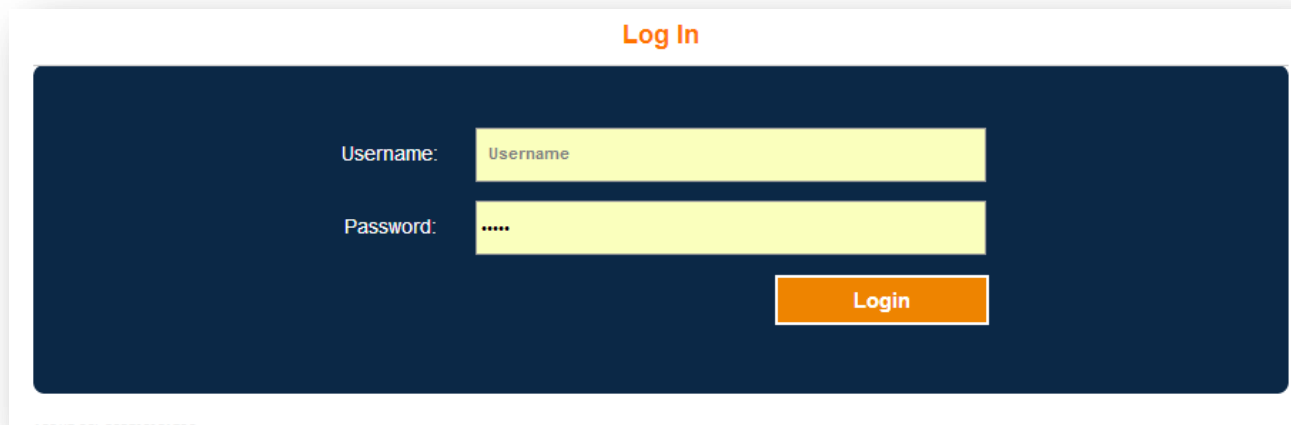


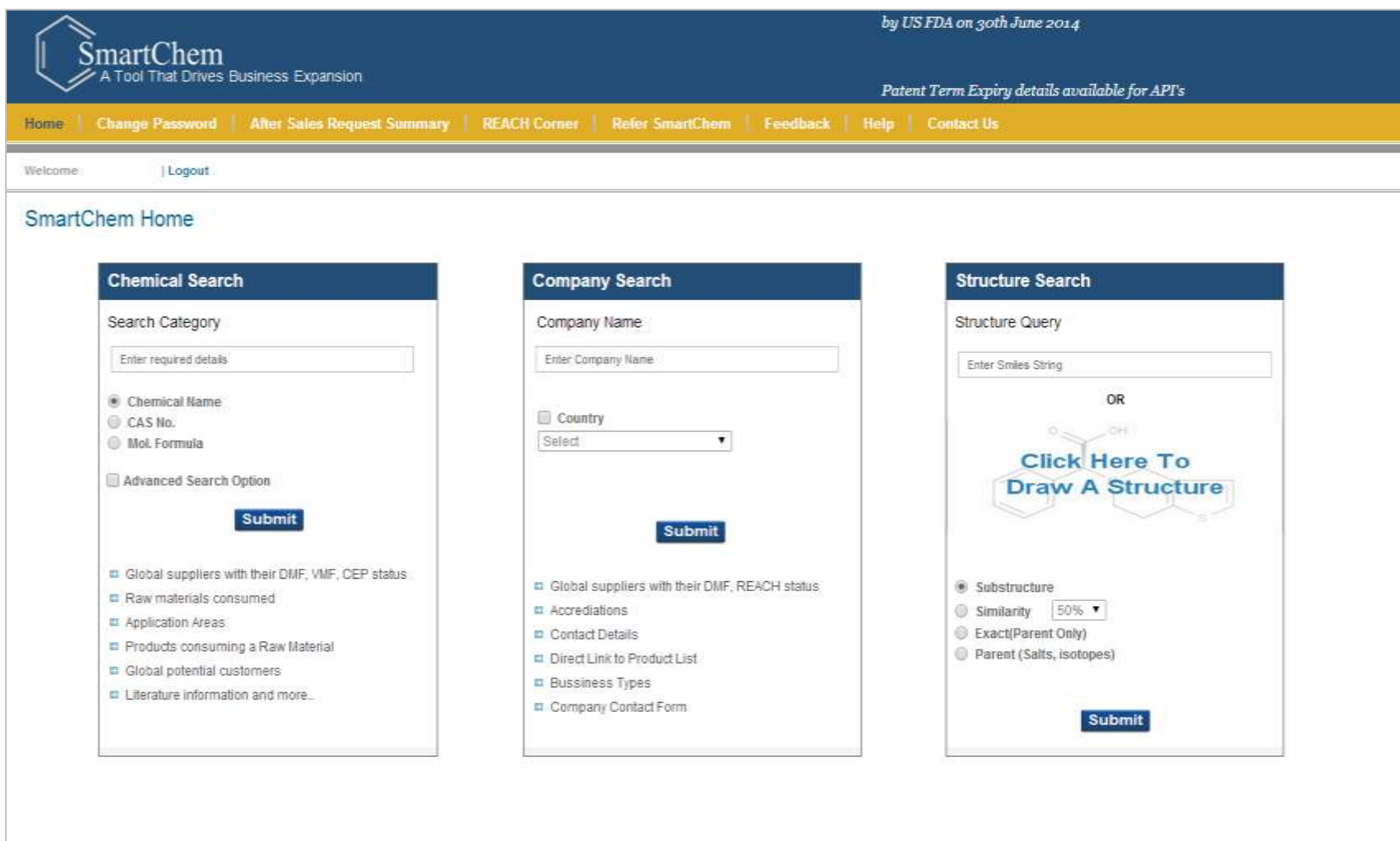
How To Use SmartChem

- A) Login page: Login in to SmartChem using login details provided to you by clicking on the login option provided on our website www.row2technologies.com. Once you click on the Login tab you are redirected to secure site.



The image shows the login page for SmartChem. The page has a dark blue background with the title 'Log In' in orange text at the top center. Below the title is a dark blue rectangular area containing the login form. The form has two input fields: 'Username' and 'Password'. The 'Username' field contains the text 'Username' and the 'Password' field contains four dots. Below the input fields is an orange 'Login' button.

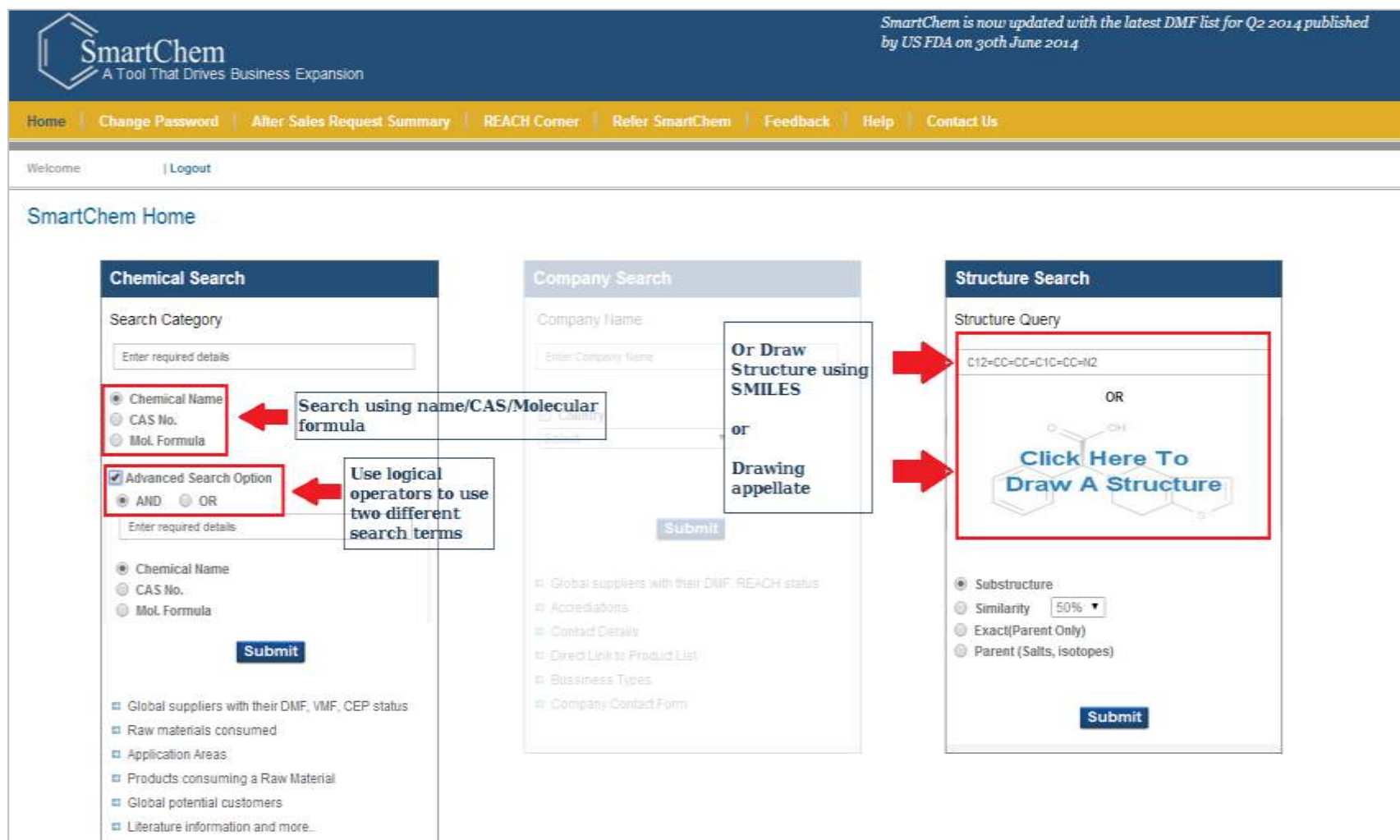
- B) SmartChem home page is shown below. It has three search options namely, Chemical Search, Company Search and Structure Search. Chemical and Structure search options are used for searching chemicals and related information whereas Company Search is used for searching companies in SmartChem.



The screenshot displays the SmartChem home page with the following elements:

- Header:** SmartChem logo with the tagline "A Tool That Drives Business Expansion". Text on the right indicates "by US FDA on 30th June 2014" and "Patent Term Expiry details available for APIs".
- Navigation Bar:** Links for Home, Change Password, Alter Sales Request Summary, REACH Corner, Refer SmartChem, Feedback, Help, and Contact Us.
- User Area:** "Welcome:" followed by a "Logout" link.
- Main Content:** Three search panels:
 - Chemical Search:** Includes a "Search Category" input field, radio buttons for "Chemical Name", "CAS No.", and "Mol. Formula", an "Advanced Search Option" checkbox, a "Submit" button, and a list of search filters such as "Global suppliers with their DMF, VMF, CEP status", "Raw materials consumed", "Application Areas", "Products consuming a Raw Material", "Global potential customers", and "Literature information and more...".
 - Company Search:** Includes a "Company Name" input field, a "Country" dropdown menu, a "Submit" button, and filters like "Global suppliers with their DMF, REACH status", "Accreditations", "Contact Details", "Direct Link to Product List", "Business Types", and "Company Contact Form".
 - Structure Search:** Includes a "Structure Query" input field, an "OR" separator, a chemical structure diagram with the text "Click Here To Draw A Structure", radio buttons for "Substructure", "Similarity" (set to 50%), "Exact (Parent Only)", and "Parent (Salts, isotopes)", and a "Submit" button.

- C) Chemical Searching: In SmartChem, chemical can be searched using its full or partial name, CAS number or molecular formula. You can also use a combination of these search parameters with logical operators like AND / "OR" by using the Advanced Search in the section highlighted below. Chemicals can also be searched using their structures. You can either use a simple SMILE string or actually draw a chemical structure using the drawing applet provided in the highlighted section shown below.



The screenshot displays the SmartChem website interface with three main search sections: Chemical Search, Company Search, and Structure Search. Red boxes and arrows highlight specific features:

- Chemical Search:**
 - Search Category: Enter required details
 - Radio buttons for **Chemical Name**, CAS No., and Mol. Formula.
 - Advanced Search Option: AND OR
 - Text box: Enter required details
 - Submit button
 - Global suppliers with their DMF, VMF, CEP status
 - Raw materials consumed
 - Application Areas
 - Products consuming a Raw Material
 - Global potential customers
 - Literature information and more...
- Company Search:**
 - Company Name: Enter Company Name
 - Country: [Dropdown]
 - City: [Dropdown]
 - Submit button
 - Global suppliers with their DMF, REACH status
 - Accreditations
 - Contact Details
 - Direct Link to Product List
 - Business Types
 - Compare Contact Form
- Structure Search:**
 - Structure Query: C12=CC=CC=C1C=CC=N2
 - OR
 - Click Here To Draw A Structure (with drawing applet)
 - Substructure:
 - Similarity: 50%
 - Exact (Parent Only)
 - Parent (Salts, isotopes)
 - Submit button

Annotations and arrows:

- Red box around "Chemical Name" with arrow pointing to "Search using name/CAS/Molecular formula".
- Red box around "Advanced Search Option" with arrow pointing to "Use logical operators to use two different search terms".
- Red box around "Or Draw Structure using SMILES" and "Drawing applet" with arrow pointing to the Structure Search section.
- Red box around the SMILES string and drawing applet in the Structure Search section with arrow pointing to the "Click Here To Draw A Structure" link.

- D) Chemical Search result is a listing of chemicals containing your search term which is highlighted for your ready reference. It also clearly indicates about the type of information that is present in SmartChem for the chemicals enlisted therein as shown below.

SmartChem
A Tool That Drives Business Expansion

SmartChem is now updated with the latest DMF list for Q2 2014 published by US FDA on 30th June 2014

Home | Change Password | After Sales Request Summary | REACH Corner | Refer SmartChem | Feedback | Help | Contact Us

















Welcome Swati Sawant | Logout

Chemical Search | Company Search | Structure Search

Chemical Search Results

The following chemicals in SmartChem match your query **Sitagliptin**

1

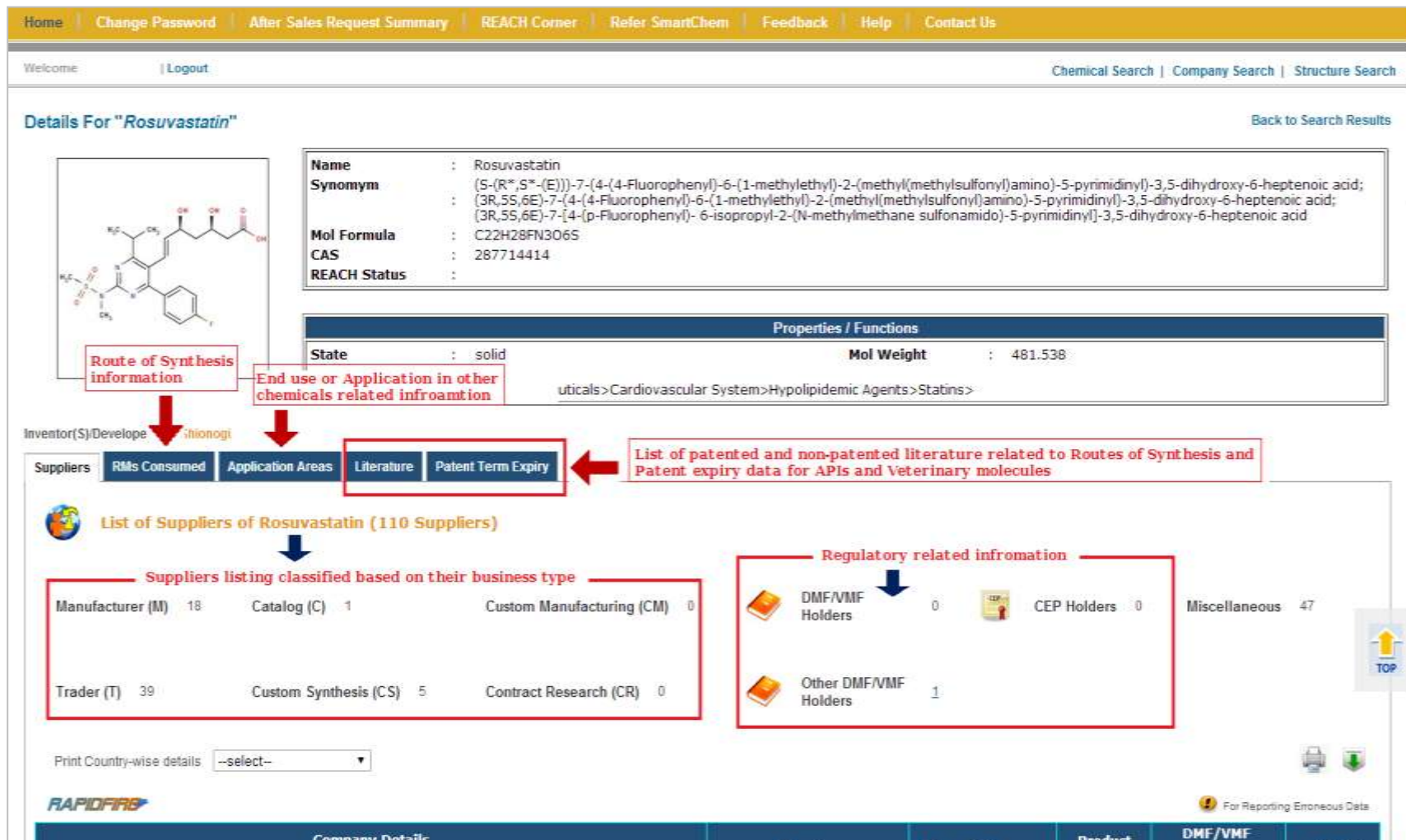
Chemical Name / Synonym	Structure	CAS No.	Mol. Formula	Suppliers	Raw Materials	Application Areas	Literature
Sitagliptin 7-[(3R)-3-Amino-4-(2,4,5-trifluorophenyl)butanoyl]-3-(trifluoromethyl)-5,6,7,8-tetrahydro-1,2,4-triazolo-1,2,4-triazolo[4,3- α]pyrazine, MK-0431; (R)-4-Oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3- α]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine		486460326	C16H15F6N5O				 Patent Term
Sitagliptin Phosphate 7-[(3R)-3-Amino-4-(2,4,5-trifluorophenyl)butanoyl]-3-(trifluoromethyl)-5,6,7,8-tetrahydro-1,2,4-triazolo[4,3- α]pyrazine monophosphate; 4-Oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3- α]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine phosphate		854671780	C16H18F6N5O5P / C16H15F6N5O.H3O4P			Not Applicable	
Sitagliptin hydrochloride (3R)-3-Amino-1-[3-(trifluoromethyl)-5H,6H,7H,8H-[1,2,4]triazolo[4,3- α]pyrazin-7-yl]-4-(2,4,5-trifluorophenyl)butan-1-one hydrochloride; (R)-Oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3- α]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine			C16H16ClF6N5O / C16H15F6N5O.ClH				
Sitagliptin phosphate hydrate 7-[(3R)-3-Amino-4-(2,4,5-trifluorophenyl)butanoyl]-3-(trifluoromethyl)-5,6,7,8-tetrahydro-1,2,4-triazolo[4,3- α]pyrazine monophosphate monohydrate		854671779	C16H20F6N5O6P / C16H15F6N5O.H3O4P.H2O				

This chemical is an end product by itself and not used in any other synthesis

A check mark indicates that this information is present in SmartChem

Indicates patent expiry data present for this chemical

- E) Chemical information page has various tabs to retrieve information related to the chemical of interest as highlighted in red in the figure shown below. “RM consumed” will give you a list of routes present in SmartChem for the chemical, whereas “Application areas” will tell you where that particular chemical is used to synthesize chemicals from various other industries. For the literature information you can click on the respective tabs. Supplier’s information can be viewed by clicking on that tab. You will also find detailed chemical specific regulatory information for APIs like DMF or CEP in the right hand side of the page. Another highlight of this page is the classification of the suppliers based on their business type; this allows a quick selection for you based on your requirements.



Details For "Rosuvastatin"

Name : Rosuvastatin
Synonym : (S-(R*,S*-(E))) -7-(4-(4-Fluorophenyl)-6-(1-methylethyl)-2-(methyl(methylsulfonyl)amino)-5-pyrimidinyl)-3,5-dihydroxy-6-heptenoic acid; (3R,5S,6E)-7-(4-(4-Fluorophenyl)-6-(1-methylethyl)-2-(methyl(methylsulfonyl)amino)-5-pyrimidinyl)-3,5-dihydroxy-6-heptenoic acid; (3R,5S,6E)-7-[4-(p-Fluorophenyl)-6-isopropyl-2-(N-methylmethane sulfonamido)-5-pyrimidinyl]-3,5-dihydroxy-6-heptenoic acid
Mol Formula : C22H28FN3O6S
CAS : 287714414
REACH Status :

Properties / Functions
State : solid
Mol Weight : 481.538
 uticals>Cardiovascular System>Hypolipidemic Agents>Statins>

Suppliers | **RMs Consumed** | **Application Areas** | **Literature** | **Patent Term Expiry**

List of Suppliers of Rosuvastatin (110 Suppliers)

Suppliers listing classified based on their business type

Manufacturer (M)	18	Catalog (C)	1	Custom Manufacturing (CM)	0
Trader (T)	39	Custom Synthesis (CS)	5	Contract Research (CR)	0

Regulatory related information


DMF/VMF Holders	0	CEP Holders	0	Miscellaneous	47
Other DMF/VMF Holders	1				

Print Country-wise details: --select--

Company Details | Product | DMF/VMF


F) Clicking on Supplier tab will give you a detailed list of the suppliers who either trade or manufacture that chemical both commercial as well as smaller quantities as the case may be. This page has their contact details, a direct link to supplier's website and product list. We have also provided a direct link to their "inquiry form" for your ready and quick communication. The list can be sorted on the country name, business type, DMF/VMF and CEP holdings. We have also designed a special tool "RAPIDFIRE" for you that allows you to collect emails addresses of selected suppliers in one text file for your ready reference.


Suppliers
RMs Consumed
Literature



List of Suppliers of Rosuvastatin Calcium (236 Suppliers)



Manufacturer (M) 55 Catalog (C) 9 Custom Manufacturing (CM) 3

Trader (T) 64 Custom Synthesis (CS) 4 Contract Research (CR) 0

 DMF/VMF Holders 8


 CEP Holders 0 Miscellaneous 101


 Other DMF/VMF Holders 11


Print Country-wise details
 


RAPIDFIRE
←


A tool that allows you to collect email addresses of your selected suppliers in a single text file

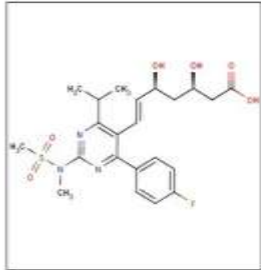
 Expand All

 Collapse All
For Reporting Erroneous Data

Company Details	Country	Type of Company	Product List	DMF/VMF CEP	GDUF
Dromex	Argentina	T	✓		
Apotex Pharmachem Inc. 11, 34, 50 Spalding Drive Brantford Ontario - N3T 6B8 Tel No: 1-519-7568942 Fax No: 1-519-7533051 Contact Email: sales@apotexpharmachem.com; INFO@APOTEXPHARMACHEM.COM Website: www.apotexpharmachem.com Company Contact Form	Canada	M	✓		
Molcan Corporation	Canada	M/CS	✓		
Toronto Research Chemicals	Canada	C	✓		
Afine Chemicals Limited	China	M/T	✓		
Alpha Pharmaceutical Co., Ltd.	China	M	✓		
Alpha Pharmaceutical Co., Ltd.	China	M/T	✓		
Alway Chem	China	M/T/CS	✓		
Ancheng Pharma Limited	China	M/T	✓		
Anhui Qingyun Pharmaceutical And Chemical Co., Ltd.	China	M	✓		

 TOP

- G) Raw Material information: You can view the raw material information by clicking on the “RM consumed” tab on the Properties page shown in (E) above. This will give you a list of Routes that are present in SmartChem for synthesis of Chemicals small dual colored rectangle  indicates that the raw materials listed here are represented schematically as “Reaction Scheme”. You can view this by clicking on the image as shown below. The literature information regarding the these routes can be viewed by clicking on the Literature tab where as in the case APIs and veterinary medicine the “Patent Expiry data” can be view by clicking on respective tabs as shown below.



Name : Rosuvastatin
Synonym : (S-(R*,S*-E))-7-(4-(4-Fluorophenyl)-6-(1-methylethyl)-2-(methyl(methylsulfonyl)amino)-5-pyrimidinyl)-3,5-dihydroxy-6-heptenoic acid; (3R,5S,6E)-7-(4-(4-Fluorophenyl)-6-(1-methylethyl)-2-(methyl(methylsulfonyl)amino)-5-pyrimidinyl)-3,5-dihydroxy-6-heptenoic acid; (3R,5S,6E)-7-[4-(p-Fluorophenyl)- 6-isopropyl-2-(N-methylmethane sulfonamido)-5-pyrimidinyl]-3,5-dihydroxy-6-heptenoic acid
Mol Formula : C22H28FN3O6S
CAS : 287714414
REACH Status :

Properties / Functions

State : solid **Mol Weight** : 481.538

Functions : 1. Pharmaceuticals>Cardiovascular System>Hypolipidemic Agents>Statins>


Inventor(S)/Developer(S) - Shionogi

Suppliers
RMs Consumed
Application Areas
Literature
Patent Term Expiry













Raw Materials in "Rosuvastatin"

Click on these tabs for Literature and Patent expiry details

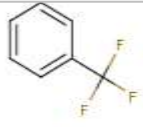
Click on the image to view the Reaction Scheme



Raw Materials Consumed in the manufacture of 'Rosuvastatin' by Route 1

Suppliers	Chemical Name / Synonym	Structure	CAS	Mol Formula	Raw Materials
	Ethyl isobutyrylacetate  Isobutyrylacetic acid ethyl ester; Ethyl 4-methyl-3-oxopentanoate		7152150	C8H14O3	
	para-Fluorobenzaldehyde  4-Fluorobenzaldehyde		459574	C7H5FO	
	Sodium ethoxide  Sodium ethylate		141526	C2H5NaO / C2H5O.Na	

H) Application Areas: This tab will give you a list of chemicals from various industries which use chemical of your interest is used as raw material or as an intermediate.



Mol Formula : C7H6F3N
CAS : 98168
REACH Status : Registered

Properties / Functions

Color : colorless	State : liquid
Mol Weight : 161.1244	BP : 187°C
MP : 5-6°C	Density : 1.29

Suppliers | **RMs Consumed** | **Application Areas** | **Literature**





Application Areas For "3-Trifluoromethyl aniline"

Click on any of the following functional areas to view products which consume 3-Trifluoromethyl aniline in that functional area.

Pharmaceuticals

Agrochemicals

Various industries using 3-trifluoroaniline as raw material


Suppliers	Name/Synonym	Structure	CAS	Mol Formula
	<p>Fluorochloridone ✕</p> <p>3-Chloro-4-(chloromethyl)-1-[3-(trifluoromethyl)phenyl]pyrrolidin-2-one; 1-(m-Trifluoromethylphenyl)-3-chloro-4-chloromethyl-2-pyrrolidone</p>		61213250	C12H10Cl2F3NO
	<p>Fluometuron ✕</p> <p>N,N-Dimethyl-N'-[3-(trifluoromethyl)phenyl]urea; 1,1-Dimethyl-3-(alpha, alpha, alpha-trifluoro-m-tolyl)urea</p>		2164172	C10H11F3N2O

Veterinary Drugs

Intermediates

Various industries using 3-trifluoroaniline as raw material

- l) Company search: You can browse through around 13000 suppliers listed in SmartChem using Company Search option. Just key in the Company name and the country (if required) to find its details. Apart from the product details of the company, the page also has additional information about various regulatory filings like DMF, CEP, European marketing authorization (MAA), REACH registration, accreditations like ISO cGMP etc. as shown below.


SmartChem
A Tool That Drives Business Expansion

SmartChem is now updated with the latest DMF list for Q2 2014 published by US FDA on 30th June 2014

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Welcome | [Logout](#)
[Chemical Search](#) | [Company Search](#) | [Structure Search](#)

Company Search

Details for Mac-Chem Products India Pvt. Ltd. [Back to Search Results](#)

Mac-Chem Products (India) Pvt. Ltd.
304, Town Centre, 3rd Floor, Andheri Kurla Road, Andheri (East), Mumbai, Maharashtra, India-400059.

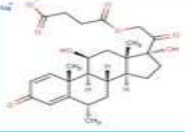

www.macchemgroup.com

Phone : 91-22-40939000, 40939001
Fax : 91-22-40939060
[Company Contact Form](#)

Product List : ✓	DMF-VMF : ✓	EMA : N/A
CEP : ✓	REACH : N/A	GDUF : N/A

10 1 2 3 4 5 6

▶ The following products of Mac-Chem Products India Pvt. Ltd. are available in SmartChem:

Chemical Name / Synonym	Structure	CAS No.	Mol. Formula	Suppliers	Raw Materials	Application Areas	Literature
6alpha-Methylprednisolone sodium succinate <input checked="" type="checkbox"/> (6a,11b)-21-(3-Carboxy-1-oxopropoxy)-11,17-dihydroxy-6-methyl-pregna-1,4-diene-3,20-dione monosodium salt; 11b,17,21-Trihydroxy-6a-methyl-pregna-1,4-diene-3,20-dione 21-(hydrogensuccinate) monosodium salt; Succinic acid 21-monoester with 11b,17,21-trihydroxy-6a-methylpregna-1,4-diene-3,20-dione monosodium salt		2375033	C26H33NaO8 / C26H33O8.Na	✓	✓	Not Applicable	
Amifostine <input checked="" type="checkbox"/> 2-[(3-Aminopropyl)amino]ethane thiol dihydrogen phosphate ester; Phosphorothioic acid S-[2-[(3-amino propyl)amino]ethyl] ester		20537886	C5H15N2O3PS	✓	✓	Not Applicable	✓