



ROTTERDAM CONVENTION

SECRETARIAT FOR THE ROTTERDAM CONVENTION
ON THE PRIOR INFORMED CONSENT PROCEDURE
FOR CERTAIN HAZARDOUS CHEMICALS AND PESTICIDES
IN INTERNATIONAL TRADE



FORM FOR NOTIFICATION OF FINAL REGULATORY ACTION TO BAN OR SEVERELY RESTRICT A CHEMICAL

Country:

P.R.China

SECTION 1 IDENTITY OF CHEMICAL SUBJECT TO THE FINAL REGULATORY ACTION

1.1	Common name	Hexabromocyclododecane , 1,2,5,6,9,10-hexabromocyclododecane and its main diastereoisomers
1.2	Chemical name according to an internationally recognized nomenclature (e.g. IUPAC), where such nomenclature exists	Hexabromocyclododecane
1.3	Trade names and names of preparations	Cyclododecane, hexabromo; HBCD; Bromkal 73-6CD; Nikkafainon CG 1; Pyroguard F 800; Pyroguard SR 103; Pyroguard SR 103A; Pyrovatex 3887; Great Lakes CD-75P™; GreatLakes CD-75; Great Lakes CD75X1; Great Lakes CD75PC (compact); Dead Sea Bromine Group Ground FR 1206 I-LM; Dead Sea Bromine Group Standard FR 1206 I-LM; Dead Sea Bromine Group Compact FR 1206 I-CM.
1.4	Code numbers	
1.4.1	CAS number	25637-99-4 (hexabromocyclododecane) 3194-55-6 (1,2,5,6,9,10-hexabromocyclododecane) 134237-50-6 (α -hexabromocyclododecane) 134237-51-7 (β -hexabromocyclododecane) 134237-52-8 (γ -hexabromocyclododecane)
1.4.2	Harmonized System customs code	2903890020

1.4.3 Other numbers
(specify the numbering
system)

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1.5 Indication regarding previous notification on this chemical, if any

1.5.1 This is a first time notification of final regulatory action on this chemical.

1.5.2 This notification replaces all previously submitted notifications on this chemical.
Date of issue of the previous notification:

SECTION 2

FINAL REGULATORY ACTION

2.1 The chemical is: banned OR severely restricted

2.2 Information specific to the final regulatory action

2.2.1 Summary of the final regulatory action

Since December 26th, 2016, the production, use, import and export of hexabromocyclododecane have all been banned in China except for the specific exemption.

2.2.2 Reference to the regulatory document, e.g. where decision is recorded or published

According to Announcement No.[2016]84 by MEP and 10 other ministries :
Announcement on "Stockholm Convention on Persistent Organic Pollutants (POPs): entry into force of the amendment to Annexes A to list hexabromocyclododecane".

2.2.3 Date of entry into force of the final regulatory action

December 26th, 2016

2.3 Category or categories where the final regulatory action has been taken

2.3.1 All use or uses of the chemical in your country prior to the final regulatory action

used mainly as flame retardant

2.3.2 Final regulatory action has been taken for the category Industrial

Use or uses prohibited by the final regulatory action

The production, use, import and export of hexabromocyclododecane have all been banned in China except for the followings:

1. The production, use, import and export of hexabromocyclododecane used for expanded polystyrene and extruded polystyrene in buildings (used mainly as flame retardant) will be allowed within the validity of specific exemption. The validity of the specific exemption will be terminated in 5 years after the amendment taking into effect in China (on December 25, 2021).
2. The production, use, import and export of hexabromocyclododecane used for laboratory-scale research or as a reference standard will be allowed.

Use or uses that remain allowed (only in case of a severe restriction)

1. Expanded polystyrene and extruded polystyrene in buildings (used mainly as flame retardant)
2. Used for laboratory-scale research or as a reference standard

2.3.3 Final regulatory action has been taken for the category Pesticide

Formulation(s) and use or uses prohibited by the final regulatory action

Formulation(s) and use or uses that remain allowed (only in case of a severe restriction)

Was the final regulatory action based on a risk Yes or hazard evaluation?

No (If no, you may also complete section 2.5.3.3)

If yes, reference to the relevant documentation, which describes the hazard or risk evaluation

Summary description of the risk or hazard evaluation upon which the ban or severe restriction was based.

Is the reason for the final regulatory action relevant to human health? Yes

No

If yes, give summary of the hazard or risk evaluation related to human health, including the health of consumers and workers

Expected effect of the final regulatory action

Is the reason for the final regulatory action relevant to the environment? Yes

No

If yes, give summary of the hazard or risk evaluation related to the environment

Expected effect of the final regulatory action

Other relevant information regarding the final regulatory action

Estimated quantity of the chemical produced, imported, exported and used

	Quantity per year (MT)	Year
produced		
imported		
exported		
used		

Indication, to the extent possible, of the likely relevance of the final regulatory action to other states and regions

Other relevant information that may cover:

Assessment of socio-economic effects of the final regulatory action

Information on alternatives and their relative risks, e.g. IPM, chemical and non-chemical alternatives

Basis for the final regulatory action if other than hazard or risk evaluation

On July 2, 2016, the 21st meeting of the 12th Session of the Standing Committee of the National People's Congress reviewed and approved the amendment of enlisting hexabromocyclododecane to Annex A of Stockholm Convention on Persistent Organic Pollutants (POPs), and the amendment has entered into force since December 26, 2016 in our country.

2.5.3.4 Additional information related to the chemical or the final regulatory action, if any

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SECTION 3 PROPERTIES

3.1 Information on hazard classification where the chemical is subject to classification requirements

International classification systems **Hazard class**
 e.g. WHO, IARC, etc.

Other classification systems **Hazard class**
 e.g. EU, USEPA

EU	Acute aquatic toxicity (Category 1) Chronic aquatic toxicity (Category 1)

3.2 Further information on the properties of the chemical

3.2.1 Description of physic-chemical properties of the chemical

Property	Value	Reference
Chemical formula	C ₁₂ H ₁₈ Br ₆	
Molecular weight	Molecular weight 641.7	
Physical state	Physical state White odour less solid	
	White odourless solid	
Melting point	Ranges from approximately: 172-184 °C to 201-205 °C	Smith et al. (2005)

	<p>190 °C, as an average value, was used as input data in the EU risk assessment model EUSES.</p> <p>179-181 °C α-HBCD</p> <p>170-172 °C β-HBCD</p> <p>207-209 °C γ-HBCD</p>	
Boiling point	Decomposes at >190 °C (see also text below)	Peled et al. (1995)
Density	<p>2.38 g/cm³</p> <p>2.24 g/cm³</p>	<p>Albemarle Corporation (1994)</p> <p>Great Lakes Chemical Corporation (1994)</p>
Vapour pressure	6.3·10 ⁻⁵ Pa (21 °C)	Stenzel and Nixon (1997)
Partition coefficient noctanol/ water	<p>Log Kow = 5.62 (technical product)</p> <p>5.07 ± 0.09 α-HBCD</p> <p>5.12 ± 0.09, β-HBCD</p> <p>5.47 ± 0.10 γ-HBCD</p>	<p>MacGregor and Nixon (1997)</p> <p>Hayward et al. (2006)</p>
Henry's Law constant	<p>0.75 Pa×m³/mol</p> <p>Calculated from the vapour pressure and the watersolubility (66µg/l)</p>	
Flash point	Not applicable	
Auto flammability	Decomposes at >190 °C	
Flammability	Not applicable-flame retardant	
Explosive properties	Not applicable	
Oxidizing properties	Not applicable	
Conversion factor	<p>1 ppm = 26.6 mg/m³</p> <p>1 mg/m³ = 0.037 ppm</p>	

Reference

Report of the Persistent Organic Pollutants Review Committee on the work of its sixth meeting Addendum Risk profile on hexabromocyclododecane

3.2.2 Description of toxicological properties of the chemical

LD50 Oral - rat - > 20,000 mg/kg

Reference

Guidechem Chemical Network, Chemical Manufacturers Dictionary

3.2.3 Description of ecotoxicological properties of the chemical

Toxicity to fish : LC50 - *Oncorhynchus mykiss* (rainbow trout) - 0.003 mg/l - 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 - *Daphnia* - > 3.2 mg/l - 48 h

Toxicity to algae : EC50 - Algae - 0.003 mg/l - 72 h

Reference

Guidechem Chemical Network, Chemical Manufacturers Dictionary

SECTION 4

DESIGNATED NATIONAL AUTHORITY

Institution

Solid Waste and Chemicals Management Center (C/O)
Ministry of Environmental Protection/Department of Soil
Environmental Management

Address

No. 1, Yuhuananlu, Chaoyang District, 100029 Beijing China

Name of person in charge

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Date, signature of DNA and official seal:







March, 23rd, 2017.

PLEASE RETURN THE COMPLETED FORM TO:

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Definitions for the purposes of the Rotterdam Convention according to Article 2:

(a) 'Chemical' means a substance whether by itself or in a mixture or preparation and whether manufactured or obtained from nature, but does not include any living organism. It consists of the following categories: pesticide (including severely hazardous pesticide formulations) and industrial;

(b) 'Banned chemical' means a chemical all uses of which within one or more categories have been prohibited by final regulatory action, in order to protect human health or the environment. It includes a chemical that has been refused approval for first-time use or has been withdrawn by industry either from the domestic market or from further consideration in the domestic approval process and where there is clear evidence that such action has been taken in order to protect human health or the environment;

(c) 'Severely restricted chemical' means a chemical virtually all use of which within one or more categories has been prohibited by final regulatory action in order to protect human health or the environment, but for which certain specific uses remain allowed. It includes a chemical that has, for virtually all use, been refused for approval or been withdrawn by industry either from the domestic market or from further consideration in the domestic approval process, and where there is clear evidence that such action has been taken in order to protect human health or the environment;

(d) 'Final regulatory action' means an action taken by a Party, that does not require subsequent regulatory action by that Party, the purpose of which is to ban or severely restrict a chemical.