Implementing rules of "Other data and information to be attached to the application for registration of an agricultural chemical"

(The notification, Ref. No. 13-Seisan-3988, issued on January 10, 2002 by the Director, Agricultural Production Materials Division, Agricultural Production Bureau, Ministry of Agriculture, Forestry and Fisheries)

NOTICE TO USERS:

All of the translation provided in this document are unofficial. Only the original Japanese texts of the notification are official, and the translation is to be used solely as reference materials to aid in the understanding of the Japanese notification. FAMIC is not responsible for the accuracy, reliability or currency of the translation provided in this document, or for any consequence resulting from use of the information in this document. Any translation has not yet been proofread or corrected by a native English speaker or legal translation expert. This translation may be modified in the future.

Partly revision:Ref. No. 16-Shouan-9263, issued on 16 March, 2005Partly revision:Ref. No. 18-Shouan-14854, issued on 2 April, 2007Partly revision:Ref. No. 21-Shouan-14388, issued on 1 April, 2010The latest revision:Ref. No.25-Shouan-682, issued on 31 May, 2013

(Annex)

Implementing rules of "Other data and information to be attached to the application for registration of an agricultural chemical"

1. Data on the physical and chemical properties of agricultural chemicals

- (1) These data, as used herein, refer to the "Test Results Report Form on the Physical and Chemical Properties of Agricultural Chemicals" and the Appendices attached hereto (Attached Form No. 1), the former of which includes the test results on the visual appearance of the relevant agricultural chemicals (e.g. color) by the formulation type, and on the "Test Items" listed in Appendix Table 1. However, the test results may not be required in certain reasonable cases such as when the items listed in Appendix Table 1 are difficult to test due to the properties of the relevant agricultural chemicals.
- (2) When the formulation of the relevant agricultural chemical is not listed in the "Formulation" list in Appendix Table 1, the test items that are regarded necessary to define the physical and chemical properties of the relevant agricultural chemical shall be conducted.

2. Data on the storage stability of agricultural chemicals

These data, as used herein, refer to the "Test Results Report Form on the Storage stability of Agricultural Chemicals" and the Appendices attached hereto (Attached Form No. 2), the former of which includes the test results on the storage stability of the relevant agricultural chemicals.

3. Data on the ingredient composition of agricultural chemicals (formulations) and the technical grade of the active ingredient (TGAI), and the manufacturing methods, etc.

- (1) These data, as used herein, refer to the "Report Form on the Ingredient Composition of Agricultural Chemicals (formulations) and the technical grade of the active ingredient (TGAI), and the manufacturing methods" and the Appendices attached hereto (Attached Form No. 3). The report form includes the names and the contents of the TGAI and the adjuvant ingredients, etc., which are added in the manufacturing process of the relevant agricultural chemicals (formulations), and the methods and the process of their manufacturing in detail, etc., as well as the ingredient composition (active ingredients and impurities) of the TGAI of the relevant agricultural chemicals and the methods and the process of their manufacturing in detail, and their analysis results, etc..
- (2) The methods and the TGAI manufacturing process shall be described in detail as follows: The process of synthesis and purification from the starting raw materials (raw materials that are available as general manufactured products) to the active ingredients shall be described using a flowsheet. Chemical reactions (including reaction conditions such as temperature, solvents, catalysts, and pH) shall be described using chemical equations.

When raw materials of the TGAI or semi-manufactured products are to be manufactured in other locations (including when outsourcing to other manufacturers), the relevant process shall be included in the description of the TGAI manufacturing process.

- (3) Regarding the analysis of ingredient composition, the expected impurities shall be examined by the following categories; source materials of the relevant TGAI, major inclusions in the source materials, intermediate products, side reaction products, inclusion reaction products in the source materials, decomposed matters (raw materials, intermediate products, and final synthetics), catalysts, reagents, and solvents, etc. The results shall be used to select the target impurity analytes. The examination results shall be provided as the "Statement of reasons for selecting the impurities".
- (4) When active ingredients are a mixture of isomers, the concentration or the relative proportion of each isomer shall be obtained. For impurities including isomers, the concentration of each isomer shall be obtained when possible. However, when the substances comprising the relevant active ingredients are extremely difficult to isolate, this shall not apply.

- (5) More than 5 samples from each TGAI manufacturing location shall be subjected to analysis. Each sample shall be collected from different lots.
- (6) The conditions for the analysis are as follows:
 - a) Analytical methods that allow analytes to be measured with high precision shall be adopted.
 - b) The minimum limit of determination for each impurity hall be set to less than 0.1%.

4. Data on tests for dioxins in agricultural chemicals

- (1) These data, as used herein, refer to the "Test Results Report Form on Dioxin and Dioxin-like Compounds Included in Agricultural Chemicals" and the Appendices attached hereto (Attached Form No. 4), the former of which includes the test results on dioxin and dioxin-like compounds included in the relevant agricultural chemicals.
- (2) Tests shall be performed on agricultural chemicals that come under any one of the following items, from a) to c). However, if the relevant active ingredients are synthesized directly from free acid when formulations are manufactured as a form of salt, ester, etc., the relevant free acid shall be the target of test.
 - a) A TGAI of the agricultural chemical containing an active ingredient with a chemical structure in which chlorine atoms are attached to the benzene ring, and also, in whose synthesizing process, dioxin and dioxin-like compounds as in (4) below may be produced or be mixed in.
 - b) A TGAI of the agricultural chemical containing an active ingredient, in whose synthesizing process it is clear that benzene rings with chlorine atoms attached are involved, and also, in whose synthesizing process, dioxin and dioxin-like compounds as in (4) below may be produced or be mixed in.
 - c) Agricultural chemicals in whose formulating process dioxin and dioxin-like compounds as in (4) below may be produced or be mixed in.
- (3) The samples to be tested shall be collected from multiple lots that are representative of each TGAI manufacturing location.
- (4) The dioxin and dioxin-like compounds to be tested are polychlorinated dibenzo-*p*-dioxins (PCDDs), polychlorinated dibenzofurans (PCDFs), and coplaner polychlorinated biphenyls (Co-PCBs) all of which are toxic, on the basis of Toxicity Equivalency Factor (TEF) as proposed by World Health Organization-International Program on Chemical Safety (WHO-IPCS) in 2006. The minimum limit of determination of each compound shall be set to 0.1 ng (expressed in Toxicity Equivalency Quantity (TEQ)) per 1 g of a TGAI.
- (5) The test methods shall be in accordance with the methods specified in the Japan Industrial Standard (e.g. JIS K 0312 Method for determination of tetra- through octa-chlorodibenzo-p-dioxins, tetra-through octa-chlorodibenzofurans and coplanar polychlorobiphenyls in industrial water and wastewater).

5. Data on tests for harmful impurities other than dioxins in agricultural chemicals

- These data, as used herein, refer to the "Test Results Report Form on Hazardous Impurities Other Than Dioxins and Dioxin-like Compounds" and the Appendices attached hereto (Attached Form No. 5), the former of which includes the test results on the hazardous impurities other than dioxin and dioxin-like compounds in the relevant agricultural chemicals.
- (2) Tests shall be performed on the TGAI of the agricultural chemicals that may contain the chemical substances listed in Appendix Table 2, considering the chemical structures of the active ingredients of the relevant agricultural chemical, its synthesizing method, etc. However, when the agricultural chemical is very unlikely to produce hazardous impurities other than dioxins and dioxin-like compounds, considering its raw materials, its synthesizing reaction, etc., the applicant may submit data stating to that effect as a substitute for the Test Results Report Form.

- (3) The samples to be tested shall be collected from multiple lots that are representative of each TGAI manufacturing location.
- (4) Potential hazardous impurities shall be analyzed with the limit of determination as low as technically feasible.

6. Data on Predicted Environmental Concentration for short-term risk assessment on aquatic organisms

- (1) These data, as used herein, refer to the "Derivation Results Report on Predicted Environmental Concentration for short-term risk assessment on aquatic organisms " and the Appendices attached hereto (Attached Form No. 6), the former of which includes the predicted environmental concentrations (hereinafter referred to as "short-term PEC") on substances such as the active ingredients of the relevant agricultural chemicals.
- (2) Short-term PEC calculation results report may be omitted if any one of the following items, (i) or (ii), applies, and the applicant may submit the report setting forth as such instead of the report.
 - (i.) When it is found that there is no risk that the components etc. of the relevant agricultural chemical will contaminate farmland soil where it is used or run off into water systems such as rivers, in light of its formulation type, its application method etc.;
 - (ii.) When the relevant agricultural chemical is found to be safe because its components etc. are of very low toxicity, in light of their type etc.;
 - The case where it lists to the next etc. corresponds to (i) or (ii.).
 - (When it corresponds to (i))
 - a) When the relevant agricultural chemical is used with its component substances encapsulated, such as in the case of attractants;
 - b) When the relevant agricultural chemical is used by placing it in certain locations, such as in the case of repellents, rodenticides, and molluscicides;
 - c) When the relevant agricultural chemical is applied to the applicable crops by painting or trunk injection;
 - d) When the relevant agricultural chemical is used only inside of a facility such as warehouse and greenhouse;
 - e) When the relevant agricultural chemical is not used in large quantities over a wide area at one time, such as in the case of aerosol;
 - f) When the relevant agricultural chemical is applied by attaching it directly to seeds, etc., such as in the case of dust coating.

(When it corresponds to (ii))

When the active ingredients of the relevant agricultural chemical have been used generally and widely for food, etc., and well known to the public as safe;

(3) Short-term PEC shall be derived separately depending on the usage stated in the application form, i.e., for use in paddy fields (paddy use) or fields other than paddy fields (not paddy use). However, if the derivation was performed regarding the usage for which the short-term PEC is expected to be the maximum, the derivation for other usage may be omitted.

7. Data on Predicted Environmental Concentration for long-term risk assessment on human health

- (1) These data, as used herein, refer to the "Derivation Results Report on Predicted Environmental Concentration for long-term risk assessment on human health " and the Appendices attached hereto (Attached Form No. 7), the former of which includes the predicted environmental concentrations (hereinafter referred to as "long-term PEC") of substances such as the active ingredients of the relevant agricultural chemicals.
- (2) Long-term PEC derivation may be omitted if any one of the following items, (i) or (ii), applies, and the applicant may submit data stating to that effect as a substitute for the Derivation Results Report Form.
 - (i.) When it is found that there is no risk that the components etc. of the relevant agricultural

chemical will contaminate farmland soil where it is used or run off into water systems such as rivers, in light of its formulation type, its application method etc.;

(ii.) When the relevant agricultural chemical is found to be safe because its components etc. are of very low toxicity, in light of their type etc.;

The case where it lists to the next etc. corresponds as (i) or (ii).

(When it corresponds to (i))

- a) When the relevant agricultural chemical is used with its component substances encapsulated, such as in the case of attractants;
- b) When the relevant agricultural chemical is used by placing it in certain locations, such as in the case of repellents, rodenticides, and molluscicides;
- c) When the relevant agricultural chemical is applied to the applicable crops by painting or trunk injection;
- d) When the relevant agricultural chemical is used only inside of a facility such as warehouse and greenhouse;
- e) When the relevant agricultural chemical is not used in large quantities over a wide area at one time, such as in the case of aerosol;
- f) When the relevant agricultural chemical is applied by attaching it directly to seeds, etc., such as in the case of dust coating.
- (When it corresponds to (ii))

When the active ingredients of the relevant agricultural chemical have been used generally and widely for food, etc., and well known to the public as safe;

(3) Long-term PEC shall be derived separately depending on the usage stated in the application form. However, if the derivation was performed regarding the usage for which the long-term PEC is expected to be the maximum, the derivation for other usage may be omitted.

8. Data on the test of agricultural chemical samples

- (1) These data, as used herein, refer to the "Test Results Report Form on Agricultural Chemical Samples" and the Appendices attached hereto (Attached Form No. 7), the former of which includes the test results on the content of the active ingredient in the samples of the relevant agricultural chemical.
- (2) Consider the following points in selecting a test method.
 - a. The test method shall be simple and easy, and practicable for general analysts, without an art requiring special skills.
 - b. The test method shall be such that it can specifically determine the active ingredient, without being affected by other components in the agricultural chemical.
 - c. The method shall be high precision, as well as high recovery.
- (3) The test (analysis) shall be repeated at least 5 times. However, some parts of the method, such as how to provide scores for analysis, need not necessarily be in conformity with the form, as long as the method is approved as the CIPAC method.

9. Samples of agricultural chemicals

Regarding submission of the samples of the agricultural chemical, TGAI, and purified active ingredients of the agricultural chemical, the requirements such as the type of the container, the amount to be submitted, etc. shall be specified in the attached "Submission of the Component Samples".

Supplementary Provisions (May 31, 2013)

The amendments in accordance with this notification shall apply to test results regarding efficacy, phytotoxicity, toxicity and persistence of agricultural chemicals that are submitted on and after May 31, 2013.

Appendix Table 1)	1
Formulation types	Test Items
Dustable powders	Fineness, apparent specific gravity, moisture content, drift index, average particle diameter, percentage of particles with an diameter of 0.01 mm or less, flowability, and pH.
Granules	Particle size, apparent specific gravity, friability in water, friability, moisture content, and pH
Dust-granule mixtures	Particle size, apparent specific gravity, friability, angle of repose, moisture content, and pH
Powders	Fineness, apparent specific gravity, moisture content, and pH
Wettable powders	Fineness, apparent specific gravity, wettability, suspension rate, viscosity, specific gravity, pH, stabilities of stock solution and diluted solution, and particle size
Water soluble powders	Fineness, apparent specific gravity, water solubility, dispersion rate in water, and pH
Emulsifiable concentrates	Stabilities of stock solution and diluted solution, specific gravity, and pH
Soluble concentrate	Stabilities of stock solution and diluted solution, specific gravity, and pH
Oil miscible liquid	Stability of stock solution, and specific gravity
Aerosols	Flame extension, internal pressure, absence or presence of leakage of injected gas, injection status, and classification of dangerous goods
Microcapsules	Test items for formulation with similar properties, physical state of microcapsules, average particle diameter, and film thickness
Pastes	Odour, consistency, and pH
Smoking agents	Size, weight, smoke emittance, fineness, apparent specific gravity, and smoke emitting period
Fumigants	Odour, specific gravity, viscosity, inflammability, explosibility, and unevaporated residue
Liniments	Odour, consistency, and pH
Ultra low volume	Stability of stock solution, specific gravity, and viscosity
liquid	
Lubricant	Stability of diluted solution, specific gravity (15/4 °C), viscosity (CSt,
emulsifiable	40 °C), pour point (°C), total acid number(mgKOH/g), aniline point (°C),
concentrates	degree of nonsulfation (V/V%), distillation properties (°C 1013 hPa) $<$ 50%
	distillation temperature (°C), distillation temperature range of 10 to >90%, carbon type (%CP) and pH
Spreaders	Stability of stock solution, pH, specific gravity, and surface tension

- Note 1 Regarding the formulations to be applied in the form of original agricultural chemical wrapped with water soluble film, etc., or used for preparing spray solutions., tests shall be performed on the visual appearance, weight, physical strength, solubility, and physical and chemical properties of the wrapping material, in addition to the relevant test items for its formulation type. These results shall be recorded.
 - 2. The solid agricultural chemicals to be applied directly to paddy fields, etc. (e.g., those in tablets or in spherical forms) shall be inspected regarding visual appearance, dimensions, weight, friability in water, and physical change (time-course investigation on cracking and friability due to surface scaling, etc.), in addition to the relevant test items, and the results shall be recorded.
 - 3. Of the agricultural chemicals containing items that are regulated as dangerous goods by the Fire Service Law (Law No. 186, issued on 24 July 1948), "Registration Confirmation" shall be provided with those that were registered in the "Database of Dangerous Goods by Hazardous Materials Safety Technique Association ". With those that were not registered, the materials informing whether or not they are the dangerous goods shall be provided (such as test results specified in the dangerous goods ordinance).

(Appendix Table 2)

General names for substances to be inspected
Dichlorodiphenyltrichloroethanes (DDTs)
Hexachlorobenzene (HCB)
Benzo[a]pyrene
Isomalathion
Hydrazine
β-naphthol
1,2-dichloropropane
Trichloroethylene
Tetrachloroethylene
Ethylenethiourea (ETU)
Heavy metals (selenium, cadmium, chromium, lead, mercury, and arsenic)

Test	Results Report Form of Agric	on Physical and ultural Chemic	d Chemical Properties cals
			Year Month Da
		Name	Corporate name, if any and name of representative
1.Type of the agricultu	ral chemical		
2.Name of the agricult	ural chemical		
3.Name and affiliation	n of the study director		
4. Test Tesuits			
Test items	Test results		Test (measurement) methods
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	~~~~~~~~~~
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
<u> </u>	1		

(Japan Industrial Standard A4)

Note: The test results and their (measurement) methods shall be described specifically for each test item listed in Appendix Table 1. Refer to Appendix 2 to create the form.

(Attached Form No. 2)

Test Results Report Form on the Storage stability of Agricultural Chemicals

Year Month Date

Name Corporate name, if any and name of representative

1. Type of the agricultural chemical

2.Name of the agricultural chemical

3.Name and affiliation of the study director

4. Temperature conditions

5.Test methods (e.g., amount of samples, type of container to be tested)

6.Test results

Elapsed time	Start time		1 year	(1 month)	2 years		
Sample	Date of	Default	Analytical	Decomposition	Analytical	Decomposition	
number	manufacture		value	rate	value	rate	
1		%	%	%	%	%	
2							
3							
	1			1			

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~	
Mean					
Appearance,					
etc.					
Container					
status					

Note 1. Enter the respective active ingredient content in the Default and the Analytical value fields.

2. Enter the color, visual appearance, status, redispersion rate, etc., of the relevant agricultural chemical in the Appearance field.

3. The months in the brackets are the elapsed time when tested at a temperature of 40  $^\circ$ C.

7. Discussion on the results

(State the anticipated agricultural chemical status during the shelf life).

## (Attached Form No. 3)

Report Form on Ingredient Composition of Agricultural Chemicals (Formulations) and the Technical Grade of Active Ingredients (TGAI), and the Manufacturing Methods

Year Month Date

Name

Corporate name, if any and name of representative

## 1. Type of the agricultural chemical

## 2.Name of the agricultural chemical

## 3.Name of the active ingredient

	Japanese name	English name
General name		
Chemical name		

## 4.Ingredient composition of the formulation

Classification	Туре	Name	Content (%)
Active ingredient	TGAI		
Inert ingredient (Other ingredient)			
Total			100.0

Note 1. Describe the substances that are intentionally added in the formulation process.

- 2. Enter the general name for the active ingredient.
- Enter the amount of TGAI in feed (%) in the samples of the agricultural chemical as the TGAI content (%) in the formulation. The active ingredient content in the TGAI (technical grade of active ingredient) (%) shall be added in brackets.
- 4. Enter the comprehensive type name for the inert ingredient type (e.g., surfactants, organic solvents, mineral powders, and pigments).
- 5. Enter the popular name (the most common name) for the inert ingredient.
- 6. Attach the detailed description (e.g., chemical name, trade name, CAS (Chemical Abstract Service) number, ENCS (Existing and New Chemical Substance List) number by METI, intended use, manufacturer, product specification, specifications and regulations by the relevant laws), analysis method, and analysis results for each inert ingredient name.
- 5. Methods and process for manufacturing the formulation

(The manufacturing methods shall be described using a flowchart. Each process (e.g., mixing, grinding, granulation, and drying) shall be described so that it will be easy to see the points when the TGAI (including the premixed one) and each inert ingredient are loaded.

Classification	Classification Name		Structural	Molecular	Molecular	Content in the TGAI (%)		
	General name	Chemical name	Iormula	formula	weight	Specification	Conventional value *	
Active								
ingredient								
Impurities								
а								
b								
с								

## 6. Ingredient composition of TGAI

* Enter the conventional range of fluctuation in the conventional value field, based on the results from the production lot analysis of TGAI, etc.

- 7. Methods for manufacturing TGAI, etc.
  - (1) Patent number for manufacturing method (Name of the patent owner)
  - (2) Reaction formula
  - (3) Reaction flowchart
  - (4) Purification process
  - (5) Address and name of the TGAI manufacturing location
- 8. Analysis results of ingredient composition of TGAI
  - (1) Address and name of the test facility
  - (2) Period of analysis (Starting date and ending date of analysis)
  - (3) Outline of analysis method
  - (4) Summary of analysis results

					Manu locatio	facturing		
Classification	Name		Analy	tical value	(%)	#	Min.	Max.
		А	В	С	D	Е		
Active ingredient								
Impurities in TGAI	а							
	b							
	С							

Note 1 The results report shall be created separately for each manufacturing location. Enter the manufacturing location in the upper right field.

2 Enter sample lot numbers in the fields from A to E.

3 Enter analyte names (impurities) in the fields indicated in lower case alphabet.

4 Enter the maximum and the minimum analytical value (%) in the Max and Min fields.

## (5) Appendices

- 1) Statement of reasons for selecting the target impurities
- 2) Analysis Results Report Form (It is required to include the address and name of the test facility, name of the study director, period of analysis, information on the analytes (e.g., name of analytes, manufacturing location, date of manufacture, and lot number), analysis methods (including determination methods), analytical instruments and conditions, analysis results, typical chromatogram (both for analytes and reference substance, including peak attribution)).

(Attached Form No. 4)

Test Results Report Form on Dioxin and Dioxin-like Compounds Included in Agricultural Chemicals

Year Month Date



- 1. Type of the agricultural chemical
- 2. Name of the agricultural chemical
- 3. Name and address of test facility
- 4. Period of test (Starting date and ending date of test)
- 5. Name of analytes
- 6. Information on analytes

Sample number	1	2	3	4	
Lot number					
Manufacturing location					
Date of manufacture					
Purity (%)					

- 7. Outline of test methods
- 8. Summary of test results (as described in the Appendix)
- 9. Appendices

Test Results Report Form (It is required to include the address and name of the test facility, name of the chief inspector, period of test, information on the analytes (e.g., name of analytes, manufacturing location, date of manufacture, lot number, degree of purity), information on reference substances, test methods, minimum limit of determination, test instruments and conditions, test results, chromatogram (including peak attribution)).

## (Appendix)

Summary	table	of ana	lvsis	results
Summary	uuuu	or unu	19515	results

			Sample number
The name	e of the compound for analysis	Minimum limit of determination	Analytical value (ng/g)
q	2,3,7,8-T ₄ TCDD		
inate ns	1,2,3,7,8-P ₅ CDD		
chlor dioxi	1,2,3,4,7,8-H ₆ CDD		
- <i>d</i> -0	1,2,3,6,7,8-H ₆ CDD		
ly oenz	1,2,3,7,8,9-H ₆ CDD		
Po dil	1,2,3,4,6,7,8-H ₇ CDD		
	O ₈ CDD		
	2,3,7,8-T ₄ CDF		
	1,2,3,7,8-P ₅ CDF		
s	2,3,4,7,8-P ₅ CDF		
Iran	1,2,3,4,7,8-H ₆ CDF		
zofu	1,2,3,6,7,8-H ₆ CDF		
ben	1,2,3,7,8,9-H ₆ CDF		
Di	2,3,4,6,7,8-H ₆ CDF		
	1,2,3,4,6,7,8-H ₇ CDF		
	1,2,3,4,7,8,9-H ₇ CDF		
	O ₈ CDF		
	3,4,4',5-T ₄ CB(#81)		
	3,3',4,4'-T ₄ CB(#77)		
	3,3',4,4',5-P ₅ CB(#126)		
ated	3,3',4,4'5,5'-H ₆ CB(#169)		
orina	2',3,4,4',5-P ₅ CB(#123)		
ychl	2,3',4,4',5-P ₅ CB(#118)		
pol	2,3,4,4',5-P ₅ CB(#114)		
aner enyls	2,3,3',4,4'-P ₅ CB(#105)		
Copl Jiphe	2,3',4,4',5,5'-H ₆ CB(#167)		
	2,3,3',4,4',5-H ₆ CB(#156)		
	2,3,3',4,4',5'-H ₆ CB(#157)		
	2,3,3',4,4',5,5'-H ₇ CB(#189)		

Remarks The results report shall be created for every sample. Enter the sample number corresponding to the number of the sample indicated to 6. in the upper right.

(Attached Form No. 5)

## Test Results Report Form on Hazardous Impurities Other Than Dioxin and Dioxin-like Compounds

Year Month Date

- 1. Type of the agricultural chemical
- 2. Name of the agricultural chemical
- 3. Name and address of test facility
- 4. Period of test (Starting date and ending date of test)(If multiple analytes are to be inspected, specific data shall be described separately for each analyte)
- 5. Name of analytes
- 6. Information on analytes

Sample number	1	2	3	4	
Lot number					
Manufacturing location					
Date of manufacture					
Purity (%)					

## 7. Analytes

General name	Chemical name	Structural formula
a		
b		
c		

Note In the fields indicated by lower case alphabet, enter the name of impurities that may possibly be included in the relevant agricultural chemical, among the substances listed in Appendix Table 2.

## 8. Outline of test methods

9. Summary of test results

General name of		Content of t	he analyte (uni	t)	
analyte	1	2	3	4	
	А	В	С	D	
a b c					

Note 1 The numbers in the above table correspond to the sample numbers in the preceding item 6. 2. Enter lot number of the sample in the fields indicated by upper case characters.

## 10. Appendices

Test Results Report Form (It is required to include the address and name of the test facility, name of the study director, period of test, information on the analytes (e.g., name of analytes, manufacturing location, date of manufacture, lot number, degree of purity), test methods, minimum limit of determination, test instruments and conditions, test results, chromatograms (including peak attribution)).

(Attached Form No. 6)

Derivation Results Report on Predicted Environmental Concentration for short-term risk assessment on aquatic organisms Year Month Date Name (Corporate name, if any and name of representative 1. Type of the agricultural chemical 2. Name of the agricultural chemical 3. Name and content of active ingredient 4. Short-term PEC derivation results (1) Tier 1 PEC derivation results Substance to be Site to be pest derivation results Method for use calculated controlled Use 2 days 3 days 4 days scene Use in paddy fields Use in other than paddy fields Note 1: Indicate application crops, the control method, application method, the amount used, etc. in the method-for-use column. 2: Enter N/A for the entry not to be calculated. 3: When there are two or more substances to be calculated, indicate results for every substance.

Substance to be	Site to be pest	Method for use	derivati	on results	5
calculated	controlled		2 days	3 days	4 days
	Use in paddy fields				
	Use in other than				
	paddy fields				
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	~~~~~	~~~~~~	~~~~~
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~	~~~~~	~~~~~

Note 1: Indicate application crops, the control method, application method, the amount used, etc. in the method-for-use column.

- 2: Enter N/A for the entry not to be calculated.
- 3: When there are two or more substances to be calculated, indicate results for every substance.

(3) Tier 3 PEC derivation results

Substance to be	Site to be pest	Method for use	derivati	on results	
calculated	controlled		2 days	3 days	4 days
	Use in paddy fields				
	Use in other than paddy fields				
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~~~~~		~~~~~
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~~~~~		~~~~~

Note 1: Indicate application crops, the control method, application method, the amount used, etc. in the method-for-use column.

2: Enter N/A for the entry not to be calculated.

3: When there are two or more substances to be calculated, indicate results for every substance.

5. Appendices

Derivation Process Report (It is required to include data used for derivation and derivation process for each tier of PEC)

(Attached Form No. 7)

Derivation Results Report on Predicted Environmental Concentration for long-term risk assessment on human health Year Month Date Name (Corporate name, if any and name of representative 1. Type of the agricultural chemical 2. Name of the agricultural chemical 3. Name and content of active ingredient 4. Long-term PEC derivation results (1) Tier 1 PEC derivation results derivation results Substance to be Site to be pest Method for use calculated controlled Use in paddy fields Use in other than paddy fields Note 1: Indicate application crops, the control method, application method, the amount used, etc. in the method-for-use column. 2: Enter N/A for the entry not to be calculated. 3: When there are two or more substances to be calculated, indicate results for every substance.

Substance to be calculated	Site to be pest controlled	Method for use	derivation results
	Use in paddy fields		
	Use in other than paddy fields		
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Note 1: Indicate application crops, the control method, application method, the amount used, etc. in the method-for-use column.

- 2: Enter N/A for the entry not to be calculated.
- 3: When there are two or more substances to be calculated, indicate results for every substance.

(3) Tier 3 PEC derivation results

Substance to be calculated	Site to be pest controlled	Method for use	derivation results
	Use in paddy fields		
	Use in other than paddy fields		
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Note 1: Indicate application crops, the control method, application method, the amount used, etc. in the method-for-use column.

- 2: Enter N/A for the entry not to be calculated.
- 3: When there are two or more substances to be calculated, indicate results for every substance.

5. Appendices

Derivation Process Report (It is required to include data used for derivation and derivation process for each tier of PEC)

(Attached Form No. 8)

	Name	Corporate name and name of	me, if any representativ	e )
Type of the agricultural c	hemical			
Name of the agricultural	chemical			
Summary of test results				
	Analytical value	(aantant (0/))		
1	Analytical value	(content (%))		
2				
3				
4				
5				
Mean (χ-)				
Standard deviation (δ)				
Coefficient of variation (%)				
Appendices (Refer to the Appendix	x)			

## (Appendix)

- 1. Appendices to be submitted
- (1) The relevant calibration curves, if the analyses were performed by gas chromatography (GC), high performance liquid chromatography (HPLC), or spectrophotometry, etc.
- (2) The chromatograms plotted when calibration curves were generated, and typical chromatograms of relevant samples of agricultural chemicals, TGAI, purified active ingredients, inert ingredients, and internal standard substances, if the analyses were performed by GC or HPLC. One example chromatogram from each of these analytes that show analytical values close to the mean will suffice.
- (3) The calculation sheet for the analysis results (Enter the results specifically on the calculation sheet, including starting from sample weighing to the final calculations, so that the analytical values at 5 points will be reproducible. Refer to Section 2 below).
- (4) If chemical quantitative analysis was used to test active ingredients of agricultural chemical samples, the supporting materials including the following data shall be provided for reviewing test methods. The material 2) shall be accompanied by the data on which give a sufficient basis to the test methods.
  - 1) Test methods
  - 2) Principles of the test methods
  - 3) Data on the accuracy and precision of the test methods
    - A) Recovery
    - B) Repeatability
    - C) Presence or absence of interference by other components
- (5) If bioassay was performed, the observed values obtained from the assay (e.g., inhibition zone diameter, leaf sheath length, and 50% lethal dose (LD50)).
- (6) Regarding microcapsules, the results and methods of active ingredient analysis, which were performed without a microcapsule, shall be provided.

2.Sample form for analysis by GC or HPLC

(

	The Calculation Sheet for the Quantitative Analysis Results of $\circ \circ$					
l) Prepa	Preparation of calibration curve					
Amou	nt of the purified	○○ (purity: ○○%):	Measuring fl	ask, 207.2 mg/20 mI		
Amou	nt of the internal s	tandard ムム: Me	easuring flask, 1	.0475 g/100 mL		
(Use	as the internal star	ndard solution. Me	easure out 4.00 mI	L of this for use.)		
No	oo standard	Content of oo	Weight ratio	Area ratio	Mean	
	solution					
1	1.00 mL	10.36 mg	0.2473	0.2061, 0.2077	0.2069	
2	2.00	20.72	0.4945	0.5083, 0.5160	0.5122	
3	3.00	31.08	0.7418	0.8305, 0.8273	0.8289	
4	4.00	41.44	0.9890	1.1384, 1.1525	1.1455	
5	5.00	51.80	1.2363	1.4426, 1.4495	1.4461	
Calcula	alculation formula: (weight ratio of $00$ ) = 0.745 × (Area ratio) + 0.0840					

Calculation formula: (weight ratio of  $\circ \circ$ ) = 0.745 × (Area ratio) + 0 Correlation coefficient = 0.9999

(Note) Weight ratio means weight of  $\circ\circ$  divided by weight of internal standard substance, and area ratio means area of  $\circ\circ$  divided by area of internal standard substance.

(2) Quantitative analysis of  $\circ \circ$  (Labeled amount: 2.0%)

(If the data relevant to calculation (e.g., the used amount or dilution rate of internal standard solution) are different from those above (in (1)), specify the details.

n	Collected	Area ratio	Mean	Weight	Content of $\circ \circ$	Analytical
	amount			ratio		value
1	1.5043 g	0.9077, 0.8975	0.9026	0.8011	33.57	2.23
2	1.5276g	0.9129, 0.9238	0.9184	0.8137	34.09	2.23
3	1.5098g	0.9054, 0.9064	0.9059	0.8037	33.68	2.23
4	1.6591g	1.0120, 1.0018	1.0069	0.8840	37.04	2.23
5	1.5074g	0.9108, 0.9115	0.9112	0.8079	33.85	2.25
L	1					1

Submission of Sample Ingredients, etc.

- Amount of sample ingredients to be submitted (1)Purified active ingredients: 1g (or 1 mL) x 2 (2)TGAI: 10 g (or 10 mL) x 2
- Type of containers to place the sample ingredients in The containers provided by Food and Agricultural Materials Inspection Center shall be used in principle.
- 3. Sample form of a label to be attached to the container

The form shown below is a sample of a label to be attached to the containers in which samples of agricultural chemicals, purified active ingredients, and TGAI are placed. The signs referring to intended use shall be entered in the sample form below according to the following classification.

Insecticide (I), Fungicide (F), Herbicide (H), Plant growth regulator (P), Rodenticide (R), Spreader (S), and Others (O).

(1) Sample form of a label to be attached to the container for agricultural chemical sample

Sample for Application for Registration of Agricultural Chemicals

- 1. Register number
- 2. Type of the agricultural chemicals
- 3. Name of the agricultural chemicals
- 4. Applicant
- 5. Date of re-registration
- 6. Date of manufacture
- 7. Manufacturing location (Factory name)
- 8. Lot number
- 9. Name of active ingredients
- 10. Content of active ingredients (labeled value and analytical values)
- Note For the agricultural chemical already registered, enter the register number and date of re-registration(expected date).
- (2) Sample form of a label to be attached to the container for purified active ingredients of agricultural chemicals
  - 1) Sample form of a label to be attached to the container (a vial or bottle) for purified active ingredients (when solid)

	Purified $\circ\circ$ (Purity (%))
Melting poi	nt (°C)
Inner capac	ity (g)
Applicant	
Date of sub	mission

Note 1. The dimensions shall be 25 mm in length by 30 mm in width.

- 2. Enter the sign referring to intended use in the field indicated by  $\Box\Box$ .
- 3. Enter the general name for the agricultural chemical in the field indicated by  $\circ \circ$ .
- 2) Sample form of a label to be attached to the container (a vial or bottle) for purified active ingredients (when liquid)

	Purified oo (Purity (%))
Boiling po	int (□/Pa)
Inner capa	city (mL)
Applicant	
Date of su	bmission

Note 1. The dimensions shall be 25 mm in length by 30 mm in width.

- 2. Enter the sign referring to intended use in the field indicated by  $\Box\Box$ .
- 3. Enter the general name for the agricultural chemical in the field indicated by  $\circ \circ$ .
- 4. For highly volatile liquid, measure out approximately 1 mL into an ampul (10.5 mm in diameter by less than 67 mm in height) and seal.
- 3) Sample form of a label to be attached to the container to accommodate 2 of the containers 1) or 2) above

	Purified $\circ\circ$ (Purity (%))
1.	Chemical name
2.	Melting point or boiling point
3.	Inner capacity
4.	Applicant
5.	Date of submission
6.	Date of manufacture
L	

Note 1. The dimensions shall be 50 mm in length by 79 mm in width.

- 2. Enter the sign referring to intended use in the field indicated by  $\Box\Box$ .
- 3. Enter the general name for the agricultural chemical in the field indicated by  $\circ \circ$ .

(3) Sample form of a label to be attached to the container (a vial or bottle) for the TGAI sample

	TGAI of $\circ \circ$ (Purity (%))
1.	Chemical name
2.	Melting point or boiling point
3.	Inner capacity
4.	Applicant
5.	Date of submission
6.	Date of manufacture
7.	Manufacturing location (Factory name)
8.	Lot number

Note 1. The dimensions shall be 50 mm in length by 79 mm in width.

2. Enter the sign referring to intended use in the field indicated by  $\Box\Box$ .

3. Enter the general name for the agricultural chemical in the field indicated by  $\circ \circ$ .

Refer to the following sample form for reporting test results when providing Item 4. (Test results) of Attached Form No. 1 "Test Results Report Form on Physical and Chemical Properties" in " Implementing rules of "Other data and information to be attached to the application for registration of an agricultural chemical (the notification issued by the Director, Agricultural Production Materials Division) "".

•Sample form for general dust
-------------------------------

Test items	Test results	Test (measurement) methods
Appearance	Nearly white powders	Methods in accordance with the notification, Ref. No. $\circ$ Nosan issued on $\circ\circ\circ$ by the Director General, Agricultural Production Bureau, MAFF, and by using organoleptic characterization
Fineness	Below 45 μm 98.0%	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.
Apparent specific gravity	0.58	Ditto
Moisture content	1.0%	Methods according to the notification, Ref. No. $\circ$ Nosan issued on $\circ\circ\circ$ by the Director General, Agricultural Production Bureau, MAFF.
рН	6.0	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.

•Sample form for low drift dust formulations (DL)

Test items	Test results	Test (measurement) methods
Appearance	Nearly white powders	Methods in accordance with the notification, Ref. No. $\circ$ Nosan issued on $\circ\circ\circ$ by the Director General, Agricultural Production Bureau, MAFF, and by using organoleptic characterization
Fineness	Below 45 μm 98.4%	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.
Drift index	9.8	Methods according to the notification, Ref. No. $\circ$ Nosan issued on $\circ\circ\circ$ by the Director General, Agricultural Production Bureau, MAFF.
Mean particle size	0.0247 mm	Ditto
Particles with a diameter of 0.01 mm or less	10.3%	Ditto
Apparent specific gravity	0.83	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.
Flowability	4 sec	Methods according to the notification, Ref. No. $\circ$ Nosan issued on $\circ\circ\circ$ by the Director General, Agricultural Production Bureau, MAFF.
pН	6.0	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.

$\circ \text{Sample}$	form	for	fine	dust	formu	lations

Test items	Test results	Test (measurement) methods
Appearance	Nearly white powders	Methods in accordance with the notification, Ref. No. $\circ$ Nosan issued on $\circ\circ\circ$ by the Director General, Agricultural Production Bureau, MAFF, and by using organoleptic characterization
Fineness	Below 45 μm 99.8%	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.
Drift index	99	Methods according to the notification, Ref. No. $\circ$ Nosan issued on $\circ\circ\circ$ by the Director General, Agricultural Production Bureau, MAFF.
Mean particle size	0.0021 mm	Ditto
Apparent specific gravity	0.081	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.
рН	6.8	Ditto

## •Sample form for granules

Test items	Test results	Test (measurement) methods
Appearance	Light brown granules No crystal deposition was observed.	Methods in accordance with the notification, Ref. No.0 Nosan issued on 000 by the Director General, Agricultural Production Bureau, MAFF, and by using organoleptic characterization
Particle size	850 - 1700 μm   1.2%     500 - 850 μm   48.2%     300 - 500 μm   50.0%     63 - 300 μm   0.2%     Below 63 μm   0.4%	Methods in accordance with the Notification No. 750, issued on 25 July 1975 by the Ministry of Agriculture and Forestry.
Apparent specific gravity	1.4	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.
Friability in water	5 min	Methods according to the notification, Ref. No. Nosan issued on 000 by the Director General, Agricultural Production Bureau, MAFF.
Friability*	Sifting time     10'   20'     300-1700 μm   99.2% 98.9%     106-300 μm   0.02% 0.03%     45-106 μm   0% 0.03%     Below 45 μm   0.17% 0.12%	Ditto
Moisture content	1.0%	Ditto
pН	7.2	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.

*This item shall be measured for those with relatively strong TGAI toxicity.

•Sample form for microgranules

Test items	Test results	Test (measurement) methods
Appearance	Nearly white granules No crystal deposition was observed.	Methods in accordance with the notification, Ref. No.0 Nosan issued on 000 by the Director General, Agricultural Production Bureau, MAFF, and by using organoleptic characterization
Particle size	180 - 300 μm58.2%125 - 180 μm34.3%63 - 125 μm16.0%Below 63 μm1.5%	Methods in accordance with the Notification No. 750, issued on 25 July 1975 by the Ministry of Agriculture and Forestry.
Apparent specific gravity	1.4	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.
Angle of repose	37°	Methods in accordance with the Notification No. 750, issued on 25 July 1975 by the Ministry of Agriculture and Forestry.
Moisture content	1.0%	Methods according to the notification, Ref. No. $\circ$ Nosan issued on $\circ \circ \circ$ by the Director General, Agricultural Production Bureau, MAFF.
рН	6.5	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.

## <u>•Sample form for microgranules F</u>

Test items	Test results	Test (measurement) methods
Appearance	Nearly white microgranules and coarse dusts No crystal deposition was observed.	Methods in accordance with the notification, Ref. No. $\circ$ Nosan issued on $\circ \circ \circ$ by the Director General, Agricultural Production Bureau, MAFF, and by using organoleptic characterization
Particle size	150 - 212 μm 25.5%   106 - 150 μm 40.4%   63 - 106 μm 28.3%   Below 63 μm 4.5%   Below 45 μm almost none	Methods in accordance with the Notification No. 750, issued on 25 July 1975 by the Ministry of Agriculture and Forestry.
Apparent specific gravity	1.4	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.
Angle of repose	38°	Methods in accordance with the Notification No. 750, issued on 25 July 1975 by the Ministry of Agriculture and Forestry.
Moisture content	1.0%	Methods according to the notification, Ref. No. $\circ$ Nosan issued on $\circ\circ\circ$ by the Director General, Agricultural Production Bureau, MAFF.
рН	6.5	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.

•Sample form for fine granules F

Test items	Test results	Test (measurement) methods
Appearance	Light brown granules and microgranules No crystal deposition was observed.	Methods in accordance with the notification, Ref. No. $\circ$ Nosan issued on $\circ\circ\circ$ by the Director General, Agricultural Production Bureau, MAFF, and by using organoleptic characterization
Particle size	More than 710 μm   1.6%     710 - 425 μm   85.2%     425 - 180 μm   12.3%     180 - 63 μm   0.9%     Below 63 μm   almost none	Methods in accordance with the Notification No. 750, issued on 25 July 1975 by the Ministry of Agriculture and Forestry.
Apparent specific gravity	1.4	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.
Angle of repose	38°	Methods in accordance with the Notification No. 750, issued on 25 July 1975 by the Ministry of Agriculture and Forestry.
Friability*	Sifting time     10'   20'     710 - 425 μm   85.2% 85.0%     425 - 180 μm   12.3% 12.2%     180 - 63 μm   0.9% 1.2%     Below 43 μm   0% 0%	Methods according to the notification, Ref. No.0 Nosan issued on 000 by the Director General, Agricultural Production Bureau, MAFF.
Moisture content	1.0%	Ditto
рН	6.5	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.

*This item shall be measured for those with relatively strong TGAI toxicity.

•Sample form for powders

Test items	Test results	Test (measurement) methods
Appearance	Nearly white powders	Methods in accordance with the notification, Ref. No. $\circ$ Nosan issued on $\circ \circ \circ$ by the Director General, Agricultural Production Bureau, MAFF, and by using organoleptic characterization
Fineness	Below 300 µm 98.0%	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.
Apparent specific gravity	0.58	Ditto
Moisture content	1.0%	Methods according to the notification, Ref. No. $\circ$ Nosan issued on $\circ\circ\circ$ by the Director General, Agricultural Production Bureau, MAFF.
рН	6.0	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.

Test items	Test results	Test (measurement) methods
Appearance	Nearly white powders	Methods in accordance with the notification, Ref.
(For tablets :	Record the measured value for	No. $\circ$ Nosan issued on $\circ \circ \circ$ by the Director General,
	one tablet.)	Agricultural Production Bureau, MAFF, and by using organoleptic characterization
Fineness	Below 45 µm 98.0%	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.
Apparent specific gravity	0.35	Ditto
Wettability	2.0 min	Ditto
Suspension rate	70.0%	Ditto
-	After 15 min, no oily matter or deposition was observed in the suspension.	
рН	6.5	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.

•Sample form for general wettable powders

## •Sample form for wettable powders (suspension concentrates)

Test items	Test results	Test (measurement) methods
Appearance	Nearly white wettable viscous suspension liquid	Methods in accordance with the notification, Ref. No.0 Nosan issued on 000 by the Director General, Agricultural Production Bureau, MAFF, and by using organoleptic characterization
Stability of stock solution	After standing for 72 hours at room temperature, no deposition or separation was observed./After standing for 72 hours at -5 $\Box$ , no change in appearance or properties was observed.	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.
Stability of diluted solution	No deposition or separation was observed.	Ditto
Specific gravity	1.14 (25°C)	Pycnometery (JIS K0061)
Viscosity	114 mPa·s (20°C)	Brookfield type viscometer (rotor No. 2, 60 rpm)
Suspension rate	90.0% After 15 min, no oily matter or deposition was observed in the suspension.	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.
pН	4.7	Ditto

•Sample form for granular wettable powders

Test items	Test results	Test (measurement) methods
Appearance	Light brown granules	Methods in accordance with the notification, Ref. No.0 Nosan issued on 000 by the Director General, Agricultural Production Bureau, MAFF, and by using organoleptic characterization
Particle size	850 - 1700 μm 0.1% 500 - 850 μm 93.20% 300 - 500 μm 6.6% Below 45 μm 0.1%	Methods in accordance with the Notification No. 750, issued on 25 July 1975 by Ministry of Agriculture and
Apparent specific gravity	1.4	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.
Wettability	2 min	Ditto
Suspension rate	80.0% After 15 min, almost no oily matter or deposition was observed in the suspension.	Ditto
pН	5.6	Ditto

## •Sample form for water soluble powders

Test items	Test results	Test (measurement) methods
Appearance	Nearly white powders	Methods in accordance with the notification, Ref. No. $\circ$
(For tablets :	Record the measured value	Nosan issued on $\circ \circ \circ$ by the Director General, Agricultural
	for one tablet ).	Production Bureau, MAFF, and by using organoleptic characterization
Fineness	Below 45µm 98.0%	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.
Apparent specific gravity	0.30	Ditto
Water solubility	2.0 min After 15 min, no oily matter or deposition was observed in the suspension.	Add the flaked sample to 200 mL of water with hardness 3 at 20°C, to give the maximum concentration of use for the formulation. Stir with a glass rod at a rate of once per second, and measure the time interval until the liquid becomes transparent.
Dispersion in water	90%	Methods according to the notification, Ref. No. $\circ$ Nosan issued on $\circ \circ \circ$ by the Director General, Agricultural Production Bureau, MAFF.
рН	4.7	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.

## •Sample form for emulsifiable concentrates

Test items	Test results	Test (measurement) methods
Appearance	Light yellow oily liquid	Methods in accordance with the
	No turbidity or deposition was observed.	notification, Ref. No.º Nosan issued on
		000 by the Director General, Agricultural
		Production Bureau, MAFF, and by using
		organoleptic characterization
Stability of	No separation of the liquid or deposition	Methods in accordance with the
stock solution	was observed.	Notification No. 71, issued on 3 February
		1960 by the Ministry of Agriculture and
		Forestry.
Stability of	The emulsion was homogeneous, and no	Ditto
diluted solution	oily matter or deposition was observed.	
рН	6.5	Ditto
Specific gravity	1.04 (20 °C)	Hydrometry (JIS K0061)

## •Sample form for soluble concentrate

Test items	Test results	Test (measurement) methods
Appearance	Light yellow oily liquid	Methods in accordance with the
	No turbidity or deposition was observed.	notification, Ref. No. $\circ$ Nosan issued on $\circ \circ \circ$ by the Director General, Agricultural Production Bureau, MAFF, and by using organoleptic characterization
Stability of stock solution	No separation of the liquid or deposition, etc., was observed (2 °C).	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.
Stability of diluted solution	The solution is homogeneous and almost no oily matter or deposition, etc., was observed.	Ditto
рН	3.5	Ditto
Specific gravity	1.15 (20 °C)	Hydrometry (JIS K0061)

## •Sample form for oil miscible liquid

Test items	Test results	Test (measurement) methods
Appearance	Light yellow oily liquid	Methods in accordance with the notification,
	No turbidity or deposition was observed.	Ref. No. $\circ$ Nosan issued on $\circ \circ \circ$ by the Director
		General, Agricultural Production Bureau,
		MAFF, and by using organoleptic
		characterization
Stability of stock solution	No separation of the liquid or deposition, etc., was observed (2 °C).	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.
Specific gravity	0.97 (20 °C)	Hydrometry (JIS K0061)

## ○Sample form for aerosols

Test items	Test results	Test (measurement) methods
Appearance	Light yellow oily liquid	Methods in accordance with the notification,
	No turbidity or deposition was	Ref. No. $\circ$ Nosan issued on $\circ \circ \circ$ by the Director
	observed.	General, Agricultural Production Bureau, MAFF,
		and by using organorepite characterization
Flame extension	20 cm	Methods in accordance with the Enforcement
		Order of the High-pressure Gas Safety Law
Internal pressure	4,900 hPa (35 ℃)	Methods described in the Appendix (Note 2).
Absence/presence of	No leakage was observed.	Dipped into the warm water at a temperature
leakage of injected gas		range from 53 to 57 $\square$ .
Injection status	Injection is homogeneous, and	Methods described in the Appendix (Note 2).
	no valve occlusion was	
	observea.	
Classification as	Class 4 Petroleum No. 2	Methods in accordance with the Fire Service
dangerous goods		Law.

## •Sample form for microcapsules

Test items	Test results	Test (measurement) methods
Appearance	Light yellow granules	Methods in accordance with the notification, Ref. No. $\circ$ Nosan issued on $\circ\circ\circ$ by the Director General, Agricultural Production Bureau, MAFF, and by using organoleptic characterization
Test items for formulation types with similar properties*		
Physical state Mean particle size Film thickness	Spherical 10 μm 0.1 μm	Measure with a microscope. Ditto Methods described in the Appendix.

* Perform test items for either liquid or granular formulations, depending on the property of the tested formulation.

## •Sample form for pastes and liniments

Test items	Test results	Test (measurement) methods
Appearance	Light yellow pastes. Homogeneous colored and no solid matter observed.	Methods in accordance with the notification, Ref. No. $\circ$ Nosan issued on $\circ\circ\circ$ by the Director General, Agricultural Production Bureau, MAFF, and by using organoleptic characterization
Odour	Non-odour	Organoleptic characterization
Consistency	25.0 mm (25 °C, measured for 5 sec)	Methods described in the Appendix (Note 2).
рН	6.5	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.

•Sample form for smoking agents

Test items	Test results	Test (measurement) methods
Appearance	Nearly white, smoke emitting, hollow, and discoid	Methods in accordance with the notification, Ref. No.0 Nosan issued on 000 by the Director General, Agricultural Production Bureau, MAFF, and by using organoleptic characterization
Dimensions Weight	ED 65.3 mm, ID 20.2 mm, H 14.5 mm 75.0 g per piece	Measure with a micrometer caliper.
Smoke emittance	It shall emit smoke at 250 °C.	Place the sample on the hot plate and keep the constant temperature for 3 min. Then increase the heat gradually to measure the temperature at which smoke is first detected.

## •Sample form for smoking agents (powdered)

Test items	Test results	Test (measurement) methods
Appearance	Light yellow powders	Methods in accordance with the
		notification, Ref. No. $\circ$ Nosan issued on $\circ \circ \circ$
		by the Director General, Agricultural
		Production Bureau, MAFF, and by using
		organoleptic characterization
Fineness	85.3%	Methods in accordance with the
		Notification No. 71, issued on 3 February
		1960 by the Ministry of Agriculture and
		Forestry.
Apparent	0.75	Ditto
specific		
gravity		
Smoke	Fasy to ignite No abnormalities such as	Ignitable with a match
emittance	ignition failure or flame extinction were	iginatione with a match.
cinitanee	observed	
Smoke	65 min	Measure the time from the ignition to the
emitting		end of smoke emission.
period		

## •Sample form for fumigants

Test items	Test results	Test (measurement) methods
Appearance	Light yellow viscous liquid. No turbidity or deposition was observed.	Methods in accordance with the notification, Ref. No.0 Nosan issued on 000 by the Director General, Agricultural Production Bureau, MAFF, and by using organoleptic characterization
Odour	Non-odour	Organoleptic characterization
Specific gravity	1.21 (20 °C)	Hydrometry (JIS K0061)
Viscosity	9.2 mPa·s (20 °C)	Methods described in the Appendix (Note 2).
Inflammability	None	Method of Pensky-Martens Closed Cup (JIS K2265)
Explosibility, *	None	Methods described in the Appendix (Note 2).
Unevaporated residue	0.01%	Measure out a specific quantity of the liquid into a bottle and evaporate. Weight the residue to calculate the amount of unevaporated residue.

*This item shall be measured if only a little explosibility exists.

## oSample form for ultra low volume liquid

Test items	Test results	Test (measurement) methods
Appearance	Light brown liquid	Methods in accordance with the notification,
	No turbidity or deposition was observed.	Ref. No. $\circ$ Nosan issued on $\circ \circ \circ$ by the
		Director General, Agricultural Production
		Bureau, MAFF, and by using organoleptic
		characterization
Stability of	No separation of the liquid or deposition	Methods in accordance with the Notification
stock solution	was observed.	No. 71, issued on 3 February 1960 by the
		Ministry of Agriculture and Forestry.
Specific	1 12 (25 °C)	Methods described in the Appendix (Note 2)
gravity	1.12 (25 0)	Ditto
5		
Viscosity	8.17 mPa · s (25 °C)	
	× • •	

Test items	Test results	Test (measurement) methods
Appearance	Light yellow oily liquid No turbidity or deposition was observed.	Methods in accordance with the notification, Ref. No. $\circ$ Nosan issued on $\circ\circ\circ$ by the Director General, Agricultural Production Bureau, MAFF, and by using organoleptic characterization
Stability of diluted solution	The emulsion was homogeneous, and no oily matter or deposition, etc., was observed.	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.
Specific gravity $(15/4 \Box)$	0.854	JIS-K-2249
Viscosity	13.9 (CSt,40 °C)	JIS-K-2283
Pour point	-12.6 (°C)	JIS-K-2269
Total acid number	Below 0.01 (mgKOH/g)	JIS-K-2501
Aniline point	100.8(°C)	JIS-K-2256
Degree of nonsulfation	95 (V/V%)	ASTM-D-483
Distillation properties (		
1,013.3 hPa)	38 <b>3</b> (% <b>C</b> )	ASTM D 11(0
50% distillation	382 ( C)	AS1M-D-1100
Distillation temperature	53	Ditto
range of 10 to 90%	55	Ditto
Carbon type	64.6 (%CP)	ASTM-D-2140
рН	6.5	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry.

oSample form for lubricant emulsifiable concentrates

## •Sample form for spreaders

Test items	Test results	Test (measurement) methods
Appearance	Light yellow viscous liquid No turbidity or deposition was observed.	Methods in accordance with the notification, Ref. No. $\circ$ Nosan issued on $\circ \circ \circ$ by the Director General, Agricultural Production Bureau, MAFF, and by using organoleptic characterization
Stability of stock solution	No separation of the liquid or deposition, etc., was observed.	Methods in accordance with the Notification No. 71, issued on 3 February 1960 by the Ministry of Agriculture and Forestry
рН	6.5	Ditto
Specific gravity	0.94 (20 °C)	Hydrometry
Surface tension	10,000 -fold dilution** 44.3 (20°C,N/m) 5,000 -fold dilution 43.1 2,500 -fold dilution 40.0	Methods described in the Appendix (Note 2).

* Stability or foamability, etc., shall be added to the items as needed.

** The dilution rate for test shall be established in consideration of concentrations of actual use.

Note: 1. Perform each measurement in triplicate, and report the mean value as the measured value.

2. When the test is performed using other than specified method, attach the paper describing the outline of the used methods.