



# **JAMP MSDSplus TRAINING KIT**

**August 20th, 2008  
Hotel Equatorial Kuala Lumpur**

Japan Environmental Management Association for Industry (JEMAI)



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Date of publication: August 11, 2008

Organization responsible for publication: Joint Article Management Promotion-consortium

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## Exercises 1.

### [Group 1]

If you purchased certain substances and produced the [Preparation 1] by using these substances, please create its MSDSplus on the basis of information below.

Chemical Name	g/100g of preparation	CAS No.
ethanol	70	64-17-5
potassium dichromate	10	7778-50-9
phenol	10	108-95-2
Tri-n-butyl phosphate	10	126-73-8

### [Group 2]

If you purchased certain substances and produced the [Preparation 2] by using these substances, please create its MSDSplus on the basis of information below.

Chemical Name	g/100g of preparation	CAS No.
ethanol	70	64-17-5
dibutyl phthalate	10	84-74-2
cyclohexanone	10	108-94-1
tetrahydrofuran	10	109-99-9

### [Group 3]

If you purchased certain substances and produced the [Preparation 3] by using these substances, please create its MSDSplus on the basis of information below.

Chemical Name	g/100g of preparation	CAS No.
ethanol	70	64-17-5
potassium dichromate	10	7778-50-9
Azo violet	10	74-39-5
formaldehyde	10	50-00-0

### [Group 4]

If you purchased certain substances and produced the [Preparation 4] by using these substances, please create its MSDSplus on the basis of information below.

Chemical Name	g/100g of preparation	CAS No.
ethanol	70	64-17-5
dibutyl phthalate	10	84-74-2
aluminium	10	7429-90-5
nitric acid	10	7697-37-2

## Exercises 2.

### [Group 1]

If you purchased certain substances and [Preparation 4], and produced the [Preparation 1-2] by using MSDSplus of [Preparation 4] and these substances, please create its MSDSplus on the basis of information below.

Chemical Name	g/100g of preparation	CAS No.
[Preparation 4]	50	
cycloheximide	25	66-81-9
phenol	25	108-95-2

### [Group 2]

If you purchased certain substances and [Preparation 1], and produced the [Preparation 2-2] by using MSDSplus of [Preparation 1] and these substances, please create its MSDSplus on the basis of information below.

Chemical Name	g/100g of preparation	CAS No.
[Preparation 1]	50	
cycloheximide	25	66-81-9
phenol	25	108-95-2

### [Group 3]

If you purchased certain substances and [Preparation 2], and produced the [Preparation 3-2] by using MSDSplus of [Preparation 2] and these substances, please create its MSDSplus on the basis of information below.

Chemical Name	g/100g of preparation	CAS No.
[Preparation 2]	50	
cycloheximide	25	66-81-9
phenol	25	108-95-2

### [Group 4]

If you purchased certain substances and [Preparation 3], and produced the [Preparation 4-2] by using MSDSplus of [Preparation 3] and these substances, please create its MSDSplus on the basis of information below.

Chemical Name	g/100g of preparation	CAS No.
[Preparation 3]	50	
cycloheximide	25	66-81-9
phenol	25	108-95-2

**EU03 list of substances toxic to reproduction**

\*Note :This list is created on the basis of the relevant regulations and directives,however it does not provide any guarantees for compliance with the regulations. If you utilize this list,please be sure to refer to relevant Regulations and Directives.

EU03\_2-List of Repr.Cat.1/Repr.Cat.2 substances in 67/548/EEC Annex I (67/548/EEC Annex Appendix I, CMR—Cat. 1 and 2 )

# This list shows only substances toxic to reproduction.

(2004.4.30 included by 29t ATP(Adaptation to Technical Progress)

CAS No.	EC No.	Chemical Name	Classification
119738-06-6	414-200-4	(+/-) tetrahydrofurfuryl (R)-2-[4-(6-chloroquinoxalin-2-yloxy)phenoxy]propionate	Muta.Cat.3;R68 Repr.Cat.2;R61 Repr.Cat.3;R62 Xn;R22-48/22 N;R50-53
96-18-4	202-486-1	1,2,3-trichloropropane	Carc.Cat.2;R45 Repr.Cat.2;R60 Xn;R20/21/22
68515-42-4	271-084-6	1,2-benzenedicarboxylic acid di-C7-11-branched and linear alkylesters	Repr.Cat.2;R61 Repr.Cat.3;R62
84777-06-0 [1] - [2] 131-18-0 [3] 605-50-5 [4]	284-032-2 [1] - [2] 205-017-9 [3] 210-088-4 [4]	1,2-benzenedicarboxylic acid, dipentylester, branched and linear [1] n-pentyl-isopentylphthalate [2] di-n-pentyl phthalate [3] diisopentylphthalate [4]	Repr.Cat.2;R60-61 N;R50
112-49-2	203-977-3	1,2-bis(2-methoxyethoxy)ethane TEGDME triethylene glycol dimethyl ether triglyme	R19 Repr.Cat.2;R61 Repr.Cat.3;R62
96-12-8	202-479-3	1,2-dibromo-3-chloropropane	Carc.Cat.2;R45 Muta.Cat.2;R46 Repr.Cat.1;R60 T;R25 Xn;R48/20/22 R52-53
110-71-4	203-794-9	1,2-dimethoxyethane ethylene glycol dimethyl ether EGDME	Repr.Cat.2;R60 Repr.Cat.2;R61 F;R11 R19 Xn;R20
106-94-5	203-445-0	1-bromopropane n-propyl bromide	F;R11 Rep.Cat.2;R60 Rep.Cat.3;R63 Xn;R48/20 Xi;R36/37/38 R67
556-52-5	209-128-3	2,3-epoxypropan-1-ol glycidol oxiranemethanol	Carc.Cat.2;R45 Muta.Cat.3;R68 Repr.Cat.2;R60 T;R23 Xn;R21/22 Xi;R36/37/38
	420-580-2	2-[2-hydroxy-3-(2-chlorophenyl)carbamoyl-1-naphthylazo]-7-[2-hydroxy-3-(3-methylphenyl)carbamoyl-1-naphthylazo]fluoren-9-one	Repr.Cat.2;R61 R53

continued 1

75-26-3	200-855-1	2-bromopropane	F;R11 Repr. Cat. 1;R60 Xn;R48/20 R66
110-80-5	203-804-1	2-ethoxyethanol ; ethylene glycol monoethyl ether	R10 Repr. Cat. 2;R60-61 Xn;R20/21/22
111-15-9	203-839-2	2-ethoxyethyl acetate ; ethylglycol acetate	Repr. Cat. 2;R60-61 Xn;R20/21/22
80387-97-9	279-452-8	2-ethylhexyl[[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methyl]thio]acetate	Repr. Cat. 2;R61 R43 R52-53
109-86-4	203-713-7	2-methoxyethanol ; ethylene glycol monomethyl ether	R10 Repr. Cat. 2;R60-61 Xn;R20/21/22
110-49-6	203-772-9	2-methoxyethyl acetate ; methylglycol acetate	Repr. Cat. 2;R60-61 Xn;R20/21/22
1589-47-5	216-455-5	2-methoxypropanol	R10 Repr. Cat. 2;R61 Xi;R37/38-41
70657-70-4	274-724-2	2-methoxypropyl acetate	R10 Repr. Cat. 2;R61 Xi;R37
143860-04-2	421-150-7	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	Repr. Cat. 2;R60 C;R34 N;R50-53
6807-17-6	401-720-1	4,4'-isobutylethylidenediphenol (alt.): 2,2-bis(4-hydroxyphenyl)-4-methylpentane	Repr. Cat. 2;R60 Xi;R36 N;R50-53
37894-46-5	253-704-7	6-(2-chloroethyl)-6-(2-methoxyethoxy)-2,5,7,10-tetraoxa-6-silaundecane; etacelasil	Repr. Cat. 2;R61 Xn;R22-48/22
	402-660-9	A mixture of: disodium 4-(3-ethoxycarbonyl-4-(5-(3-ethoxycarbonyl-5-hydroxy-1-(4-sulfonatophenyl)pyrazol-4-yl)penta-2,4-dienylidene)-4,5-dihydro-5-oxopyrazol-1-yl)benzenesulfonate trisodium 4-(3-ethoxycarbonyl-4-(5-(3-ethoxycarbonyl-5-oxido-1-(4-sulfonat	Repr. Cat. 2;R61 R52-53
	421-550-1	A mixture of: 1,3,5-tris(3-aminomethylphenyl)-1,3,5-(1H,3H,5H)-triazine-2,4,6-trione a mixture of oligomers of 3,5-bis(3-aminomethylphenyl)-1-poly [3,5-bis(3-aminomethylphe-nvl)-2,4,6-trioxo-1,3,5-(1H,3H,5H)-triazin-1-yl]-1,3,5-	Carc. Cat. 2;R45 Repr. Cat. 2;R61 R43 R52-53
	403-250-2	a mixture of: 4-[[bis-(4-fluorophenyl)methylsilyl]methyl]-4H-1,2,4-triazole; 1-[[bis-(4-fluorophenyl)methylsilyl]methyl]-1H-1,2,4-triazole	Carc. Cat. 3;R40 Repr. Cat. 2;R61 Xn;R22 N;R51-53
7789-09-5	232-143-1	ammonium dichromate	E;R2 O;R8 Carc. Cat. 2;R45 Muta. Cat. 2;R46 Repr. Cat. 2;R60-61 T+;R26 T;R25-48/23 Xn;R21 C;R34 R42/43 N;R50-53 T;R48/22
68049-83-2		azafenidin	Repr. Cat. 2;R61 Repr. Cat. 3;R62 N;R50-53
85-68-7	201-622-7	BBP benzyl butyl phtalate	Repr. Cat. 2;R61 Repr. Cat. 3;R62 N;R50-53
17804-35-2	241-775-7	benomyl (ISO) methyl 1-(butylcarbamoyl)benzimidazol-2-ylcarbamate	Muta. Cat. 2;R46 Repr. Cat. 2;R60-61 Xi;R37/38 R43 N;R50-53

continued 2

50-32-8	200-028-5	benzo[a]pyrene benzo[def]chrysene	Carc. Cat. 2;R45 Muta. Cat. 2;R46 Repr. Cat. 2;R60-61 R43 N;R50-53
485-31-4	207-612-9	binapacryl (ISO) 2-sec-butyl-4,6-dinitrophenyl-3-methylcrotonate	Repr. Cat. 2;R61 Xn;R21/22 N;R50-53
117-81-7	204-211-0	bis(2-ethylhexyl) phthalate di-(2-ethylhexyl) phthalate DEHP	Repr. Cat. 2; R60-61
117-82-8	204-212-6	bis(2-methoxyethyl) phthalate	Repr. Cat. 2;R61 Repr. Cat. 3;R62
111-96-6	203-924-4	bis(2-methoxyethyl)ether	R10 R19 Repr. Cat. 2; R60-61
10108-64-2	233-296-7	cadmium chloride	Carc. Cat. 2;R45 Muta. Cat. 2;R46 Repr. Cat. 2;R60-61 T+;R26 T;R25-48/23/25 N;R50-53
7790-79-6	232-220-0	cadmium fluoride	Carc. Cat. 2;R45 Muta. Cat. 2;R46 Repr. Cat. 2;R60-61 T+;R26 T;R25-48/23/25 N;R50-53
10124-36-4	233-331-6	cadmium sulphate	Carc. Cat. 2;R45 Muta. Cat. 2;R46 Repr. Cat. 2;R60-61 T;R48/23/25 T+;R26 T;R25 N;R50-53
10605-21-7	234-232-0	carbendazim (ISO) methyl benzimidazol-2-ylcarbamate	Muta. Cat. 2;R46 Repr. Cat. 2;R60-61 N;R50-53
630-08-0	211-128-3	carbon monoxide	F+;R12 Repr. Cat. 1;R61 T;R23-48/23
66-81-9	200-636-0	cycloheximide	Muta. Cat. 3;R68 Repr. Cat. 2;R61 T+;R28 N;R51-53
84-74-2	201-557-4	dibutyl phthalate DBP	Repr. Cat. 2;R61 Repr. Cat. 3;R62 N;R50
39300-45-3	254-408-0	dinocap (ISO)	Repr. Cat. 2;R61 Xn;R20-48/22 Xi;R38 R43 N;R50-53
88-85-7	201-861-7	dinoseb ; 6-sec-butyl-2,4-dinitrophenol	R44 T;R24/25 Repr. Cat. 2;R61 Repr. Cat. 3;R62 Xi;R36 N;R50-53
1420-07-1	215-813-8	dinoterb (ISO) 2-tert-butyl-4,6-dinitrophenol	Repr. Cat. 2;R61 T+;R28 T;R24 R44 N;R50-53

continued 3

32536-52-0	251-087-9	diphenylether; octabromo derivate	Repr. Cat. 2;R61 Repr. Cat. 3;R62
96-45-7	202-506-9	ethylene thiourea ; imidazolidine-2-thione ; 2-imidazoline-2-thiol	Repr. Cat. 2;R61 Xn;R22
69806-50-4	274-125-6	fluazifop-butyl (ISO) butyl (RS)-2-[4-(5-trifluoromethyl-2-pyridyloxy)phenoxy]propionate	Repr. Cat. 2;R61 N;R50-53
103361-09-7		flumioxazin (ISO) N-(7-fluoro-3,4-dihydro-3-oxo-4-prop-2-ynyl-2H-1,4-benzoxazin-6-yl)cyclohex-1-ene-1,2-dicarboxamide	Repr. Cat. 2;R61 N;R50-53
85509-19-9		flusilazole (ISO) bis(4-fluorophenyl)(methyl)(1H-1,2,4-triazol-1-ylmethyl)silane	Carc. Cat. 3;R40 Repr. Cat. 2;R61 Xn;R22 N;R51-53
75-12-7	200-842-0	formamide	Repr. Cat. 2;R61
15245-44-0	239-290-0	lead 2,4,6-trinitro-m-phenylene dioxide; lead 2,4,6-trinitroresorcinoxide; lead styphnate	E;R3 Repr. Cat. 1;R61 Repr. Cat. 3;R62 Xn;R20/22 R33 N;R50-53
1335-32-6	215-630-3	lead acetate,basic; lead acetate	Carc. Cat. 3;R40 Repr. Cat. 1;R61 Repr. Cat. 3;R62 Xn;R48/22 R33 N;R50-53
		lead alkyls	Repr. Cat. 1;R61 Repr. Cat. 3;R62 T+;R26/27/28 R33 N;R50-53
7758-97-6	231-846-0	lead chromate	Carc. Cat. 3;R40 Repr. Cat. 1;R61 Repr. Cat. 3;R62 R33 N;R50-53
12656-85-8	235-759-9	lead chromate molybdate sulfate red C.I.Pigment Red 104	Carc. Cat. 3;R40 Repr. Cat. 1;R61 Repr. Cat. 3;R62 R33 N;R50-53
		lead compounds with the exception of those specified elsewhere in this Annex	Repr. Cat. 1;R61 Repr. Cat. 3;R62 Xn;R20/22 R33 N;R50-53
301-04-2	206-104-4	lead di(acetate)	Repr. Cat. 1;R61 Repr. Cat. 3;R62 Xn;R48/22 R33 N;R50-53
13424-46-9	236-542-1	lead diazide; lead azide	E;R3 Repr. Cat. 1;R61 Repr. Cat. 3;R62 Xn;R20/22 R33 N;R50-53
25808-74-6	247-278-1	lead hexafluorosilicate	Repr. Cat. 1;R61 Repr. Cat. 3;R62 Xn;R20/22 R33 N;R50-53

continued 4



7784-40-9	232-064-2	lead hydrogen arsenate	Carc. Cat. 1;R45 Repr. Cat. 1;R61 Repr. Cat. 3;R62 T;R23/25 R33 N;R50-53
1344-37-2	215-693-7	lead sulfochromate yellow C.I.Pigment Yellow 34	Carc. Cat. 3;R40 Repr. Cat. 1;R61 Repr. Cat. 3;R62 R33 N;R50-53
17570-76-2	401-750-5	lead(II) methanesulphonate	Repr. Cat. 1;R61 Repr. Cat. 3;R62 Xn;R20/22-48/20/22 Xi;R38-41 N;R58 R33
330-55-2	206-356-5	linuron(ISO); 3-(3,4-dichlorophenyl)-1-methoxy-1-methylurea	Repr. Cat. 2;R61 Repr. Cat. 3;R62 Carc. cat. 3;R40 Xn;R22-48/22 N;R50-53
625-45-6	210-894-6	methoxyacetic acid	Repr. Cat. 2;R60-61 Xn;R22 C;R34
592-62-1	209-765-7	methyl-ONN-azoxymethyl acetate ; methyl azoxy methyl acetate	Carc. Cat. 2;R45 Repr. Cat. 2;R61
127-19-5	204-826-4	N,N-dimethylacetamide	Repr. Cat. 2;R61 Xn;R20/21
68-12-2	200-679-5	N,N-dimethylformamide ; dimethyl formamide	Repr. Cat. 2;R61 Xn;R20/21 Xi;R36
1836-75-5	217-406-0	nitrofen (ISO) 2,4-dichlorophenyl 4-nitrophenyl ether	Carc. Cat. 2;R45 Repr. Cat. 2;R61 Xn;R22 N;R50-53
79-16-3	201-182-6	N-methylacetamide	Repr. Cat. 2;R61
123-39-7	204-624-6	N-methylformamide	Repr. Cat. 2;R61 Xn;R21
7778-50-9	231-906-6	potassium dichromate	O;R8 Carc. Cat. 2;R45 Muta. Cat. 2;R46 Repr. Cat. 2;R60-61 T+;R26 T;R25-48/23 Xn;R21 C;R34 R42/43 N;R50-53 E;R2
57044-25-4	404-660-4	R-2,3-epoxy-1-propanol	Carc. Cat. 2;R45 Muta. Cat. 3;R68 Repr. Cat. 2;R60 T;R23 Xn;R21/22 C;R34
		salts and esters of dinoseb, with the exception of those specified elsewhere in this Annex	R44 Repr. Cat. 2;R61 Repr. Cat. 3;R62 T;R24/25 Xi;R36 N;R50-53
		salts and esters of dinoterb	Repr. Cat. 2;R61 T+;R28 T;R24 N;R50-53

continued 5

7775-11-3	231-889-5	sodium chromate	Carc. Cat. 2; R45 Muta. Cat. 2; R46 Repr. Cat. 2; R60-61 T+; R26 T; R25-48/23 Xn; R21 C; R34 R42/43 N; R50-53 O; R8
10588-01-9	234-190-3	sodium dichromate anhydrate	Carc. Cat. 2; R45 Muta. Cat. 2; R46 Repr. Cat. 2; R60-61 T+; R26 T; R25-48/23 Xn; R21 C; R34 R42/43 N; R50-53 O; R8
7789-12-0	234-190-3	sodium dichromate, dihydrate	Carc. Cat. 2; R45 Muta. Cat. 2; R46 Repr. Cat. 2; R60-61 T+; R26 T; R25-48/23 Xn; R21 C; R34 R42/43 N; R50-53 O; R8
13463-39-3	236-669-2	tetracarbonylnickel; nickel tetracarbonyl	F; R11 Carc. Cat. 3; R40 Repr. Cat. 2; R61 T+; R26 N; R50-53
61571-06-0	407-330-8	tetrahydrothiopyran-3-carboxaldehyde	Repr. Cat. 2; R61 Xi; R41 R52-53
24602-86-6	246-347-3	tridemorph (ISO); 2,6-dimethyl-4-tridecylmorpholine	Repr. Cat. 2; R61 Xn; R20/22 Xi; R38 N; R50-53
7446-27-7	231-205-5	trilead bis(orthophosphate)	Repr. Cat. 1; R61 Repr. Cat. 3; R62 Xn; R48/22 R33 N; R50-53
50471-44-8	256-599-6	vinclozolin (ISO) N-3,5-dichlorophenyl-5-methyl-5-vinyl-1,3-oxazolidine-2,4-dione	Carc. Cat. 3; R40 Repr. Cat. 2; R60-61 R43 N; R51-53
81-81-2 [1] 5543-57-7 [2] 5543-58-8 [3]	201-377-6 [1] 226-907-3 [2] 226-908-9 [3]	warfarin [1]; (S)-4-hydroxy-3-(3-oxo-1-phenylbutyl)-2-benzopyrone [2]; (R)-4-hydroxy-3-(3-oxo-1-phenylbutyl)-2-benzopyrone [3]	Repr. Cat. 1; R61 T; R48/25 R52-53



# JAMP MSDSplus

Document No.	
Format Version	2.01E
Date of Preparation	
Date of Revised	

This sheet provides supplemental chemical information of our product not covered by MSDS. Please refer to this sheet associating with MSDS.

## 1. Product and Company Information

Product Name	
Product Code	
Generic Name	
Supplier Identification	
Company Code	
Address	
Contact Point	
Phone Number	
Fax Number	
E-mail Address	
Authoring Division	
Phone Number	

## 2. Substance Information

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Substance(s) To Be Notified				Relevant Standard								Remarks
Chemical Name	CAS No.	Conc.	unit	JP01	JP02	JP03	E U	E U	E U	E U		

## 3. Relevant Standard Information

Code	Relevant Standard	issued or revised
JP01	Japanese Chemical Substances Control Law (Class I Specified Chemical Substances)	
JP02	Industrial Safety and Health Act (Substances Prohibited of Manufacturing etc.)	
JP03	Poisonous and Deleterious Substances Control Law (Specified Poisonous Substances)	
EU01	2002/95/EC (RoHS Directive)	
EU02	2000/53/EC (ELV Directive)	
EU03	67/548/EEC [Annex I CMR – Cat1,2]	
EU04	76/769/EEC [other than 67/548/EEC Annex I CMR – Cat1,2]	

- \*1 "●" is marked if a substance listed in the relevant standard and to be notified is intentionally added or known to be contained.  
"●" does not directly mean legally regulated. It depends on use and other conditions.
- \*2 Notified if there is additional information.
- \*3 For more information please refer to "How to make JAMP MSDSplus".

