

**Harmonized Tariff Schedule of the United States (2011) (Rev. 1)**  
Annotated for Statistical Reporting Purposes

INTERMEDIATE CHEMICALS FOR DYES APPENDIX

# Harmonized Tariff Schedule of the United States (2011) (Rev. 1)

Annotated for Statistical Reporting Purposes

## INTERMEDIATE CHEMICALS FOR DYES APPENDIX

2

This appendix enumerates those intermediate chemicals for dyes which are eligible for duty-free treatment under the provisions of general note 14 of the tariff schedule.

<u>Product</u>	<u>CAS Number</u>
Acetaldehyde, (1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-	84-83-3
Acetamide, N-(3-amino-4-methoxyphenyl)-	6375-47-9
Acetamide, N-(3-aminophenyl)-	102-28-3
Acetamide, N-(4-aminophenyl)-	122-80-5
Acetamide, N-(3-aminophenyl)-, monohydrochloride	621-35-2
Acetamide, N-(4-aminophenyl)-N-methyl-	119-63-1
Acetamide, N-(2,5-dimethoxy phenyl)-	3467-59-2
Acetamide, N-(7-hydroxy-1-naphthalenyl)-	6470-18-4
Acetamide, N-(2-methoxy-5-methyl phenyl)-	6962-44-3
Acetamide, N-(2-Methoxy Phenyl)-	93-26-5
2-amino-diphenyl-sulfone	4273-98-7
2-(2-amino-ethoxy)-2'-chloro-diethylsulfone hydrochloride	98231-71-1
2-[(4-Amino-5-methoxy phenyl)sulfonyl]-ethanol, hydrogen sulfate ester	10079-20-6
2-Amino-1,5-naphthalene disulfonic acid, monosodium salt	19352-03-7
2-[3-Aminophenyl)sulfonyl]-ethanol, hydrogen sulfate ester	2494-88-4
Aniline, 2-chloro-4-nitro-monohydrochloride-	618-99-5
9,10-Anthracenedione	84-65-1
9,10-Anthracenedione, 1-amino-	82-45-1
9,10-Anthracenedione, 1-amino-2-bromo-4-hydroxy-	116-82-5
9,10-Anthracenedione, 1-amino-2-chloro-4-hydroxy-	2478-67-3
9,10-Anthracenedione, 1-amino-N-ethyl-N-phenyl-	81-49-2
9,10-Anthracenedione, 1,4-diamino-2,3-dihydro-	81-63-0
9,10-Anthracenedione, 1,8-dichloro-	82-43-9
9,10-Anthracenedione, 1,4-dihydroxy-	81-61-4
9,10-Anthracenedione, 1,4-dihydroxy-	81-64-1
9,10-Anthracenedione, 1,8-dihydroxy-4,5-dinitro-	81-55-0
2-Anthracenesulfonic acid, 1-amino-4-bromo-9,10-dihydro-9,10-dioxo-	116-81-4
2-Anthracenesulfonic acid, 1-amino-4-bromo-9,10-dihydro-9,10-dioxo-, monosodium salt	6258-06-6
1H-Azepine, hexahydro-	111-49-9
Benzamine, 2,6-dichloro-4-nitro-	99-30-9
Benezenesulfonamide, 2-amino-N-ethyl-N-phenyl-	81-10-7
Benzaldehyde, 2-chloro-	89-98-5
Benzaldehyde, 2,6-dichloro-	83-38-5
Benzamide, 4-amino-N-(4-aminophenyl)-	785-30-8
Benzamide, 4-amino-N-[3-[(2-hydroxyethyl)sulfonyl], phenyl]-	20241-68-3
Benzamide, N-(3-aminophenyl)-	16091-26-2
Benzamine, 3-amino-4-methoxy-N-phenyl-	120-35-4
Benzamine, 3-chloro-	108-42-9
Benzamine, 4-chloro-2,5-dimethoxy-	6358-64-1
Benzamine, 5-chloro-2-methoxy-	95-03-4
Benzamine, 5-chloro-2-methyl-	95-79-4
Benzamine, 2-chloro-5-nitro-	6283-25-6
1,4-Benzaminediamine, 2 chloro-, sulfate	6219-71-2
Benzamine, 2,5-dichloro-	95-82-9
Benzamine, 2,4-dimethoxy-	2735-04-8
Benzamine, 2,5-dimethoxy-	102-56-7
Benzamine, 2,4-dinitro-	97-02-9
Benzamine, 4-ethoxy-2-nitro-	616-86-4
Benzamine, 4-fluoro-3-nitro-	364-76-1
Benzamine, 2-methoxy-5-nitro	99-59-2
Benzamine, 4-(phenylazo)-	60-09-3
Benzamine, 4-(phenylazo)-, monohydrochloride	3457-98-5
Benzeneamine, 2-chloro-4-nitro-	121-87-9
Benzeneamine, 4-chloro-2-(trifluoromethyl)-	445-03-4
Benzeneamine, 2-methoxy-	90-04-0
Benzeneamine, 4-methoxy-	104-94-9
Benzeneamine, 2-methoxy-4-nitro-	97-52-9
Benzeneamine, N-methyl-	100-61-8
Benzeneamine, 4-(6-methyl-2-benzothiazolyl)-	92-36-4
Benzeneamine, 3-nitro-	99-09-2
Benzeneamine, 2-(trifluoromethyl)-	88-17-5
Benzeneamine, 4-ethoxy-	156-43-4
Benzene, 1-chloro-2,4-dinitro-	97-00-7
1,2-Benzenediamine, 4-ethoxy-, sulfate (1:1)	85137-09-3
1,3-Benzenediamine, 4-methyl-	95-80-7

# Harmonized Tariff Schedule of the United States (2011) (Rev. 1)

Annotated for Statistical Reporting Purposes

## INTERMEDIATE CHEMICALS FOR DYES APPENDIX

3

Product	CAS Number
Benzene, 1,2-dimethyl-4-nitro-	99-51-4
1,4-Benzenedisulfonic acid, 2-amino-	98-44-2
1,4-Benzenedisulfonic acid, 2-amino-, sodium salt	76684-33-8
Benzeethanol, 4-hydroxy-	501-94-0
Benzenesulfonamide, 2-amino-N-cyclohexyl-N-methyl-	70693-59-3
Benzenesulfonamide, 3-(4,5-Dihydro-3-methyl-5-oxo-1H-pyrazol-1-yl)-	89-29-2
Benzenesulfonic acid, 4-(acetylamino)-2-amino-	88-64-2
Benzenesulfonic acid, 2-amino-	88-21-1
Benzenesulfonic acid, 3-amino-	121-47-1
Benzenesulfonic acid, 5-amino-2-[(4-aminophenyl)amino]	119-70-0
Benzenesulfonic acid, 3-amino-4-chloro-	98-36-2
Benzenesulfonic acid, 4-amino-2,5-dichloro-	88-50-6
Benzenesulfonic acid, 4-amino-2,5-dichloro-, monosodium salt	41295-98-1
Benzenesulfonic acid, 3-amino-4-hydroxy-	98-37-3
Benzenesulfonic acid, 2-amino, 5-methoxy-	13244-33-2
Benzenesulfonic acid, 2-amino, 4-methoxy-, monosodium salt	19433-86-4
Benzenesulfonic acid, 3-amino-, monosodium salt	1126-34-7
Benzenesulfonic acid, 5-amino-2-[2-(4-nitro-2-sulfophenyl)ethenyl]-	119-72-2
Benzenesulfonic acid, 5-amino-2-[2-(4-nitro-2-sulfophenyl)ethenyl]-, disodium salt	6634-82-8
Benzenesulfonic acid, 2-amino-5-[(4-sulfophenyl)azo]-	101-50-8
Benzenesulfonic acid, 2-amino-5-[(4-sulfophenyl)azo]-, disodium salt	2706-28-7
Benzenesulfonic acid, 4-chloro-3-(4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-1-yl)-	88-76-6
Benzenesulfonic acid, 2,4-diamino-	88-63-1
Benzenesulfonic acid, 2,5-diamino-, monopotassium salt	88-45-9
Benzenesulfonic acid, 2,5-diamino-, monopotassium salt	77847-12-2
Benzenesulfonic acid, 2,4-diamino-, monosodium salt	3177-22-8
Benzenesulfonic acid, 2,5-dichloro-4-(4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-1-yl)-	84-57-1
Benzenesulfonic acid, 4-(4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-1-yl)	89-36-1
Benzenesulfonic acid, 4-[(1,3-dioxybutyl)amino]-5-methoxy-2-methyl-	62592-39-6
Benzenesulfonic acid, 4-[(1,3-dioxybutyl)amino]-5-methoxy-2-methyl-, ammonium salt	72705-22-7
Benzenesulfonic acid, 4-[(1,3-dioxybutyl)amino]-5-methoxy-2-methyl-, monosodium salt	133167-77-8
Benzenesulfonic acid, 2,2'-(1,2-ethenediyl)bis[5-amino-], disodium salt	7336-20-1
Benzenesulfonic acid, 2,2'-(1,2-ethenediyl)bis[5-amino-], sodium salt	25394-13-2
Benzenesulfonic acid, 2,2'-(1,2-ethenediyl)bis[5-nitro-], disodium salt	3709-43-1
Benzenesulfonic acid, 2,2'-(1,2-ethenediyl)bis[5-nitro-], sodium salt	15883-59-7
Benzenesulfonic acid, 2-formyl-, sodium salt	1008-72-6
Benzenesulfonic acid, 4-hydrazino-	98-71-5
Benzenesulfonyl chloride, 4-methyl-	98-59-9
Benzenesulfonyl chloride, 2-nitro-	1694-92-4
Benzoic acid, 2-amino-5-nitro-	616-79-5
Benzoic acid, 2-hydroxy-3-methyl-	83-40-9
Benzonitrile, 2-amino-5-nitro-	17420-30-3
4H-1-Benzopyran-4-one, 2-(2,4-dihydroxyphenyl)-2,5,6-trihydroxy-	480-16-0
2-Benzothiazolamine, 5,6-dichloro-	24072-75-1
2-Benzothiazolamine, 6-methoxy-	1747-60-0
2-Benzothiazolamine, 6-nitro-	6285-57-0
2-Benzothiazolamine, 4-chloro-	19952-47-7
Benzothiazole	95-16-9
7-Benzothiazolesulfonic acid, 2-(4-aminophenyl)-6-methyl-	130-17-6
7-Benzothiazolesulfonic acid, 2-(4-aminophenyl)-6-methyl-, monolithium salt	74578-07-7
7-Benzothiazolesulfonic acid, 2-(4-aminophenyl)-6-methyl-, monopotassium salt	74578-06-6
7-Benzothiazolesulfonic acid, 2-(4-aminophenyl)-6-methyl-, monosodium salt	74578-05-5
2(3H)-Benzoxazolone, 6-[(2-hydroxyethyl)sulfonyl]-	5031-74-3
4-(beta Aminoethylamino)-3-(2-hydroxyethyl)sulfonyl]-nitrobenzene	105652-75-3
1,1'-Binaphthalene-8,8'-dicarboxylic acid	29878-91-9
[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-	119-90-4
[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-, dihydrochloride	20325-40-0
[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-	119-93-7
[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-, dihydrochloride	612-82-8
Butanamide, N-(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)-3-oxo-	26576-46-5
Butanedioic acid, acetyl-, dimethyl ester	10420-33-4
Butanedioic acid, sulfo-, 1,4-bis(2-ethylhexyl)ester, sodium salt	577-11-7
9H-Carbazole	86-74-8
Cobalt, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-,(sp-4-1)	3317-67-7
Cyanamide	420-04-2
Cyanamide, (1,4,5,6-tetrahydro-4,6-dioxo-2-pyrimidinyl)-	55067-10-2
2,5-Cyclohexadiene-1,4-dione, 2,3,5,6-tetrachloro-	118-75-2
1,4-Cyclohexanedicarboxylic acid, 2,5-dioxo-, dimethyl ester	6289-46-9
2,4-Diaminobenzenesulfonic acid	83-63-1

# Harmonized Tariff Schedule of the United States (2011) (Rev. 1)

Annotated for Statistical Reporting Purposes

## INTERMEDIATE CHEMICALS FOR DYES APPENDIX

4

Product	CAS Number
Disulfide, bis(2-nitrophenyl)-	1155-00-6
Ethanedioic acid	144-62-7
Ethanol, 2-[(4-amino-2,5-dimethoxy phenyl)sulfonyl]-, hydrogen sulfate ester	26672-24-2
Ethanol, 2-[(4-amino-5-methoxy-2-methylphenyl), sulfonyl]-, hydrogen sulfate ester	21635-69-8
Ethanol, 2-[(3-Amino phenyl)sulfonyl]-	5246-57-1
Ethanol, 2-[(4-aminophenyl)sulfonyl]-, hydrogen sulfate ester	2494-89-5
Ethanol, 2-[(3-nitrophenyl)sulfonyl]-	41687-30-3
1H-Indole, 2,3-dihydro-1,3,3-trimethyl-2-methylene-	118-12-7
Methanone, (3,4-dihydroxyphenyl)(2,4,6-trihydroxyphenyl)-	519-34-6
2-Naphthalenesulfonic acid, 8-amino-, monosodium salt	6322-37-8
2-Naphthalenecarboxylic acid, 3-hydroxy-	92-70-6
2-Naphthalenecarboxylic acid, 6-hydroxy-	16712-64-4
1,3-Naphthalenedisulfonic acid, 7-amino-	86-65-7
1,5-Naphthalenedisulfonic acid, 2-amino-	117-62-4
1,5-Naphthalenedisulfonic acid, 3-amino-	131-27-1
1,3-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-	82-47-3
2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-	90-20-0
2,7 Naphthalenedisulfonic acid, 4-amino-5-hydroxy-, disodium salt	3963-80-2
1,3-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-, monopotassium salt	57248-90-5
2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-, monosodium salt	5460-09-3
1,3-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-, sodium salt	76550-42-0
2,7-Naphthalenedisulfonic acid, 3-amino-5-hydroxy-, sodium salt	53891-22-8
1,3-naphthalenedisulfonic acid, 7-amino-, monopotassium salt	842-15-9
1,5-Naphthalenedisulfonic acid, 2-amino-, monosodium salt	19532-03-7
1,5-Naphthalenedisulfonic acid, 3-amino-, sodium salt	52085-24-2
1,3-Naphthalenedisulfonic acid, 6-(4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-1-yl)-	7277-87-4
2,7-Naphthalenedisulfonic acid, 4,5-dihydroxy-	148-25-4
2,7-Naphthalenedisulfonic acid, 4,5-dihydroxy-, disodium salt	129-96-4
2,7-Naphthalenedisulfonic acid, 4,5-dihydroxy-, monosodium salt	3888-44-6
1,3-Naphthalenedisulfonic acid, 7-hydroxy-	118-32-1
2,7-Naphthalenedisulfonic acid, 3-hydroxy-	148-75-4
1,3-Naphthalenedisulfonic acid, 7-hydroxy-, dipotassium salt	842-18-2
1,3-Naphthalenedisulfonic acid, 7-hydroxy-, disodium salt	842-19-3
2,7-Naphthalenedisulfonic acid, 3-hydroxy-, disodium salt	135-51-3
2-Naphthalenedisulfonic acid, 6-hydroxy-, monosodium salt	135-76-2
2-Naphthalenesulfonic acid, 6-amino-7-hydroxy-	6399-72-0
2-Naphthalenesulfonic acid, 7-(acetylamino)-4-hydroxy-	6334-97-0
1-Naphthalenesulfonic acid, 2-amino-	81-16-3
1-Naphthalenesulfonic acid, 4-amino-	84-86-6
1-Naphthalenesulfonic acid, 5-amino-	84-89-9
1-Naphthalenesulfonic acid, 8-amino-	82-75-7
2-Naphthalenesulfonic acid, 5-amino-	119-79-9
2-Naphthalenesulfonic acid, 6-amino-	93-00-5
2-Naphthalenesulfonic acid, 8-amino-	119-28-8
2-Naphthalenesulfonic acid, 6-amino-4-hydroxy-	90-51-7
2-Naphthalenesulfonic acid, 7-amino-4-hydroxy-	87-02-5
1-Naphthalenesulfonic acid, 2-amino-, mono ammonium salt	68540-41-0
2-Naphthalenesulfonic acid, 6-amino-, monoammonium salt	70682-62-1
1-Naphthalenesulfonic acid, 4-amino-, monosodium salt	130-13-2
2-Naphthalenesulfonic acid, 6-amino-, monosodium salt	58306-86-8
2-Naphthalenesulfonic acid, 7,7'-(carbonyldiimino)bis[4-hydroxy-	134-47-4
2-Naphthalenesulfonic acid, 7,7'-(carbonyldiimino)bis[4-hydroxy-, disodium salt	20324-87-2
2-Naphthalenesulfonic acid, 7,7'-(carbonyldiimino)bis[4-hydroxy-, monosodium salt	71550-28-2
1-Naphthalenesulfonic acid, 4-diazo-3,4-dihydro-7-nitro-3-oxo-	63589-25-3
1-Naphthalenesulfonic acid, 4-hydroxy-	84-87-7
1-Naphthalenesulfonic acid, 5-hydroxy-	117-59-9
1-Naphthalenesulfonic acid, 8-hydroxy-	117-22-6
2-Naphthalenesulfonic acid, 6-hydroxy-, monopotassium salt	833-66-9
1-Naphthalenesulfonic acid, 4-hydroxy-, monosodium salt	6099-57-6
2-Naphthalenesulfonic acid, 4-hydroxy-7-(phenylamino)-	119-40-4
2-Naphthalenesulfonic acid, 4-hydroxy-7-(phenylamino)-, monosodium salt	68213-89-8
1,3-Naphthalenesulfonic acid, 7-hydroxy-, potassium salt	13846-08-7
1-Naphthalenesulfonic acid, 5-hydroxy-, sodium salt	79873-34-0
1-Naphthalenesulfonic acid, 8-(phenylamino)-	82-76-8
1-Naphthalenesulfonic acid, 8-(phenylamino)-, monoammonium salt	28836-03-5
1,3,6-Naphthalenetrisulfonic acid, 7-amino-	118-03-6
1,3,6-Naphthalenetrisulfonic acid, 8-amino-	117-42-0

# Harmonized Tariff Schedule of the United States (2011) (Rev. 1)

Annotated for Statistical Reporting Purposes

## INTERMEDIATE CHEMICALS FOR DYES APPENDIX

5

Product	CAS Number
1,3,6 Naphthalenetrisulfonic acid, 7-amino-, diammonium salt	70714-69-1
1,3,6 Naphthalenetrisulfonic acid, 7-amino-, disodium salt	67602-72-6
1,3,6 Naphthalenetrisulfonic acid, 7-amino-, sodium salt	41016-61-9
2-Naphthalenol	135-19-3
1-Naphthalenesulfonic acid, 4-hydroxy-, monopotassium salt	37860-62-1
1-Naphthalenesulfonic acid, 8-(phenylamino)-, monosodium salt	1445-19-8
1H-Naphth[2,3-f]isoindole-1,3,5,10(2H)tetrone, 4,11-diamino-	128-81-4
Naphth[1,2-d][1,2,3]oxadiazole-5-sulphonic acid, 7-nitro-	84-91-3
1-Naphthylamine	134-27-7
Nickel [29H,31H-phthalocyaninato(2-)-N29, N30, N31, N32]-, (SP-4-1)-	14055-02-8
Phenol, 3-amino-	591-27-5
Phenol, 4-amino-	123-30-8
Phenol, 2-amino-3-bromo-5-nitro-	17601-96-6
Phenol, 2-amino-4-chloro-	95-85-2
Phenol, 2-amino-4,6-dinitro-, monosodium salt	831-52-7
Phenol, 5-Amino-2-methyl-	2835-95-2
Phenol, 2-amino-4-nitro-	99-57-0
Phenol, 2-amino-5-nitro-	121-88-0
Phenol, 2-amino-4-nitro, monosodium salt	61702-43-0
Phenol, 4-chloro-2-(phenylmethyl)-	120-32-1
Phenol, 3-(diethylamino)-	91-68-9
Phenol, 3-(ethylamino)-4-methyl-	120-37-6
Phenol, 4,4'-sulfonylbis-	80-09-1
2-phenyl-indol-5-sulfonic acid, NA salt	119205-39-9
2-[(phenylmethylene)hydrazino]-4-sulfobenzoic acid	77734-52-2
2-[(phenylmethylene)hydrazino]-4-sulfobenzoic acid, monosodium salt	131887-77-9
Propanenitrile, 3,3'-(phenylamino)bis-	1555-66-4
Propionamide, N-(3-aminophenyl)-	22987-10-6
1H-Pyrazol-5-amine, 3-methyl-1-phenyl-	1131-18-6
1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-3-methyl-5-oxo-1-phenyl-, ethyl ester	89-33-8
1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfonyl)-	118-47-8
3H-Pyrazol-3-one, 2-chlorophenyl)-2,4-dihydro-5-methyl-	14580-22-4
3H-Pyrazol-3-one, 2,4-dihydro-2-[-4-[(2-hydroxyethyl)sulfonyl], phenyl]-5-methyl-	21951-34-8
3H-Pyrazol-3-one, 2,4-dihydro-5-methyl-2-(4-methylphenyl)-	86-92-0
3H-Pyrazol-3-one, 2,4-dihydro-5-methyl-2-phenyl-	89-25-8
3-Pyridinecarboxamide, 1-ethyl-1,2-dihydro-6-hydroxy-4-methyl-2-oxo-	29097-12-9
2,4,6(1H,3H,5H)-Pyrimidinetrione	67-52-7
2,4,6(1H,3H,5H)-Pyrimidinetrione, monosodium salt	4390-16-3
8-Quinolinol	148-24-3
Spiro[isobenzofuran-1(3H),9'-[9H]-xanthen]-3-one, 3',6'-bis(ethylamino)-2',7'-dimethyl-	41382-37-0
2-Thiazolamine	96-50-4
Thiourea	62-56-6
1,3,5-Triazine, 2,4,6,(1H,3H,5H)-trione, 1,3,5-trichloro-	87-90-1
1,3,5,-Trioxane, 2,4,6-trimethyl-	123-63-7
Urea, (3-Amino Phenyl)-	25711-72-2
Urea, (3-aminophenyl)-, monohydrochloride	59690-88-9