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Environment Programme**



**Food and Agriculture Organization
of the United Nations**

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**Rotterdam Convention on the Prior Informed
Consent Procedure for Certain Hazardous
Chemicals and Pesticides in International Trade
Chemical Review Committee**

First meeting

Geneva, 11–18 February 2005

Item 7 (j) of the provisional agenda*

**Inclusion of chemicals in Annex III of the Rotterdam Convention:
review of notifications of final regulatory actions to ban
or severely restrict a chemical: benzidine**

Benzidine

Note by the secretariat

1. In line with article 5 of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, when the secretariat has received at least one notification from each of two prior informed consent (PIC) regions that contain the information required in Annex I to the Convention, it shall forward the notifications and accompanying documentation to the members of the Chemical Review Committee. The Committee shall review the information provided in such notifications and, in accordance with the criteria set out in Annex II, recommend to the Conference of the Parties whether the chemical in question should be included in Annex III and a decision guidance document drafted.
2. The secretariat has received four notifications from three PIC regions relating to benzidine (Europe – Latvia; Near East – Jordan; and Asia – India and Republic of Korea). Summaries of these notifications are included in PIC Circular XVIII, for December 2003, and PIC Circular XX, for December 2004. The notifications as they were received from the notifying countries are annexed to the present note.
3. The supporting documentation provided by Latvia, Jordan, India and the Republic of Korea, where available, will be found in documents UNEP/FAO/RC/CRC.1/23.Add.1, Add.2, Add.3 and Add.4, respectively.

* UNEP/FAO/RC/CRC.1/1.

Annex



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

IMPORTANT: See instructions before filling in the form

COUNTRY: REPUBLIC OF KOREA

PART I: PROPERTIES, IDENTIFICATION AND USES

1. IDENTITY OF CHEMICAL		
1.1	Common name	Benzidine
1.2	Chemical name according to an internationally recognized nomenclature (e.g. IUPAC), where such nomenclature exists	4,4'-Diphenyldiamine (1,1'-Biphenyl)-4,4'-diamine (IUPAC)
1.3	Trade names and names of preparations	No information is available
1.4	Code numbers	
1.4.1	CAS number	92-87-5
1.4.2	Harmonized System customs code	2921-59
1.4.3	Other numbers (specify the numbering system)	99-4-10 (designation number of the banned chemical in the Ministry of Environment's Public Notice No. 2003-163 (16 Sept. 2003) in Korea)

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 is a modification of a previous notification of final regulatory action on this chemical. The sections modified are: _____
	<input checked="" type="checkbox"/> This notification replaces all previously submitted notifications on this chemical.
	Date of issue of the previous notification: February 25 1992

PLEASE RETURN THE COMPLETED FORM TO:

Secretariat for the Rotterdam Convention
Plant Protection Service
Plant Production and Protection Division, FAO
Viale delle Terme di Caracalla
00100 Rome, Italy

OR

Secretariat for the Rotterdam Convention
UNEP Chemicals

11-13, Chemin des Anémones
CH - 1219 Châteline, Geneva, Switzerland

Tel: (+39 06) 5705 3441
Fax: (+39 06) 5705 6347
E-mail: pic@fao.org

Tel: (+41 22) 917 8183
Fax: (+41 22) 797 3460
E-mail: pic@unep.ch

1.6 Information on hazard classification where the chemical is subject to classification requirements	
International classification systems	Hazard class
IARC	Group 1
ACGIH	Group A1
Other classification systems	Hazard class
US NTP(National Toxicology Program)	Group 1
US EPA	Group A
•TCCA(Toxic Chemicals Control Act of Korea)	•Harmful if swallowed
	•May cause cancer

1.7 Use or uses of the chemical	
1.7.1	Pesticide
	Describe the uses of the chemical as a pesticide in your country: No information is available
1.7.2	<input checked="" type="checkbox"/> Industrial
	Describe the industrial uses of the chemical in your country: Benzidine was used as an intermediate in the production of dye stuff

1.8 Properties	
1.8.1	Description of physico-chemical properties of the chemical
	Form: white crystalline powder M.p.: 115-120°C b.p; about 400°C Sol in organic solvent

1.8.2	Description of toxicological properties of the chemical
	Acute oral: LD50 mus 214mg/kg, rat 309mg/kg Carcinogenic to humans(IARC group 1, NTP group a) Ref. HSDB, IRIS, RTECS
1.8.3	Description of ecotoxicological properties of the chemical
	Fish toxicity: LC50(fathead minnow, 96hr) > 20mg/l LC50(rainbow trout, 96hr) 7.4mg/l Ref. HSDB, IRIS, RTECS

PART II: FINAL REGULATORY ACTION

2. FINAL REGULATORY ACTION	
2.1	The chemical is: <input checked="" type="checkbox"/> banned OR severely restricted

2.2	Information specific to the final regulatory action
2.2.1	Summary of the final regulatory action Benzidine and mixtures containing 0.1% or more of Benzidine are banned for manufacture, import and use as an industrial chemical. No remaining uses are allowed.
2.2.2	Reference to the regulatory document Ministry of Environment's Public Notice No. 2003-163(Amended on 16 Sept. 2003)
2.2.3	Date of entry into force of the final regulatory action Benzidine and its mixtures were banned for manufacture, use and import by MOE's Public Notice No 1996-75(1 Jun 1996). Final amended notice which designated mixtures containing 0.1% or more of any of them as banned chemical took into force on 13 Nov. 2003.

2.3	Was the final regulatory action based on a risk or hazard evaluation?	<input checked="" type="checkbox"/> Yes No
	If yes, give information on such evaluation	
	<ul style="list-style-type: none"> ● From the chemicals designated as toxic according to the TCCA or from those existing chemicals found to have toxic effect on humans or the environment through various international assessments, the National Institute of Environmental Research(NIER) conducts hazard evaluation in accordance with the provisions on hazard evaluation of chemicals – NIER's Public Notice No. 1999-39(14 June 1999) - and submits recommendation to the Ministry of Environment. Upon receiving the recommendation from the NIER, The Ministry of Environment takes consultation with relevant ministries and decides whether to ban or severely restrict the chemical for industrial uses. The final decision is published in Public Notice. Especially NIER concentrated on its assessment whether Benzidine might cause risk to human health by ingestion or short term direct exposure and might cause damage to or adverse effects on human organs through exposure when assessed for carcinogenicity and genetic toxicity according to Article 10 of NIER's Public Notice, ● As for Benzidine and mixtures containing 0.1% or more of Benzidine, they are banned due to risk of carcinogenic effect on humans 	
	Reference to the relevant documentation The NIER's Public Notice No. 1999-39(14 June 1999)	

2.4	Reasons for the final regulatory action	
2.4.1	Is the reason for the final regulatory action relevant to the human health?	<input checked="" type="checkbox"/> Yes No
	If yes, give summary of the known hazards and risks presented by the chemical to human health, including the health of consumers and workers Benzidine is a carcinogen to humans(IARC group 1) and it causes irritation of eyes, skin, and respiratory tract. Laboratory studies shows it is genotoxic in bacterial and mammalian assays, including a transplacental micronucleus test	
	Reference to the relevant documentation	

	<p>-U.S. EPA IRIS on Benzidine from the National Library of Medicine's TOXNET System, November 1, 1994</p> <p>-ACGIH. Threshold Limit Values (TLVs) for Chemical Substances and Physical Agents and Biological Exposure Indices (BEIs) for 1995-1996. Cincinnati, OH: ACGIH, 1995.</p> <p>-IARC. Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man. Geneva: WHO, International Agency for Research on Cancer, p. S7 58 (1987)</p> <p>- DHHS/NTP; Seventh Annual Report on Carcinogens (1994)</p>
	<p>Expected effect of the final regulatory action</p> <p>It is expected that the regulatory action will significantly reduce the potential risk of carcinogenic effect to workers and others involved in dye manufacturing industry.</p>

2.4.2	<p>Is the reason for the final regulatory action relevant to the environment?</p>	<p>Yes</p> <p><input checked="" type="checkbox"/> No</p>
	<p>If yes, give summary of the known hazards and risks to the environment</p>	
	<p>Reference to the relevant documentation</p>	
	<p>Expected effect of the final regulatory action</p>	

2.5	Category or categories where the final regulatory action has been taken	
2.5.1	<p>Final regulatory action has been taken for the chemical category</p>	<p><input checked="" type="checkbox"/> Industrial</p>
	<p>Use or uses prohibited by the final regulatory action</p> <p>Benzidine and mixtures containing 0.1% or more of Benzidine are banned for manufacture, import and use as an industrial chemical. No remaining uses are allowed, except for the use mentioned in the subsection below.</p>	
	<p>Use or uses that remain allowed</p>	
	<p>Use of the chemical for research or laboratory purposes is allowed.</p>	

2.5.2	Final regulatory action has been taken for the chemical category	Pesticide
	Formulation(s) and use or uses prohibited by the final regulatory action	
	No information is available	
	Formulation(s) and use or uses that remain allowed	
No information is available		

2.5.3 Estimated quantity of the chemical produced, imported, exported and used, where available.		
	Quantity per year (MT)	Year
Produced		
Imported		
Exported	10.80	1998
Used	199.881	1996
	317.600	1998

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

2.7	Other relevant information that may cover:
2.7.1	Assessment of socio-economic effects of the final regulatory action
	No information is available

2.7.2	Information on alternatives and their relative risks
No information is available	

2.7.3	Relevant additional information
	No information is available

PART III : GOVERNMENT AUTHORITIES

Ministry/Department and authority responsible for issuing/enforcing the final regulatory action	
Institution	Chemicals Safety Div., Ministry of Environment
Address	Government Gwacheon Complex 1, Joongang-dong, Gwachon, Gyeonggi-do, Republic of Korea 427-729
Telephone	82-2-2110-7951
Telefax	82-2-507-2457
E-mail address	chemical@me.go.kr
Designated National Authority	
Institution	Chemicals Safety Div., Ministry of Environment
Address	Government Gwacheon Complex 1, Joongang-dong, Gwachon, Gyeonggi-do, Republic of Korea 427-729
Name of person in charge	Yeon Soo, PARK
Position of person in charge	Director
Telephone	82-2-2110-7951
Telefax	82-2-507-2457
E-mail address	chemical@me.go.kr

Date, signature of DNA and official seal: 30/04/04 Yeon Soo, PARK





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

IMPORTANT: See instructions before filling in the form

COUNTRY: LATVIA

PART I: PROPERTIES, IDENTIFICATION AND USES

1. IDENTITY OF CHEMICAL

1.1	Common name	Benzidine
1.2	Chemical name according to an internationally recognized nomenclature (e.g. IUPAC), where such nomenclature exists	(1,1'-Biphenyl)-4,4'-diamine
1.3	Trade names and names of preparations	Benzidine
1.4	Code numbers	
1.4.1	CAS number	92-87-5
1.4.2	Harmonized System customs code	2921 59 90
1.4.3	Other numbers (specify the numbering system)	EINECS 202-199-1 UN 1885

1.5 Indication regarding previous notification on this chemical, if any

1.5.1	<input checked="" type="checkbox"/> This is a first time notification of final regulatory action on this chemical.
1.5.2	<input type="checkbox"/> This is a modification of a previous notification of final regulatory action on this chemical. The sections modified are: _____
	<input type="checkbox"/> This notification replaces all previously submitted notifications on this chemical.
	Date of issue of the previous notification: _____

PLEASE RETURN THE COMPLETED FORM TO:

Interim Secretariat for the Rotterdam Convention
Plant Protection Service
Plant Production and Protection Division, FAO
Viale delle Terme di Caracalla
00100 Rome, Italy

Tel: (+39 06) 5705 3441
Fax: (+39 06) 5705 6347
E-mail: pic@fao.org

OR

Interim Secretariat for the Rotterdam Convention
UNEP Chemicals

11-13, Chemin des Anémones
CH - 1219 Châtelaine, Geneva, Switzerland

Tel: (+41 22) 917 8183
Fax: (+41 22) 797 3460
E-mail: pic@unep.ch

1.6 Information on hazard classification where the chemical is subject to classification requirements	
International classification systems	Hazard class
UN Classification	UN Hazard Class: 6.1
	UN Pack Group: II
Other classification systems	Hazard class
EU Classification	T; N
	R: 45-22-50-53
	S: 53-45-60-61
	Note: E

1.7 Use or uses of the chemical	
1.7.1	<input type="checkbox"/> Pesticide Describe the uses of the chemical as a pesticide in your country:
1.7.2	<input checked="" type="checkbox"/> Industrial Describe the industrial uses of the chemical in your country:

1.8 Properties	
1.8.1	Description of physico-chemical properties of the chemical
	Boiling point 402°C
	Melting point 128°C
	Vapour pressure 0.000009 kPa
	Solubility in water 400 mg/l

1.8.2	Description of toxicological properties of the chemical
	LD ₅₀ Oral rat: 309 mg/kg body weight EFFECTS OF LONG-TERM OR REPEATED EXPOSURE: This substance is carcinogenic to humans.
1.8.3	Description of ecotoxicological properties of the chemical
	LC ₅₀ Fish 96h: 2,5 mg/l Species: Notropis lutrensis EC ₅₀ Daphnia 48h: 0,6 mg/l IC ₅₀ Algae 72h: 4,5 mg/l Bioaccumulation: BCF: 55 Log Pow: 1.81

PART II: FINAL REGULATORY ACTION

2. FINAL REGULATORY ACTION	
2.1	The chemical is: <input type="radio"/> banned OR <input checked="" type="radio"/> severely restricted
2.2	Information specific to the final regulatory action
2.2.1	Summary of the final regulatory action Shall not be used in jokes and hoaxes or in objects intended to be used as such, for instance as a constituent of sneezing powder and stink bombs. Certain exceptions apply.
2.2.2	Reference to the regulatory document 25 April 2000 Regulation of the Cabinet of Ministers the Republic of Latvia No.158 "Regulatory on use and marketing restrictions and bans for hazardous chemical substances and hazardous chemical preparations".
2.2.3	Date of entry into force of the final regulatory action 1 January 2001

2.3	Was the final regulatory action based on a risk or hazard evaluation?	<input checked="" type="radio"/> Yes <input type="radio"/> No
	If yes, give information on such evaluation Based on intrinsic properties of the chemical substance.	
	Reference to the relevant documentation EU bans and restrictions Directive 76/769/EBC.	

2.4	Reasons for the final regulatory action	
2.4.1	Is the reason for the final regulatory action relevant to the human health?	<input checked="" type="radio"/> Yes <input type="radio"/> No
	If yes, give summary of the known hazards and risks presented by the chemical to human health, including the health of consumers and workers The compound may damage the blood, liver and kidneys. Ingestion: Leads to nausea and vomiting. See above. Skin contact: Taken up through intact skin. The compound has been shown to be carcinogenic. Textiles and leather products containing azo dyes can release aryl amines that may cause cancer.	
	Reference to the relevant documentation 	
	Expected effect of the final regulatory action 	

2.4.2	Is the reason for the final regulatory action relevant to the environment?	<input checked="" type="radio"/> Yes <input type="radio"/> No
	If yes, give summary of the known hazards and risks to the environment The substance is toxic to aquatic organisms.	

	Reference to the relevant documentation
	Expected effect of the final regulatory action

2.5 Category or categories where the final regulatory action has been taken											
2.5.1	<table border="1" style="width: 100%;"> <tr> <td style="width: 75%;">Final regulatory action has been taken for the chemical category</td> <td style="width: 25%;">X Industrial</td> </tr> <tr> <td colspan="2">Use or uses prohibited by the final regulatory action</td> </tr> <tr> <td colspan="2"> 1. Shall not be used in jokes and hoaxes or in objects intended to be used as such, for instance as a constituent of sneezing powder and stink bombs. 2. However, paragraph 1 does not apply to stink bombs containing not more than 1,5 ml of liquid. </td> </tr> <tr> <td colspan="2">Use or uses that remain allowed</td> </tr> <tr> <td colspan="2">All other uses not listed in the table above.</td> </tr> </table>	Final regulatory action has been taken for the chemical category	X Industrial	Use or uses prohibited by the final regulatory action		1. Shall not be used in jokes and hoaxes or in objects intended to be used as such, for instance as a constituent of sneezing powder and stink bombs. 2. However, paragraph 1 does not apply to stink bombs containing not more than 1,5 ml of liquid.		Use or uses that remain allowed		All other uses not listed in the table above.	
Final regulatory action has been taken for the chemical category	X Industrial										
Use or uses prohibited by the final regulatory action											
1. Shall not be used in jokes and hoaxes or in objects intended to be used as such, for instance as a constituent of sneezing powder and stink bombs. 2. However, paragraph 1 does not apply to stink bombs containing not more than 1,5 ml of liquid.											
Use or uses that remain allowed											
All other uses not listed in the table above.											

2.5.2	<table border="1" style="width: 100%;"> <tr> <td style="width: 75%;">Final regulatory action has been taken for the chemical category</td> <td style="width: 25%;">Ø Pesticide</td> </tr> <tr> <td colspan="2">Formulation(s) and use or uses prohibited by the final regulatory action</td> </tr> <tr> <td colspan="2"> </td> </tr> <tr> <td colspan="2">Formulation(s) and use or uses that remain allowed</td> </tr> <tr> <td colspan="2"> </td> </tr> </table>	Final regulatory action has been taken for the chemical category	Ø Pesticide	Formulation(s) and use or uses prohibited by the final regulatory action				Formulation(s) and use or uses that remain allowed			
Final regulatory action has been taken for the chemical category	Ø Pesticide										
Formulation(s) and use or uses prohibited by the final regulatory action											
Formulation(s) and use or uses that remain allowed											

2.5.3 Estimated quantity of the chemical produced, imported, exported and used, where available.		
	Quantity per year (MT)	Year
Produced		
Imported		
Exported		
Used		

2.6	Indication, to the extent possible, of the likely relevance of the final regulatory action to other states and regions
	Decision taken in accordance with EU bans and restrictions Directive 76/769/EEC.

2.7 Other relevant information that may cover:	
2.7.1	Assessment of socio-economic effects of the final regulatory action
2.7.2	Information on alternatives and their relative risks

2.7.3	Relevant additional information
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PART III : GOVERNMENT AUTHORITIES

Ministry/Department and authority responsible for issuing/enforcing the final regulatory action	
Institution	Environmental State Inspectorate
Address	Rupniecibas iela 23 Riga LV-1045 Latvia
Telephone	+371 7325209; +371 7321200; +371 7320506
Telefax	+371 7321577
E-mail address	vvi@vvi.gov.lv
Designated National Authority	
Institution	Latvian Environment Agency
Address	Straumes iela 2 Jurmala LV-2015 Latvia
Name of person in charge	Arnis Ludborzs
Position of person in charge	Head, Division of Chemicals Register
Telephone	+371 7755409
Telefax	+371 7764162
E-mail address	Arnis.Ludborzs@lva.gov.lv

Date, signature of DNA and official seal: Director DNA



Ilze Kirstuka



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

IMPORTANT: See instructions before filling in the form

COUNTRY: JORDAN

PART I: PROPERTIES, IDENTIFICATION AND USES

1. IDENTITY OF CHEMICAL		
1.1	Common name	Benzidine and its salts (see the attached paper).
1.2	Chemical name according to an internationally recognized nomenclature (e.g. IUPAC), where such nomenclature exists	(1,1-biphenyl)-4,4-diamine
1.3	Trade names and names of preparations	<ul style="list-style-type: none"> * Benzidine base * 4,4'-Bianiline * para,para'-Bianiline * 4,4'-Biphenyldiamine * 4,4'-Biphenylenediamine * C.I. azoic diazo component 112 * 4,4'-Diaminobiphenyl * 4,4'-Diamino-1,1'-biphenyl * para,para'-Diaminobiphenyl * 4,4'-Diaminodiphenyl * para-Diaminodiphenyl * 4,4'-Diphenylenediamine * Fast Corinth base B
1.4	Code numbers	
1.4.1	CAS number	92-87-5
1.4.2	Harmonized System customs code	292159
1.4.3	Other numbers (specify the numbering system)	EC#612-042-00-2 UN # 1885

PLEASE RETURN THE COMPLETED FORM TO:

Interim Secretariat for the Rotterdam Convention
Plant Protection Service
Plant Production and Protection Division, FAO
Viale delle Terme di Caracalla
00100 Rome, Italy

OR

Interim Secretariat for the Rotterdam Convention
UNEP Chemicals

11-13, Chemin des Anémones
CH - 1219 Châteline, Geneva, Switzerland

Tel: (+39 06) 5705 3441
Fax: (+39 06) 5705 6347
E-mail: pic@fao.org

Tel: (+41 22) 917 8183
Fax: (+41 22) 797 3460
E-mail: pic@unep.ch

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 is a modification of a previous notification of final regulatory action on this chemical.

The sections modified are: _____

This notification replaces all previously submitted notifications on this chemical.

Date of issue of the previous notification: _____

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

International classification systems	Hazard class
RTECS # DC9625000	Carcinogenic
Other classification systems	Hazard class

1.7 Use or uses of the chemical

1.7.1 Pesticide

Describe the uses of the chemical as a pesticide in your country:

Non

1.7.2 Industrial ✓

Describe the industrial uses of the chemical in your country:

1.8 Properties

1.8.1 Description of physico-chemical properties of the chemical

	<p>WHITE OR REDDISH CRYSTALLINE POWDER, TURNS DARK ON EXPOSURE TO AIR AND LIGHT.</p> <p>Boiling point: 401°C Melting point: 128°C Relative density (water = 1): 1.25 Given melting point when anhydrous and rapidly heated, when slowly heated: 115-120°C. Addition of small amounts of a flammable substance or an increase in the oxygen content of the air strongly enhances combustibility.</p> <p>Solubility in water: none Relative vapour density (air = 1): 6.36 Octanol/water partition coefficient as log Pow: 1.34</p>
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1.8.2	Description of toxicological properties of the chemical	This substance is carcinogenic to humans, with the principal target organ being the bladder.
1.8.3	Description of ecotoxicological properties of the chemical	

PART II: FINAL REGULATORY ACTION

2. FINAL REGULATORY ACTION	
2.1	The chemical is: <input type="radio"/> banned OR <input checked="" type="radio"/> severely restricted
2.2	Information specific to the final regulatory action
2.2.1	Summary of the final regulatory action
2.2.2	Reference to the regulatory document
2.2.3	Date of entry into force of the final regulatory action

2.3	Was the final regulatory action based on a risk or hazard evaluation?	<input type="radio"/> Yes <input type="radio"/> No
	If yes, give information on such evaluation	Jordan was notified on June 2002 that Benzidine is being exported to our Country. After reviewing the documents received, the chemical and its salts were included in the list of restricted chemicals, with restriction to their uses according to the federal register of EPA. Unfortunately we were not able to trace the chemical use in Jordan. The customs were informed by an official letter that this chemical and its salts need permission from the ministry of health prior to their entry to Jordan, as an interim action awaiting for issuing a decision regarding the restricted chemicals.

	Reference to the relevant documentation	
	Letter No SP/WS/29/992 date 26/8/2002 (By the Minister of Health).	
2.4	Reasons for the final regulatory action	
2.4.1	Is the reason for the final regulatory action relevant to the human health?	<input type="radio"/> Yes <input type="radio"/> No
	If yes, give summary of the known hazards and risks presented by the chemical to human health, including the health of consumers and workers	
	Case reports and follow-up studies of workers in many countries have demonstrated that occupational exposure to benzidine is causally associated with an increased risk of bladder cancer .	
	Reference to the relevant documentation	
	Federal Register /vol.58.No.229/ 1993, EPA	
	Expected effect of the final regulatory action	
2.4.2	Is the reason for the final regulatory action relevant to the environment?	<input type="radio"/> Yes <input type="radio"/> No
	If yes, give summary of the known hazards and risks to the environment	
	Reference to the relevant documentation	
	Expected effect of the final regulatory action	

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

2.5.1	Final regulatory action has been taken for the chemical category	⊖	Industrial
	Use or uses prohibited by the final regulatory action		
	All uses except for mentioned below		
	Use or uses that remain allowed		
	As a reagent to test for hydrogen peroxide in milk, a reagent to test for hydrogen sulfate, hydrogen cyanide, and nicotine, a reagent for detecting blood, an analytical standard, and also for colour index (C.I.) Direct Red 28.		

2.5.2	Final regulatory action has been taken for the chemical category	⊖	Pesticide
	Formulation(s) and use or uses prohibited by the final regulatory action		
	Non		
	Formulation(s) and use or uses that remain allowed		
	Non		

2.5.3 Estimated quantity of the chemical produced, imported, exported and used, where available.

	Quantity per year (MT)	Year
Produced		
Imported		
Exported		
Used		

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

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2.7 Other relevant information that may cover:

2.7.1	Assessment of socio-economic effects of the final regulatory action
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2.7.2	Information on alternatives and their relative risks
2.7.3	Relevant additional information

PART III : GOVERNMENT AUTHORITIES

Ministry/Department and authority responsible for issuing/enforcing the final regulatory action	
Institution	Ministry of Health/ Environmental Health Directorate
Address	Amman P.O.Box 86
Telephone	00962-6-5685397
Telefax	00962-6-5666147
E-mail address	cic@moh.gov.jo
Designated National Authority	
Institution	Ministry of Health/ Environmental Health Directorate
Address	Amman P.O.Box 86
Name of person in charge	Dr. Basheer AL-Qaseer
Position of person in charge	Director of Environmental Health Directorate
Telephone	00962-6-5685397
Telefax	00962-6-5666147
E-mail address	cic@moh.gov.jo

Date, signature of DNA and official seal:


 28.5.2003

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

* IMPORTANT: See instructions before filling in the form

COUNTRY: INDIA

PART I: PROPERTIES, IDENTIFICATION AND USES

1. IDENTITY OF CHEMICAL

1.1	Common name	Benzidine based dyes & its salts.
1.2	Chemical name according to an internationally recognized nomenclature (e.g. IUPAC), where such nomenclature exists	(1, 1-biphenyl) - 4, 4 diamine.
1.3	Trade names and names of preparations	Not applicable, since use of these these chemicals is prohibitive. Direct Red 1, 13, 28, Blue 2, Brown 2, 95, Acid Red 85 etc.
1.4	Code numbers	
1.4.1	CAS number	92 - 87 - 5
1.4.2	Harmonized system customs code	2921.59
1.4.3	Other numbers (specify the numbering system)	-

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. Yes
- 1.5.2 This is a modification of a previous notification of final regulatory action on this chemical.
The sections modified are: _____ Not applicable.
- This notification replaces all previously submitted notifications on this chemical. Not Applicable.
- Date of issue of the previous notification: _____ Not Applicable.

PLEASE RETURN THE COMPLETED FORM TO:

Interim Secretariat for the Rotterdam Convention
Plant Protection Service
Plant Production and Protection Division, FAO
Viale delle Terme di Caracalla
00100 Rome, Italy

OR

Interim Secretariat for the Rotterdam Convention
UNEP Chemicals

11-13, Chemin des Anémone
CH - 1219 Châtelaine, Geneva, Switzerland

Tel: (+39 06) 5705 3441
Fax: (+39 06) 5705 6347
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6 Information on hazard classification where the chemical is subject to classification requirements

International classification systems	Hazard class
	GR. 2A
	Human Carcinogenic
Other classification systems	Hazard class

1.7 Use or uses of the chemical

1.7.1 Pesticide

Describe the uses of the chemical as a pesticide in your country:

Not applicable

1.7.2 Industrial

Describe the industrial uses of the chemical in your country:

The use of Benzidine based dyes and its salts is Prohibited in India.

1.8 Properties

1.8.1 Description of physico-chemical properties of the chemical

Melting Point : 128°C

Boiling point : 400°C at 740 mm.

Appearance : White or Slightly reddish crystalline powder.

	<p>Description of toxicological properties of the chemical</p> <p>Can cause damage to blood including hemolysis and bone marrow depression. On injection causes nausea and vomiting, which may be followed by liver and kidney damage. Causes bladder tumor.</p>
<p>1.8.3</p>	<p>Description of ecotoxicological properties of the chemical</p> <p>Dangerous when heated to decomposition, emits highly toxic fumes. The acute fish toxicity LC 50 is about 5-50 ppm depending on the type of fish.</p>

PART II: FINAL REGULATORY ACTION

<p>2. FINAL REGULATORY ACTION</p>	
<p>2.1</p>	<p>The chemical is: <input type="checkbox"/> banned OR <input type="checkbox"/> severely restricted</p>
<p>2.2. Information specific to the final regulatory action</p>	
<p>2.2.1</p>	<p>Summary of the final regulatory action</p>
	<p>Description of ecotoxicological properties of the chemical</p> <p>Govt. had prohibited and restricted the use of Benzidine based dyes and its salts in the dyeing and colour processing industries. All dyes and dye-intermedaites containing Benzidine and its derivatives are prohibited for handling.</p>
<p>2.2.2</p>	<p>Reference to the regulatory document</p> <p>Ministry of Environment and Forests notification No. SO 108 (E) dt. 30th January 1990.</p>
<p>2.2.3</p>	<p>Date of entry into force of the final regulatory action</p> <p>Discontinued within 3 years from the date of issue of the notification.</p>

	Was the final regulatory action based on a risk or hazard evaluation?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	If yes, give information on such evaluation Industrial Toxicological Research Institute (ITRC) Lucknow submitted status report on the occupational and environmental Hazards on Benzidine based dyes to Ministry of Environment & Forests.	
	Reference to the relevant documentation As Above.	

2.4	Reasons for the final regulatory action	
2.4.1	Is the reason for the final regulatory action relevant to the human health?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	If yes, give summary of the known hazards and risks presented by the chemical to human health, including the health of consumers and workers Can cause damage to blood including hemolysis and bone marrow depression. On injection causes nausea and vomiting, which may be followed by liver and kidney damages.	
	Reference to the relevant documentation ITRC Study as in 2.3.	
	Expected effect of the final regulatory action It shall extend necessary support to textile manufacturing units in achieving ISO 9000 and ISO 14000 Standards by not using hazardous Benzidine based dyes for dyeing. This will also give thrust to development of ecofriendly dyes.	

2.4.2	Is the reason for the final regulatory action relevant to the environment?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
If yes, give summary of the known hazards and risks to the environment			
Not Applicable			
Reference to the relevant documentation			
Expected effect of the final regulatory action			

2.5	Category or categories where the final regulatory action has been taken		
2.5.1	Final regulatory action has been taken for the chemical category	<input checked="" type="checkbox"/>	Industrial
Use or uses prohibited by the final regulatory action			
As mentioned in 2.2.1			
Use or uses that remain allowed			
Not Applicable			

Final regulatory action has been taken for the chemical category

 Pesticide

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

Not Applicable

Formulation(s) and use or uses that remain allowed

2.5.3 Estimated quantity of the chemical produced, imported, exported and used, where available.

	Quantity per year (MT)	Year
Produced	Nil	
Imported	Nil	
Exported	Nil	
Used	Nil	

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

Not Applicable

2.7 Other relevant information that may cover:

2.7.1 Assessment of socio-economic effects of the final regulatory action

It is preventive measure against Carcinogenic effect Of Benzidine based dyes and its salts to the human health.

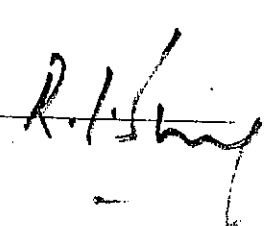
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2

Information on alternatives and their relative risks	
<p>Suitable substitutes have been developed with no known carcinogenic risks.</p>	
2.7.3	Relevant additional information
<p> </p>	

ENVIRONMENTAL GOVERNMENT AUTHORITIES

Ministry/Department and authority responsible for issuing/enforcing the final regulatory action	
Institution	Ministry of Environment & Forests.
Address	Secretary, Ministry of Environment & Forests CGO Complex, Paryavaran Bhawan, New Delhi.
Telephone	+91-11-24360721
Telefax	+91-11-24362746
E-mail address	prodipto_ghosh@nic.in
Designated National Authority	
Institution	Department of Chemicals & Petrochemicals
Address	Joint Secretary, Deptt. of Chemicals & Petrochemicals, Room No. 341, 'A' Wing, Shastri Bhawan, New Delhi - 110001.
Name of person in charge	Mr. R.I. Singh
Position of person in charge	Joint Secretary
Telephone	+91-11-23381573
Telefax	+91-11-23073050
E-mail address	jsc.cpc@sb.nic.in

Date, signature of DNA and official seal: _____



(RAMESH INDER SINGH)
Joint Secretary
Deptt. of Chemicals & Petrochemicals
New Delhi.