



Welcome to the Thomson Reuters Manufacturing Capabilities Form. This form was developed to allow active ingredient manufacturers worldwide an opportunity to convey information, free of charge, about their products and capabilities to potential customers and partners around the world. Our customers rely on Thomson Reuters for up-to-date information on APIs and API manufacturers, and for the ability to identify API manufacturers based on certain manufacturing capabilities.

Using the fields and check boxes below, please provide as much information as you can regarding your facility and the capabilities of that facility. At the bottom of this form you will also find boxes to share what APIs you are making as well as APIs in development. Once the form is completed, please save it using the name of your company, for example ThomsonReuters.pdf. If you are providing us with information on multiple facilities, please fill out separate forms for each facility and save the forms with unique names.

Please return the completed forms to ts.npmfrcaps@thomsonreuters.com by clicking on Submit Form.

You must have Adobe Reader 9.0 or greater to complete this form. To download the latest version of Adobe Reader click on the Adobe Reader button or go to <http://get.adobe.com/reader/>

If you have a question regarding the form please e-mail us at ts.npmfrcaps@thomsonreuters.com

Company Pco g

*****Comp ID (Thomson Reuters use only)

Address 1

Address 2

City

State / Province

Country

ZIP / Postal Code

Phone

Fax

Website

Chemical Capabilities

Inspection Dates

Dates

Australian TGA

MHRA

Canadian TPP

US FDA

EMEA

WHO

German BfArM

Other

Scale (check all that apply)

Special Capability

Lab scale

Pilot Plant

Commercial scale

Cephalosporins
Cryogenics
Cytotoxics
DEA Scheduled Products
Electrochemicals
Enzymatic Synthesis
Fermentation
High Potency
Natural Product Extraction
Nucleotides
Organometallics
Penicillins
Peptides
Phytochemicals
Proteins
Sterile

Scale (check all that apply)

Reactions

Lab scale

Pilot Plant

Commercial scale

(reductive) Cyclization
Acetoacetylation
Acetylation
Acid chlorides
Acylation
Acylation
Aldol reaction (Condensation)
Alkoxylation
Alkylation
Amidation
Amination
Ammonolysis
Arylation
Asymmetric synthesis
Axide Chemistry
Baeyer-Villiger oxidation
Benzoylation

Birch reduction
Bisphosphate Chemistry
Bromination
Butylation
Carbohydrate chemistry
Carbon disulfide chemistry
Carbonylation
Carboxylation
Chlorination
Chloromethylation
Chlorosulfonation
Claisen condensation
Condensation
Cyanide Chemistry
Dehalogenation
Dehydrocyclization

Dehydrogenation
Dehydrohalogenation
Diazotization
Dieckmann cyclization
Diels-Alder
Diketene reactions
Epoxidation
Esterification
Etherification
Fluorination
Formylation
Friedel-Crafts reaction
Fries Rearrangement
Glycosylation
Grignard reaction
Halide exchange

Halogenation
Hydrazine chemistry
Hydride Chemistry
Hydrogenation
Hydrogenlysis
Hydrolysis
Hydrosilylation
Hydroxylation
Iodination
Ketalization
Ketene reactions
Liquid ammonia reactions
Mannich reaction
Methoxylation
Methylation

Micheal reaction
(Addition, Condensation)
Nitration
Nitrosation
Nucleation
Optical Resolution
Oxidation
Oximation
Ozonolysis
Peroxidation
Phosgenation
Phosphation
Polymerization
Quaternization
Racemization
Reduction
Rosenmund reduction

Sandmeyer
Silylations
Sulfonation
Sulfoxidation
Thiocarbonylation
Thiophosgenation
Transamination
Transesterification
Vilsmeier-Haack Reaction
Wittig reaction

Chiral Synthesis

Chemical Resolution
Enzymatic Resolution
Stereospecific Resolution

On-Site Capabilities

Check all that apply

Active Pharmaceutical Ingredient Manufacture
Autoclaves
Blending
Bulk Storage of Chemicals
Cooling systems
Crystallization
Deionized Water
Desiccators
Dose/Finished Dose Mfr
Fluid Bed Drying
Freeze Drying
Heat exchangers

Homogenizer
Incineration
Liquid Nitrogen
Lyophilization
Microencapsulation
Micronization
Milling
Production of Intermediates
Purified Water
QC Analytical Capabilities
QC Method Development
Scrubbers
Solvent Recovery
Spray Drying
Sterile Water
Thermal Oxidizer
Waste Treatment

Types of Purifications

(Scale) Check all that apply

	Lab Scale	Pilot Plant	Commercial Scale
Centrifuges			
Chromatography Columns			
Distillation Columns			
Filters			
Ion Exchange Columns			
Liquid-Liquid Separation			
Precipitation			
Resins Columns			
Reverse Osmosis			
Solid-Liquid Separation			

Reactor Types

Scale, in liters (please enter # of reactors in each scale range)

Reactor Type: **Lab scale** ¹⁰⁰⁰ **<= 4,000** **4,001 - 12,000** **12,001 - 40,000** **> 40,000**

Glass-Lined

Hastalloy

Stainless Steel

Environmentally Controlled

Ability to Inert

Azeotropic vessels

High Pressure

High Temperature

Jacketed Vessels

Low Temperature

Type

Units

Total Volume

Ability to inert

Azeotropic vessels

Glass-lined

Hastalloy

High Pressure

Low Pressure

High Temperature

Jacketed Vessels

Low Temperature

Stainless Steel

Biological Capabilities

Microbial Fermentation

# of Fermentors	GMP / GCP (check)	Type of Fermentation (check)	Type of Agitation (check)
100 - 4,000 liters	GMP / GCP	Batch / Continuous / Fed Batch	Air Lift / Stirred
4,001 - 20,000 liters	GMP / GCP	Batch / Continuous / Fed Batch	Air Lift / Stirred
>20,000 liters	GMP / GCP	Batch / Continuous / Fed Batch	Air Lift / Stirred

Mammalian Fermentation

# of Fermentors	GMP / GCP (check)	Type of Fermentation (check)	Type of Agitation (check)
100 - 4,000 liters	GMP / GCP	Batch / Continuous / Fed Batch	Air Lift / Stirred
4,001 - 5,000 liters	GMP / GCP	Batch / Continuous / Fed Batch	Air Lift / Stirred
5,001 – 15,000 liters	GMP / GCP	Batch / Continuous / Fed Batch	Air Lift / Stirred
>15,000 liters	GMP / GCP	Batch / Continuous / Fed Batch	Air Lift / Stirred

Capability (check all that apply)

Back-up Generation

Clean Steam

Containment

Deionized Water

Finished Dose Filling & Packing

QC & QA

Water Treatment

WFI Water

Separations

Separation	Class 100	Class 10,000	Class 100,000
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Centrifuges			
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Chromatography			
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Electrodialysis			
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Homogenizers			
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Microfiltration			
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Nanofiltration			
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Reverse Osmosis			
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Ultrafiltration			
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Other Capabilities

Class 100

Class 10,000

Class 100,000

Lyophilization

Protein Refolding

Pegylation

Oxidation

Commercial Scale

Development Scale

Produces Bulk API

Produces Proteins

Produces Antibodies

Produces Intermediates

API's in production

API's in Development

Additional Comments