

NA(CWC) LICENCE APPLICATION

*Production / Processing / Consumption / Storage of
Scheduled Chemical(s)*

GENERAL INSTRUCTIONS	
<ul style="list-style-type: none"> ◆ All relevant forms for this application must be submitted together with the NA(CWC) Licence Application Cover Form. ◆ All sections must be completed. Where not applicable, please specify "N.A.". Any incomplete or illegible application will not be accepted. ◆ A Chemical at different concentration / purity should be submitted on separate forms. ◆ Please duplicate the form as required. ◆ This form may take you 20 minutes to fill in. You will need the following information to fill in the form: <ul style="list-style-type: none"> ▪ Details of the Scheduled Chemical(s) ▪ Details of Product(s) containing the Scheduled Chemical(s) ▪ MSDS or other necessary document(s) for the Scheduled Chemical(s) 	
FORMS	PURPOSE
Form B.1	For Company / Organization involved in the production / processing / consumption / storage of Schedule 1 Chemical_(s)
Form B.2	For Company / Organization involved in the production / processing / consumption of Schedule 2 Chemical(s)
Form B.3	For Company / Organization involved in the production of Schedule 3 Chemical(s)
Form B.4.1, B.4.2 & B.4.3	For Company / Organization involved in the production of Unscheduled Discrete Organic Chemical(s)

GUIDELINES FOR FORM B.1 :SCHEDULE 1 CHEMICAL(S) (Production / Processing / Consumption / Storage)

- ◆ A chemical with different concentrations / purities should be submitted on separate Form B.1.
 - ◆ Please duplicate the forms as required.
 - ◆ **Name of Schedule 1 Chemical:**
 - ▶ Please refer to Schedule 1A/1B under the "Controlled Chemicals under NA(CWC)" for a list of Schedule 1 Chemicals.
 - ▶ In general, the chemical should be named in accordance to the list or if not available, according to IUPAC way of naming. (IUPAC refers to International Union of Pure and Appled Chemistry).
 - ◆ **Structure of Chemical:**
 - ▶ Please provide the chemical structure for chemicals that are classified under families in the scheduled chemicals list.
 - e.g.
 - Methylphosphonyldifluoride classified under Schedule 1B with the description, "Alkyl (Me, Et, n-Pr or I-Pr) phosphonyldifluorides".*
 - Chemical structure should be provided as follows:*
-
- ▶ There is no need to provide the chemical structure for chemicals that are listed individually in the Schedule list.
 - e.g.
 - Triethanolamine under Schedule 3B*
- ◆ **CAS Registry No.**
 - ▶ Refers to Chemical Abstract Service Registry Number. It is a number assigned to the chemical and is unique of each chemical. It is sometimes indicated in square brackets ([]).
 - e.g.
 - For Methyl-diethanolamine, CAS Registry no is 105-59-9*
 - ▶ This can also be found in Material Safety Data Sheets (MSDS) or equivalent type of certificate for the chemical.
- ◆ **Common Trade Name (Name of Product containing Schedule 1 Chemical):**
 - ▶ The product name as reflected in the MSDS and/or any other necessary documents.
 - ▶ This must be supported by MSDS and/or other necessary documents for the product.
- ◆ **Percentage Purity:**
 - ▶ Refers to the concentration or purity of the Schedule 1 Chemical, to be expressed in percentage.
 - ▶ This must be supported by MSDS and/or any other necessary documents for the product.
- ◆ The licence applicant must sign, indicate the date of application and company stamp on every page of the application form accordingly
 - ◆ Any application in the absence of the signature, date and/or company stamp will not be accepted

GUIDELINES FOR FORM B.1 :SCHEDULE 1 CHEMICAL(S) (Production / Processing / Consumption / Storage)

- ◆ Please indicate in one or more of the boxes the required for this application and provide the relevant information accordingly.
- ◆ Please express all quantities in micrograms (μg). (1 gram is equivalent to 1,000,000 micrograms)
- ◆ Reaction procedure(s) must be specified for all production / processing / consumption:
 - ▶ For processing, purity of the chemical in the final product should be indicated.

- ◆ Please indicate in one or more of the boxes the overall purpose(s) that best describes the intention(s) for the chemical

- ◆ The Licence applicant must sign; indicate the date of application and company stamp on every page of the application form accordingly.
- ◆ Any application in the absence of the signature, date and/or company stamp will not be accepted.

FORM B.1: SCHEDULE 1 CHEMICAL(S) (Production / Processing / Consumption / Storage)

Please indicate the required activity(ies) for this application and provide the details accordingly:

<input type="checkbox"/> Production	
Anticipated Quantity: μg	Specific purpose(s) of production, indicating any final product(s) formed:
	Briefly describe the reaction procedure(s), indicating the type of reaction(s) taking place or principle(s) employed for the procedure(s):
<input type="checkbox"/> Processing	
Anticipated Quantity: μg	Specific purpose(s) of processing, indicating any final product(s) formed and its purity:
	Briefly describe the reaction procedure(s), indicating the type of reaction(s) taking place or principle(s) employed for the procedure(s):
<input type="checkbox"/> Consumption	
Anticipated Quantity: μg	Specific purpose(s) of consumption, indicating any final product(s) formed:
	Briefly describe the reaction procedure(s), indicating the type of reaction(s) taking place or principle(s) employed for the procedure(s):
<input type="checkbox"/> Storage	
Anticipated Quantity: μg	Specific eventual purpose(s) of this chemical, indicating how would it be used:
	Is this chemical from a previous stock? <input type="checkbox"/> No <input type="checkbox"/> Yes
	If Yes, please specify the year in which your company has acquired this stock:

Overall purpose(s) for intended Production/ Processing/ Consumption/ Storage:

For in-house usage or application(s)

Research Medical Pharmaceutical
 Protective Production of other Schedule 1 Chemical(s)

For export purposes (Please see requirements in Form A.1)

For further sale or distribution

Others, please specify: _____

Applicant's Signature:	Date:	Company Stamp:
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* Please duplicate form as required

GUIDELINES FOR FORM B.2 :SCHEDULE 2 CHEMICAL(S) (Production / Processing / Consumption)

- ◆ A chemical with different concentrations / purities should be submitted on separate Form B.2.
 - ◆ Please duplicate the forms as required.
 - ◆ **Name of Schedule 2 Chemical:**
 - ▶ Please refer to Schedule 2A/2A*/2B under the "Controlled Chemicals under NA(CWC)" for a list of Schedule 2 Chemicals.
 - ▶ In general, the chemical should be named in accordance to the list or if not available, according to IUPAC way of naming. (IUPAC refers to International Union of Pure and Appled Chemistry).
 - ◆ **Structure of Chemical:**
 - ▶ Please provide the chemical structure for chemicals that are classified under families in the scheduled chemicals list.
e.g.
Methylphosphonyldifluoride classified under Schedule 1B with the description, "Alkyl (Me, Et, n-Pr or I-Pr) phosphonyldifluorides".
Chemical structure should be provided as follows:
-
- ▶ There is no need to provide the chemical structure for chemicals that are listed individually in the Schedule list.
e.g.
Triethanolamine under Schedule 3B
 - ◆ **CAS Registry No.**
 - ▶ Refers to Chemical Abstract Service Registry Number. It is a number assigned to the chemical and is unique of each chemical. It is sometimes indicated in square brackets ([]).
e.g.
For Methyl-diethanolamine, CAS Registry no is 105-59-9
 - ▶ This can also be found in Material Safety Data Sheets (MSDS) or equivalent type of certificate for the chemical.
 - ◆ **Common Trade Name (Name of Product containing Schedule 2 Chemical):**
 - ▶ The product name as reflected in the MSDS and/or any other necessary documents.
 - ▶ This must be supported by MSDS and/or other necessary documents for the product.
 - ◆ **Percentage Purity:**
 - ▶ Refers to the concentration or purity of the Schedule 2 Chemical, to be expressed in percentage.
 - ▶ This must be supported by MSDS and/or any other necessary documents for the product.

- ◆ Please indicate in one or more of the boxes the activities required for this application and provide the relevant information accordingly.
- ◆ Please express all quantities in kilograms (kg) (1 Kilogram is equivalent to 1,000 grams)
- ◆ **Reaction procedure(s) must be specified for all production / processing / consumption:**
 - ▶ For processing, purity of the chemical in the final product should be indicated

- ◆ Please indicate in one or more of the boxes the overall purpose(s) that best describes the intention(s) for the chemical.

- ◆ The Licence applicant must sign; indicate the date of application and company stamp on every page of the application form accordingly.
- ◆ Any application in the absence of the signature, date and/or company stamp will not be accepted

FORM B.2: SCHEDULE 2 CHEMICAL(S) (Production / Processing / Consumption)

Details of Schedule 2 Chemical		Details of Product containing Schedule 2 Chemical
Name of Chemical:		Common Trade Name:
CAS Registry No.:		Percentage Purity (%):
Chemical Structure:		
Please indicate the required activity(ies) for this application and provide the details accordingly:		
<input type="checkbox"/> Production		
Anticipated Quantity:	Specific purpose(s) of production, indicating any final product(s) formed:	
kg		
	Briefly describe the reaction procedure(s), indicating the type of reaction(s) taking place or principle(s) employed for the procedure(s):	
<input type="checkbox"/> Processing		
Anticipated Quantity:	Specific purpose(s) of processing, indicating any final product(s) formed and its purity:	
kg		
	Briefly describe the reaction procedure(s), indicating the type of reaction(s) taking place or principle(s) employed for the procedure(s):	
<input type="checkbox"/> Consumption		
Anticipated Quantity:	Specific purpose(s) of consumption, indicating any final product(s) formed:	
kg		
	Briefly describe the reaction procedure(s), indicating the type of reaction(s) taking place or principle(s) employed for the procedure(s):	
Overall purpose(s) for intended Production / Processing / Consumption:		
<input type="checkbox"/> For in-house usage or application(s)		
<input type="checkbox"/> For local sales or distribution		
<input type="checkbox"/> For export purposes (Please see requirements in Form A.2)		
<input type="checkbox"/> Others, please specify: _____		
Applicant's Signature:	Date:	Company Stamp:

* Please duplicate form as required

GUIDELINES FOR FORM B.3 :SCHEDULE 3 CHEMICAL(S) (Production)

- ◆ A chemical with different concentrations / purities should be submitted on separate Form B.3.
- ◆ Please duplicate the forms as required.
- ◆ *Name of Schedule 3 Chemical:*
 - ▶ Please refer to Schedule 3A/3B under the "Controlled Chemicals under NA(CWC)" for a list of Schedule 3 Chemicals.
 - ▶ In general, the chemical should be named in accordance to the list or if not available, according to IUPAC way of naming. (IUPAC refers to International Union of Pure and Appled Chemistry).
- ◆ *CAS Registry No.*
 - ▶ Refers to Chemical Abtract Service Registry Number. It is a number assigned to the chemical and is unique of each chemical. It is sometimes indicated in square brackets ([]).
e.g. *For Methyl-diethanolamine, CAS Registry no is 105-59-9*
 - ▶ This can also be found in Material Safety Data Sheets (MSDS) or equivalent type of certificate for the chemical.
- ◆ *Common Trade Name (Name of Product containing Schedule 3 Chemical):*
 - ▶ The product name as reflected in the MSDS and/or any other necessary documents.
 - ▶ This must be supported by MSDS and/or other necessary documents for the product.
- ◆ *Percentage Purity:*
 - ▶ Refers to the concentration or purity of the Schedule 3 Chemical, to be expressed in percentage.
 - ▶ This must be supported by MSDS and/or any other necessary documents for the product.

- ◆ Please indicate in one or more of the boxes the activities required for this application and provide the relevant information accordingly.
- ◆ Please express all quantities in metric tonnes (TNE) (1 metric tonne is equivalent to 1,000 kilograms)
- ◆ *Reaction procedure(s) must be specified for all production / processing / consumption:*

- ◆ Please indicate in one or more of the boxes the overall purpose(s) that best describes the intention(s) for the chemical.

- ◆ The Licence applicant must sign; indicate the date of application and company stamp on every page of the application form accordingly.
- ◆ Any application in the absence of the signature, date and/or company stamp will not be accepted

FORM B.3: SCHEDULE 3 CHEMICAL(S) (Production)


Details of Schedule 3 Chemical		Details of Product containing Schedule 3 Chemical
Name of Chemical:		Common Trade Name:
CAS Registry No.:		Percentage Purity (%):
Please indicate the required activity for this application and provide the details accordingly:		
<input type="checkbox"/> Production		
Anticipated Quantity: TNE	Specific purpose(s) of production, indicating any final product(s) formed:	
	Briefly describe the reaction procedure(s), indicating the type of reaction(s) taking place or principle(s) employed for the procedure(s):	
Overall purpose(s) for intended Production:		
<input type="checkbox"/> For in-house usage or application(s)		
<input type="checkbox"/> For local sales or distribution		
<input type="checkbox"/> For export purposes (Please see requirements in Form A.3)		
<input type="checkbox"/> Others, please specify: _____		
Applicant's Signature:	Date:	Company Stamp:

* Please duplicate form as required

GUIDELINES FOR FORM B.4.1 : Unscheduled Discrete Organic Chemical(s) (Production)

- ◆ A chemical with different concentrations / purities should be submitted on separate Form B.4.1, B.4.2 and B.4.3 will need to be submitted.
- ◆ All fields in Form B.4.1, B.4.2 and B.4.3 are mandatory, unless otherwise indicated. Application with any incomplete fields will not be accepted.
- ◆ Please duplicate the forms as required.

Details of Unscheduled Discrete Organic Chemical (DOC)

- ◆ **Name of Chemical:**
 - ▶ Please refer to the definitions of Unscheduled Discrete Organic Chemicals under the "Controlled Chemicals under NA(CWC)".
 - ▶ Please provide the chemical name of the DOC, preferably by its IUPAC name. (IUPAC refers to the International Union of Pure and Appled Chemistry)
 - ◆ **Structure of Chemical:**
 - ▶ Please provide the structure of the unscheduled DOCs:
e.g.
*Acetone is a Non-PSF containing DOCs.
Chemical structure should be provided as follows:*
- 
- ◆ **CAS Registry No.**
 - ▶ Refers to Chemical Abstract Service Registry Number. It is a number assigned to the chemical and is unique of each chemical. It is sometimes indicated in square brackets ([]).
 - ▶ If this information is not available, please indicate as "n.a.".
 - ◆ **Please indicate the type of DOC for this chemical:**
 - ▶ Please indicate the relevant box to indicate the type of DOC
 - Non-PSF containing DOC:
 - DOCs that does not contain the elements, Phosphorus, Sulfur and/or Fluorine.
 - PSF containing DOCs:
 - DOCs that does contains the elements, Phosphorus, Sulfur and/or Fluorine.
 - ◆ **Please provide the following confirmation for this chemical:**
 - ▶ Company / Organization would need to provide the following confirmation for each DOCs applied.
 - ▶ Please indicate one or more of the boxes, where applicable.
 - ◆ **Is this chemical a Schedule 1, 2 or 3 chemical?**
 - ▶ Please indicate the relevant box where applicable.

- ◆ **Please provide the following details accordingly:**
 - ▶ Anticipated Quantity:
Please express all quantities in metric tones (TNE). 1 metric tonne is equivalent to 1,000 kilograms.
 - ▶ Purpose of production:
 - The DOC will be produced in intermediate for another chemical.
 - Please confirm if this other chemical is also a DOC.
 - The DOC will be produced as a final product.
 - Others, please specify.
 - ▶ Will any Schedule 1, 2 or 3 Chemical(s) be used in the production of this chemical?:
 - No
 - Yes
 - Details pertaining to the Schedule 1, 2 or 3 Chemicals to be provided accordingly.
 - ▶ Will any Schedule 1, 2 or 3 Chemical(s) be produced in the production of this chemical?:
 - No
 - Yes
 - Details pertaining to the Schedule 1, 2 or 3 Chemicals to be provided accordingly.
 - Please also indicate if isolation of this Schedule 1, 2 or 3 chemical is possible in the production.
- ◆ More information must be provided on Form B.4.2 and B.4.3

- ◆ The licence applicant must sign; indicate the date of application and company stamp on every page of the application form accordingly.
- ◆ Any application in the absence of the signature, date and/or company stamp will not be accepted.

FORM B.4.1: UNSCHEDULED DISCRETE ORGANIC CHEMICAL(S) (Production)**Details of Unscheduled Discrete Organic Chemical (DOC)**

(All fields are mandatory, unless otherwise indicated. Application with any incomplete fields will not be accepted.)

Name of Chemical:**Structure of Chemical:****CAS Registry No.:**

If available. If not available, please indicate as "n.a."

Please indicate the type of DOC for this chemical:

Only one box should be indicated.

 Non-PSF containing DOC
DOC that does not contain the elements, Phosphorus,
Sulfur and/or Fluorine PSF-containing DOC
DOC that does contain any one of the elements, Phosphorus,
Sulfur and/or Fluorine**Please provide the following confirmation for this chemical:**

Please indicate one or more boxes, where applicable.

 It is NOT a polymer or oligomer, whether or not containing Phosphorus, Sulfur or Fluorine. It is NOT a chemical containing only carbon and metal. It is NOT a "oxides of carbon" nor a "sulfides of carbon".
i.e. It is NOT Carbon monoxide, Carbon dioxide, Carbon disulfide or Carbonyl sulfide.**Is this chemical a Schedule 1,2 or 3 chemical?:**

Only one box should be indicated.

 No Yes**Please provide the following details accordingly****Production****Anticipated Quantity:**

TNE

Purpose(s) of production:**Will the DOC be produced as an intermediate for another chemical?** No Yes, please provide the following details:

Name of chemical: _____

CAS Registry No.: _____

Will the DOC be produced as a final product? No Yes**Will the DOC be produced for other purpose(s)?** No Yes, please specify: _____**Will any schedule 1, 2 or 3 Chemical(s) be used in the production of this chemical?:** No Yes, please provide the following details:

Name of chemical:

CAS Registry No.:

Type of Schedule: Schedule 1 Schedule 2 Schedule 3**Will any schedule 1, 2 or 3 Chemical(s) be produced in the production of this chemical?:** No Yes, please provide the following details:

Name of chemical:

CAS Registry No.:

Type of Schedule: Schedule 1 Schedule 2 Schedule 3Is isolation of the chemical possible in the production?: Yes No

Applicant's Signature:

Date:

Company Stamp:

GUIDELINES FOR FORM B.4.2 : Unscheduled Discrete Organic Chemical(s) (Production)

- ◆ For each application of an Unscheduled Discrete Organic Chemical, three forms namely, Form B.4.1, B.4.2 and B.4.3 will need to be submitted.
- ◆ All fields in Form B.4.1, B.4.2 and B.4.3 are mandatory, unless otherwise indicated. Application with any incomplete fields will not be accepted.
- ◆ Please duplicate the forms as required.

Details of Unscheduled Discrete Organic Chemical (DOC)

- ◆ The following information will be required:
 - ▶ Name of Chemical
 - ▶ Structure of Chemical.
 - ▶ CAS Registry No.
- ◆ *Please provide the chemical reaction that will be involved in the production of this chemical:*
 - ▶ Please provide a brief description of the chemical reaction procedures, the type of reaction(s) that take place or principles employed for the procedure(s) with regards to the production of each DOC.
 - ▶ All chemicals provided in the chemical reaction procedure(s) must be provided with its CAS Registry No and preferably in its IUPAC name.
 - ▶ Structure provided in the reaction procedures must be in the following format. Molecular formula will not be accepted.

e.g.



- ▶ If the space provided is insufficient, please duplicate the Form B.4.2 and provide the information accordingly OR append attachments that provide the required information with applicant's signature, date of application and company stamp on every page.
- ▶ More information must be provided in Form B.4.3

- ◆ The licence applicant must sign; indicate the date of application and company stamp on every page of the application form accordingly.
- ◆ Any application in the absence of the signature, date and/or company stamp will not be accepted.

FORM B.4.2: UNSCHEDULED DISCRETE ORGANIC CHEMICAL(S) (Production)

- Information continued from Form B.4.1 -

Details of Unscheduled Discrete Organic Chemical (DOC)

(All fields are mandatory, unless otherwise indicated. Application with any incomplete fields will not be accepted.)

Name of Chemical:	Structure of Chemical:
CAS Registry No.: <i>If available. If not available, please indicate as "n.a."</i>	

Please provide the chemical reaction that will be involved in the production of this chemical:-

Please note the following:

(a) Information on the chemical reaction(s) should be provided in the following manner:

E.g.

Chemical A + Chemical B → Chemical C + Chemical D

Chemical D → Chemical E + Chemical F (where Chemical F is the DOC in this application)

(b) Please provide the principle(s) employed for the procedure(s) with regards to the production of each DOC.

(c) All structure(s) of chemicals provided in the reaction procedure(s) must be in its structural formula. Please note that molecular formula will not be accepted.

(d) All chemical(s) mentioned in the reaction procedure(s) must be provided with its chemical name, preferably in its IUPAC name and if available, the CAS Registry No. Any acronyms used in the reaction procedure(s) must be defined accordingly.

(e) Information pertaining to the reaction parameters, such as temperature, catalyst to be used, is not required to be included in this description.

Applicant's Signature:	Date:	Company Stamp:
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* Please duplicate form as required

GUIDELINES FOR FORM B.4.3 : Unscheduled Discrete Organic Chemical(s) (Production)

- ◆ For each application of an Unscheduled Discrete Organic Chemical, three forms namely, Form B.4.1, B.4.2 and B.4.3 will need to be submitted.
- ◆ All fields in Form B.4.1, B.4.2 and B.4.3 are mandatory, unless otherwise indicated. Application with any incomplete fields will not be accepted.
- ◆ Please duplicate the forms as required.

Details of Unscheduled Discrete Organic Chemical (DOC)

- ◆ The following information will be required:
 - ▶ Name of Chemical
 - ▶ Structure of Chemical.
 - ▶ CAS Registry No.
- ◆ Please provide the Block Diagram of the Process Flow in the production of the chemical:
 - ▶ A Block Diagram is a pictorial representation of the process. Please provide the Block Diagram of the Process Flow in the production of the chemical.
 - ▶ Please provide the name of each plant, if applicable that is involved in the production of the above chemical.

Term	Definition
Plant (Production facility, workshop)	Means a relatively self-contained area, structure or building containing one or more units with auxiliary and associated infrastructure, such as: <ul style="list-style-type: none"> I. Small administrative section II. Storage/handling areas for feedstock and products III. Effluent/waste handling/treatment area IV. Control/analytical laboratory First aid service/related medical section; and VI. Records associated with the movement into, around and from the site, of declared chemicals and their feedstock or product chemicals formed from them, as appropriate.
Unit (Production unit, Process unit)	Means the combination of those items of equipment, including vessels and vessel set up, necessary for the production, processing or consumption of a chemical.

- ▶ All chemicals mentioned in the Block Diagram must be provided with its chemical name, preferably in its IUPAC name and if available, the CAS Registry No. Any acronyms used must be defined accordingly.
- ▶ Information pertaining to the reaction parameters, such as temperature, catalyst to be used, is not required to be included in this Block Diagram.
- ▶ If the space provided is insufficient, please duplicate the Form B.4.3 and provide the information accordingly OR append attachments that provide the required information with applicant's signature, date of application and company stamp on every page.
- ◆ Please provide a brief description of the Process Flow Block Diagram as provided above, in the production of the chemical.

- ◆ The licence applicant must sign; indicate the date of application and company stamp on every page of the application form accordingly.
- ◆ Any application in the absence of the signature, date and/or company stamp will not be accepted.

FORM B.4.3: UNSCHEDULED DISCRETE ORGANIC CHEMICAL(S) (Production)

- Information continued from Form B.4.2 -

Details of Unscheduled Discrete Organic Chemical (DOC)

(All fields are mandatory, unless otherwise indicated. Application with any incomplete fields will not be accepted.)

Name of Chemical:	Structure of Chemical:
CAS Registry No.: <i>If available. If not available, please indicate as "n.a."</i>	

Please provide the Block Diagram of the Process Flow in the production of this chemical.

Please note the following:

- Please provide the name of each plant, if applicable that is involved in the production of the above chemical. Please refer to guidelines for definitions of Plant Site, Plant and Unit
- All chemical(s) mentioned in the Block Diagram must be provided with its chemical name, preferably in its IUPAC name and if available, the CAS Registry No. Any acronyms used must be defined accordingly.
- Information pertaining to the reaction parameters, such as temperature, catalyst to be used, is not required to be included in the Block Diagram.

Applicant's Signature:	Date:	Company Stamp:
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* Please duplicate form as required