

# Prohibition and declaration of substances

## in products, components, materials and preparations

Folder: N 2580 Prohibition and declaration of substances  
 Technical responsibility: vom2si C/PS (400)



**BOSCH**

Person in charge: lpd2si C/CTN2 (497) Replaces edition: 2007-04  
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In case of doubt the original language edition of this Bosch-Norm applies. The comma is used as decimal marker.					

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## 1 Scope and purpose

This Bosch-Norm applies to all products, components, materials and preparations that end up in our product, in addition to N 2580-1, and is applied in Business Sectors Industrial Technology (UBI) and Consumer Goods and Building Technology (UBG).

## 2 Prohibition and declaration of substances

Compliance with substance restrictions and identifications of the following standards is required:

The **prohibited** substances (classification "P") of the "**Global Automotive Declarable Substance List (GADSL)** version 4.0 (2008-01-18)" (German version **VDA 232-101**) apply to the whole Bosch Group, independent of the application case.

Link: <http://www.gadsl.org>

Exception: For products that are subject neither to the EU Directive on end-of-life-vehicles **2000/53/EC** nor to the EU Directive RoHS **2002/95/EC**, the use of Cr(VI) and Pb is still permissible.

Material restrictions acc. to EU-RoHS (**2002/95/EC**, always in the valid edition) "Restriction of the use of certain hazardous substances in electrical and electronic equipment" apply worldwide to all products, components, materials and preparations that come under the EU-RoHS area of validity.

Link: [http://europa.eu.int/comm/environment/waste/weee\\_index.htm](http://europa.eu.int/comm/environment/waste/weee_index.htm)

The EU Directive **2006/66/EC** on batteries and accumulators has to be applied worldwide.

Exception: For Bosch products that are only distributed outside the European Union it is permissible to deviate from the directives **2002/95/EC** and **2006/66/EC**. The deviation approval is notified to the supplier explicitly in the order.

In the Business Sectors Industrial Technology (UBI) and Consumer Goods and Building Technology (UBG) the **obligation to declare** is restricted to the substances listed in Table 1. For all deliveries generate the declaration using the form sheet in appendix A of this Bosch-Norm.

If the above stated laws define explicitly any exception rules, these may be applied. Substances that acc. to the above regulations are generally prohibited, however may be applied following the exception rules, have always to be declared in addition to the substances identified in Table 1.

### 2.1 Bosch requirements

Bosch requirements made in addition to GADSL and EU-RoHS are listed in Table 1.

Table 1 Bosch requirements for the Business Sectors Industry (UBI) and Consumer Goods (UBG)

Material designation	CAS-No.	D/P <sup>1</sup>	Notes and supplementary rules as well as limit values deviating from 0,1 % <sup>2</sup>
<b>Only for lubricants</b>			
Aromatics in DMSO soluble aromatics content in mineral oil products		P	3 % in lubricant base oils; determination based on IP 346
Chlorine (Chlorine total)		P	10 ppm, calculated as element, in accordance with DIN ISO 15597 (RFA)

<sup>1</sup> Obligation to declare (D) and / or Prohibited (P)

<sup>2</sup> The method of determination needs to be listed

Material designation	CAS-No.	D/P <sup>1</sup>	Notes and supplementary rules as well as limit values deviating from 0,1 % <sup>2</sup>
Tricresylphosphate with esterified o-kresole	78-30-8	P	
<b>For all substances</b>			
2,2',6,6'-Tetrabrombisphenol A (TBBPA)	79-94-7	D	e.g. flame retardants in printed circuit boards, plastics
Arsenic and its compounds		D	0,15 % e.g. lead and copper alloys, metal adhesives, soft solder, color pigments
Benzo(a)pyrene, (other PAKs under "P")	50-32-8	P	1 ppm
Decabromdiphenylether (decaBDE)	1163-19-5	D P <sup>3</sup>	e.g. flame retardants in printed circuit boards, plastics
Hexabromocyclododecane (HBCDD)	25637-99-4 3194-55-6	D	e.g. flame retardants in printed circuit boards, plastics
Phtalates (DBP, DEHP, BBP, DINP, DIDP, DNOP)	84-74-2, 117-84-0, 85-68-7, 28553-12-0, 26761-40-0, 117-84-0	D	Softening agents in plastics
Polycyclic aromatic hydrocarbons (PAKs), total, see Section 3, Table 2	see Section 3, Table 2	D	10 ppm, 16 PAKs acc. to EPA <sup>4</sup> , (for consumer goods, e.g. Power Tools) 10 ppm, 8 PAKs acc. to GADSL (for all other products (see Section 3, Table 2 "PAKs sorted by EPA and GADSL")

### 3 List of PAKs sorted by EPA and GADSL

Table 2 List of PAKs sorted by EPA and GADSL

16 PAKs	CAS-No	8 PAKs acc. to GADSL	Appendix I of the Directive on hazardous substances 67/548/EEC
Acenaphthene	83-32-9		
Acenaphthylene	208-96-8		
Anthracene	120-12-7		
Benz(a)anthracene	56-55-3	Benz(a)anthracene	T, toxic; Carc. Cat.2, substances, that shall be considered carcinogenic to people
Benzo(b)fluoranthene (Benz(e)acephenanthrylene)	205-99-2	Benz(e)acephenanthrylene (Benz(b)fluoranthene)	T, Carc. Cat.2

<sup>3</sup> Effective 2008-07-01, prohibited for products that come under the validity of the EU RoHS

<sup>4</sup> EPA = Environmental Protection Agency

16 PAKs	CAS-No	8 PAKs acc. to GADSL	Appendix I of the Directive on hazardous substances 67/548/EEC
Benzo(k)fluoranthene	207-08-2	Benzo(k)fluoranthene	T, Carc. Cat.2
Benzo(ghi)-perylene	191-42-2		
Benzo(a)pyrene	50-32-8	Benzo(a)pyrene	T, Carc. Cat.2
Chrysene	218-01-9	Chrysene	T, Carc. Cat.2
Dibenzo(a,h)-anthracene	53-70-3	Dibenzo(a,h)-anthracene	T, Carc. Cat.2
Fluoranthene	206-44-0		
Fluorene	86-73-7		
Indeno(1,2,3-cd)pyrene	193-39-5		
Naphthalene	91-20-3		Xn, harmful; Carc. Cat.3, substances, likely to be carcinogenic
Phenanthrene	85-01-8		
Pyrene	129-00-0		
	192-97-2	Benzo(e)pyrene	T, Carc. Cat.2
	205-82-3	Benzo(j)fluoranthene	T, Carc. Cat.2

## Additionally applicable documents

- ▶ N 2580-1
- ▶ GADSL, [www.gadsl.org](http://www.gadsl.org)
- ▶ EU-RoHS, [2002/95/EC](http://2002/95/EC)
- ▶ Directive on batteries and accumulators, [2006/66/EC](http://2006/66/EC)

