SuperChems™ for DIERS Policies and Information

ioMosaic Corporation is the developer and owner of Process Safety Office® SuperChems™ software. ioMosaic have available for market several versions of SuperChems™ to meet the varying needs in the industry. The SuperChems™ for DIERS version of the software is exclusively available for license from the American Institute of Chemical Engineers (AIChE) according to the fee schedule shown in Table 1. Agreement to abide by and return of the attached License Agreement (Attachment 1) signed by a responsible corporate official is a prerequisite to receipt of the software.

Table 1: SuperChems™ Licensing Information, Fees, and Options

	License Details	Comments
License acquisition fee*	$13,000 payable to AIChE	License agreement must be signed by a company officer
Annual License/ Maintenance Subscription Program	$2,200 payable to ioMosaic Corporation	Entitles licensee to technical support, upgrades, and license to use the code by up to four more users/locations.
License keys	One License is supplied with acquisition fee	Expires on December 31 each year. Renews automatically on payment of the Maintenance Subscription fee.
Additional license seats (i.e. additional users who can access the same license)	Up to four additional seats on the license can be purchased ($180 / seat) as an option under the Annual License/ Maintenance Subscription Program	

*The source code is not furnished. Bugs should be reported to, and can only be corrected by, ioMosaic.

Licenses are validated online – no hardware dongle is required. Additional license seats can be purchased under the Annual License/Maintenance Subscription Program at a cost of $180 for each copy of the program to be installed. These licenses will renew automatically on payment of the Maintenance Subscription fee. Upgrades will be furnished at least once per year. Previously installed copies of the program will then no longer be operable. Licenses will work automatically on upgraded versions of the program.

ioMosaic has agreed to provide technical support to licensees and to maintain and enhance the SuperChems™ for DIERS computer program as a service to the DIERS

Corporations and contractors that license the SuperChems™ for DIERS computer program from AIChE must:

1. Send a check for $13,000 and a signed License Agreement to AIChE at the following address:

   AIChE
   Attn: Anil Gokhale
   AIChE, Director of CCPS Projects
   120 Wall Street, 23rd Floor
   New York, NY 10005-4020
   Telephone: (646) 495-1378   Fax: (646) 495-1501   E-Mail anilg@aiche.org

2. Send a check for $2,200 and the signed Annual License / Maintenance Subscription Program Agreement to ioMosaic Corporation. Send a check for $180 each for up to four additional seats (required to run the program) to ioMosaic Corporation at the address shown below:

   ioMosaic Corporation
   93 Stiles Road
   Salem, NH 03079

Process Safety Office® SuperChems™ General Description

Process Safety Office® SuperChems™ (available in different versions) is an advanced tool for pressure relief design, consequence analysis, and thermal hazards assessment. SuperChems™ helps companies meet process safety design and management needs and objectives. Its rigorous modeling capabilities enable companies to make technically sound decisions about key process design issues.

SuperChems™ contains an extensive library of more than 2500 components with equation-of- state based computer code and incorporates many features that add tremendous value to the quality of a detailed hazards analysis. It has been extensively validated against experimental data to ensure its accuracy.

SuperChems™ for DIERS Capabilities

SuperChems™ for DIERS provides capabilities to handle multicomponent reaction kinetics, emergency pressure relief design, and selective vapor-liquid equilibrium calculations. The DIERS edition has been selected by the AIChE DIERS as the standard tool for designing emergency relief systems.

SuperChems™ for DIERS is available and can only be ordered through AIChE. This document provides general information and policies relating to the SuperChems™ software editions, software documentation, technical support services, future enhancements / updates, and contact information.

ioMosaic licenses a fully functional version of SuperChems™ called Process Safety Office® SuperChems™. This edition integrates capabilities from SuperChems™ for DIERS and further provides many more features. Several key additional features in the Process Safety Office® SuperChems™ edition include:

- Effluent handling equipment design and dynamics (cyclones, separators, stacks, and quench tanks)
- Vent and flare headers for single, and two-phase reacting flows
- Plug flow reactors for single and two-phase flow
- Simultaneous physical / chemical equilibria for the estimation of reaction stoichiometry and from experimental calorimetry data
- Multiple relief paths for a single vessel
- Dynamic flow sheet simulation for interlinked vessels and piping such as reactors venting into effluent handling equipment

The Process Safety Office® SuperChems™ edition also consists of a family of rigorous models designed to conduct consequence analysis and hazard modeling. As a sophisticated tool for consequence analysis, this fully loaded edition of SuperChems™ can quantify the hazard zones resulting from potentially toxic, flammable, or explosive releases from vessels, pipes and pools.

Key References

1. .Melhem, G. A., Fisher, H. G. and Shaw, D. A., "An Advanced Method for the Estimation of Reaction Kinetics, Scale-up, and Pressure Relief Design", Process Safety Progress, 14(1), 1-21 (January 1995).

2. Melhem, G. A., "Advanced ERS Design Using Computer Simulation", in International Symposium on Runaway Reactions and Pressure Relief Design", Melhem, G. A. and Fisher, H. G. (Eds.), AIChE/DIERS, New York (1995).

3. Melhem, G. A. and Fisher, H. G., "An Overview of SuperChems™ for DIERS: A Program for Emergency Relief System and Effluent Handling Designs", Process Safety Progress, 16(3), 185-197 (Fall 1997).

Software Documentation

SuperChems™ provides online help documentation. The documentation includes various how-to notes, which provide an overview of the software as well as comments on specific functionality and capabilities of the software. Users can access help through the table of contents or search for specific features and functions through the help index. The online documentation is provided as an online User's Manual. The User's Manual will not be available in hard copy.

The technical reference manual is available online in Acrobat PDF format. Users may search for all technical references and topics through the SuperChems™ online help, which provides direct links to the technical reference manual loaded by the Acrobat Reader. A copy of the Acrobat Reader is included as part of the software package.

Device "License"

The SuperChems™ license is provided with the program. This license is available as a download.

The license key is set to expire on December 31 or when it reaches 1,000 program executions, whichever comes first. Installed SuperChems™ for DIERS computer code will then no longer be operable. If the license allowance reaches 1,000 program executions before December31. ioMosaic will reset the license at no charge.

Licensees of the SuperChems™ for DIERS computer program who purchase the Annual License / Maintenance Subscription Program are entitled to use up to five copies of the software.

A device license is required to:

1. Operate each copy of the program,
2. Differentiate between the DIERS and Process Safety Office® SuperChems™ edition of the program,
3. Differentiate between the original and enhanced (upgraded) versions of the SuperChems™ for DIERS program, and
4. Ensure that subscribers replace their software at least once per year.

Note: Patches for serious bugs will also be available for downloading from the ioMosaic web site on a timely basis.

Technical Support and Maintenance

Users must complete and sign the attached DIERS Annual License / Maintenance Subscription Program Agreement and send / fax the form back to ioMosaic listing the designated technical contact person within their organization. Technical support is provided only through the listed contact person.

Contact Information

For ordering and more information regarding SuperChems™ for DIERS, please contact:

AIChE
Attn: Anil Gokhale
AIChE, Director of CCPS Projects
120 Wall Street
New York, NY 10005-4020
Tel. (646) 495-1378   Fax: (646) 495-1501   E-mail: anilg@aiche.org

For Annual License / Maintenance Subscription Program Agreement accounting, billing, and technical support, please contact:

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93 Stiles Road
Salem, NH 03079
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