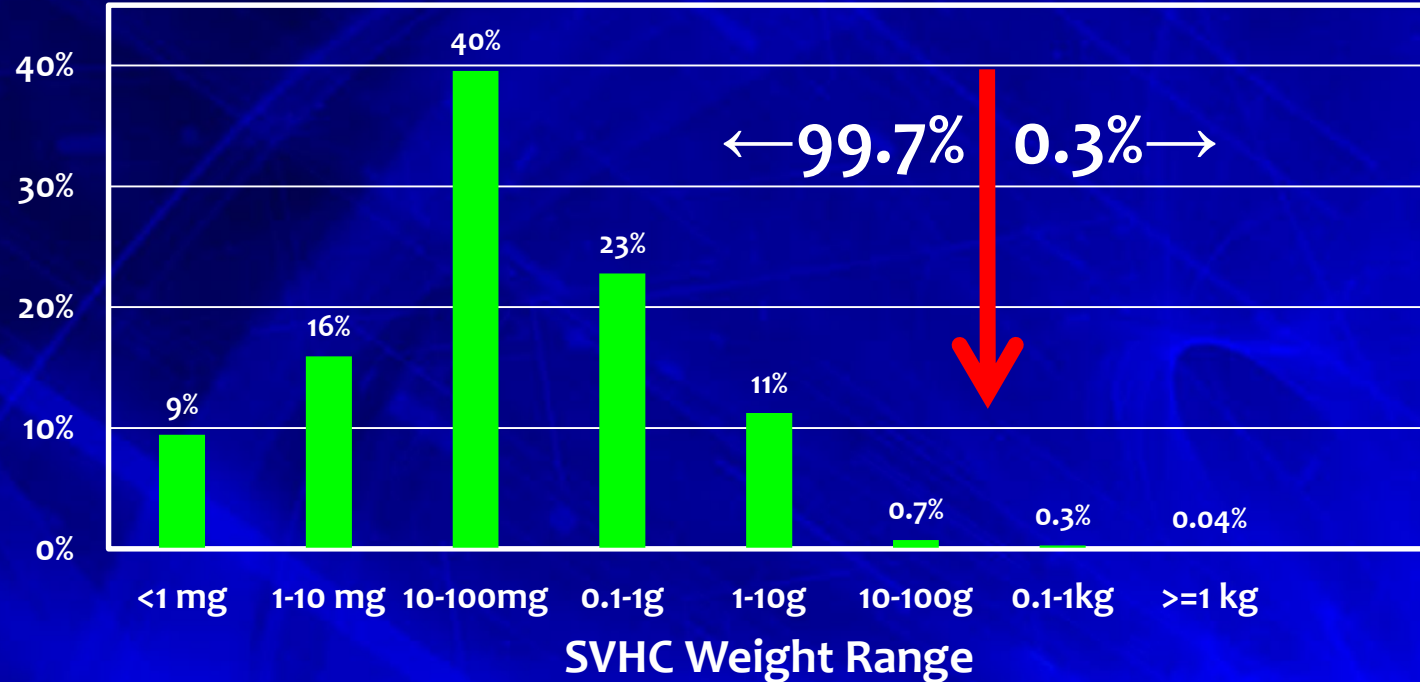
Article identification

Article name	✓
Primary article identifier	✗
Article category (CN/TARIC code)	✗
Production in European Union	✗
Linked article	✗
Number of units	✗

✓ Notwendig zur Erfüllung der AbfRRL, Artikel 9(1)(i)
✗ Nicht notwendig zur Erfüllung der AbfRRL, Artikel 9(1)(i)
aber Löschung bzw. optionale Angabe von ECHA angekündigt

IMDS Data → Foreseen SCIP input

% of Total Database Entries



In-depth SCIP data will not be used

easily identifiable and recyclable

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