

YAMAHA MOTOR CO., LTD. ROBOTICS Operations April 2019

Approach to complying with EU RoHS Directive

Our approach to complying with EU RoHS Directive is explained below.

In June, 2015, Commission Delegated Directive (EU) 2015/863 was published, and four kinds of phthalates were newly added to the specified hazardous substances (lead, hexavalent chromium, mercury, cadmium, PBB and PBDE) of EU RoHS Directive 2011/65/EU.

Our products are industrial instruments listed in Category 9 "Monitoring and control instruments including industrial monitoring and control instruments" and must comply with this directive if they are launched in Europe after the directive is put into operation. We will take measures to comply with this directive by the appointed time.

■EU RoHS Directive 2011/65/EU

1. Product categories concerned (from Annex I)

* Our products are industrial instruments listed in Category 9 "Monitoring and control instruments.

1	Large household appliances.
2	Small household appliances.
3	IT and telecommunications equipment.
4	Consumer equipment.
5	Lighting equipment.
6	Electrical and electronic tools.
7	Toys, leisure and sports equipment.
8	Medical devices.
9	Monitoring and control instruments including industrial monitoring and control instruments.
10	Automatic dispensers.
11	Other EEE not covered by any of the categories above.

2. Regulated substances and state of compliance with regulations

* All our products comply with EU RoHS Directive 2011/65/EU

Substance name	Max. allowable concentration	
1. Lead	1000ppm	
2. Mercury	1000ppm	
3. Cadmium	100ppm	
4. Hexavalent chromium	1000ppm	
5. PBB (polybrominated biphenyls)	1000ppm	
6. PBDE (polybrominated diphenyl ethers)	1000ppm	

[Addition of restricted substances to regulated substances]

Commission Delegated Directive (EU) 2015/863 (notice through official gazettes in June, 2015) added the following four kinds of restricted substances to the substances regulated by EU RoHS Directive.

Substance name	Max. allowable concentration	Effective date	
		Categories 1 to 7, 10 and 11	Categories 8 and 9
1. Bis (2-ethylhexyl) phthalate (DEHP)	1000ppm	July 22, 2019	July 22, 2021
2. Butyl benzyl phthalate (BBP)	1000ppm		
3. Dibutyl phthalate (DBP)	1000ppm		
4. Diisobutyl phthalate (DIBP)	1000ppm		