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Specialty Gas Resources and Tools

- **Software** (*Recipes, Labels and Certificates*)
- **Training** (*Mixtures, Analyses and Instrumentation*)
- **Validation** (*Analytical Methods, Process & Software*)
- **FDA self assessments** (*Thorough self audit with scorecard and specific recommendations*)

The Specialty Gas Manager – Summary

The Specialty Gas Manager assists your operations and sales personnel in...

- **Mixture Recipes** - It applies safe mixture making procedures which have been developed from years of specialty gas mixture experience (vapor pressure limitation, BTU/LEL limitation, compatibility, etc.) It recommends the CGA outlet, hydrotest frequency and eligibility for 10% overfill. It is also customizable to prohibit certain gases or conditions (fuel/oxidizer, etc.). PPM mixtures are automatically calculated using base (dilution) mixtures.
- **Post Fill Mixture Calculator** - This utility assists you in calculating the concentration of the mixture from the actual grams added on the scale. The data is entered once and available to other modules (Labels, Recipe, etc.).
- **Mixture Label Generation** - You select the gases in the mixture and the Labels Module prints a medical or industrial label with the following:
 - DOT Shipping Diamonds
 - UN Number
 - OSHA, DOT and FDA warnings
 - DOT Proper Shipping Name
 - CAS ID Numbers
 - Your address, logos, etc.
- **Sales Quotation Tool** - This module recommends a mixture price based on: the gases in the mixture, technician labor, cylinder maintenance costs, materials costs, delivery costs, desired margin, etc. It facilitates a consistent pricing strategy which protects your margin.

The Specialty Gas Manager is available for \$2250.00.

Other software is also available (SG Order Entry/Inventory Control, Acetylene Requalification, Lab Automation)

The Specialty Gas Manager – Quick Tour

The Specialty Gas Manager uses the Windows interface to calculate recipes, print labels and certificates of analysis. The system runs as well on networks as on single workstations. Please see the following pages for a description of the Specialty Gas Manager.

The Specialty Gas Manager – Main Menu

The main menu allow you to build and print a recipe, label, certificate of analysis or update your system preferences. These features are discussed on the following pages.

The screenshot shows a software window titled "Specialty Gas Manager - [AsteRisk Specialty Gas Management System]". The menu bar includes "File", "Edit", "Records", and "Help". The main content area is titled "AsteRisk Specialty Gas Management System" and lists several menu items, each with an icon and a description:

Icon	Menu Item	Description
	Mixture Recipe	Direct access to the Recipe Module. Can also move to the Post Fill Calculator, Sales Quotation and Label Generation Modules. Permits data entry in one module to be used by all modules
	Post Fill Mixture Calculator	Fast access to the Post Fill Calculator. Does not interchange data with other modules. Choose the Recipe or Label modules to interchange data with the Post Fill Mixture Calculator
	Label Generator	Direct access to the Label Generator. Can also move to the Post Fill Calculator, Sales Quotation and Mixture Recipe Modules.
	ID Label	Prints a small non-DOT identification label. This is formatted to an Avery 8161 label stock.
	Certificate of Analysis	Draft your CoA directly from the mixture data in the other modules. Print here or export to word processing.
	Chemical/Physical Properties	Utility to look up the chemical and physical properties of gases
	System Settings	Customizes the system for your company. Allows entry of your address, logo, label size, cylinder styles, BTU warning levels, etc. Year 2000 and Validation Certificates are here.
	Exit	

The Specialty Gas Manager – Recipe Printout

After you have selected your cylinder style and gases you can print the recipe. This is a sample recipe. The recipe includes the target grams, a pressure/temperature chart, safety information, recommended CGA outlet connection and fill procedure. The fill procedure is customized by you for your specific needs.

Your Mixture Recipe
✕

Mixture Recipe - 50% O2/N2 Medical

Gas		Mass (G)		Pressure (PSIA)					
		Target	Actual	50 F	60 F	70 F	80 F	90 F	100 F
Oxygen	50%	4119.3	<input type="text"/>	945.8	968.1	990.5	1012.8	1035.1	1057.3
Nitrogen	50%	3606.1	<input type="text"/>	1939.2	1984.4	2029.6	2075	2120	2179.8

Medical Gas Mixture 219.5 CF

Cylinder Style: **Ten or five year hydrotest:**

Max. safety device (psi):

The recommended valve outlet connections are CGA 280 (or 890 pin indexed).

Verify the following:

- Cylinder Style: K/UK
- DOT Specification: 3A - DOT Service Pressure: 2015 psig
- Dimensions: 9 inches (diameter) by 55 inches (height) - Water Capacity: 1.54 cubic feet

Version 2.31 - 3/27/2001

The mixture fill pressure may not exceed the working pressure of the cylinder.

*** Mixture Statistics: Specific Volume = 12.88816 cf/lb

Add your own procedure here...
For example...

- Select proper cylinder style, CGA connection, safety rating, hydrotest date and compatibility with previous service
- Odor test the cylinder ONLY IF REQUIRED BY FDA for drugs
- Connect the cylinder to the blow down rack and blow down to 0 psig

The Specialty Gas Manager – Sales Quotation

After you have printed the recipe, you can choose to print a recommended sales quotation form. All assumptions for this quotation are completely customizable for your business model and are saved for use with future mixture quotes. You identify your cost for the raw ingredients, labor cost, maintenance cost, desired margin, etc. The Specialty Gas Manager calculates the suggested sales price to meet your profit expectations.

Your Mixture Quotation

Costs
↻

Gas	50%	Cost Per CCF	Ext. Gas Cost		
Oxygen	50%	\$0.310	\$0.34	Cylinder maintenance cost:	\$2.00
Nitrogen	50%	\$0.300	\$0.33	Delivery cost:	\$12.00
				Cylinder handling cost:	\$0.75
				Technician cost:	\$12.00
				Materials cost:	\$4.00
				Addl. Hrs: <input style="width: 30px;" type="text" value="0"/> Lab Cost:	\$0.00
				Margin:	40.00%
				Sales price per cylinder:	\$52.37

219.5 CF

Medical Gas Mixture

Cylinder Style: K/UK

The recommended valve outlet connections are CGA 280 (or 890 pin indexed).

Verify the following:

- Cylinder Style: K/UK
- DOT Specification: 3A - DOT Service Pressure: 2015 psig
- Dimensions: 9 inches (diameter) by 55 inches (height) - Water Capacity: 1.54 cubic feet

Scroll down for additional information

Gas Cost: \$0.67

Estimated top fill pressure: 2010

The Specialty Gas Manager – Mixture Labels

A DOT, OSHA, CGA, NWSA and FDA complaint label is created. You may select from three different company logos to print on this label. You can also include your website URL and other company information. Cylinder contents, lot numbers, serial numbers, etc. may all be included in each label. The label prints on any Windows compatible printer. We recommend using a non-water based ink with vinyl labels for durability. Vinyl laser compatible label stock is available from AsteRisk as well as printer recommendations.

The screenshot shows the 'Specialty Gas Manager - [Your Label]' application window. The menu bar includes 'File', 'Edit', 'Records', and 'Help'. The toolbar contains icons for print, search, zoom (set to 100%), close, and help. The main content area displays a label with two hazard diamonds: 'OXIDIZER' (flame over a cylinder) and 'NON-FLAMMABLE GAS' (cylinder with '2' below it). Below the diamonds, the text reads: 'Compressed gas, oxidizing, n.o.s. (Oxygen, Nitrogen)' and 'UN3156'. A horizontal line separates this from the 'Medical Gas Mixture' section, which lists '50% Oxygen, USP' (CAS: 7782-44-7) and '50% Nitrogen, NF' (CAS: 7727-37-9). Below this, a 'CAUTION' and 'WARNING' section provides safety instructions, including 'Keep oil and grease away' and 'Use only with equipment cleaned for oxygen service'. The bottom of the window shows a page navigation bar with 'Page: 1' and navigation arrows.

Specialty Gas Manager - [Your Label]

File Edit Records Help

100% Close

OXIDIZER

NON-FLAMMABLE GAS

2

Compressed gas, oxidizing, n.o.s.
(Oxygen, Nitrogen)

UN3156

Medical Gas Mixture

50% Oxygen, USP	CAS:	7782-44-7
50% Nitrogen, NF	CAS:	7727-37-9

CAUTION: Federal law prohibits dispensing without a prescription. Rx only.

WARNING: OXIDIZING HIGH PRESSURE GAS. VIGOROUSLY ACCELERATES COMBUSTION.

Keep oil and grease away. Use only with equipment cleaned for oxygen service and rated for cylinder pressure. Use equipment rated for cylinder pressure. Store and use with adequate ventilation. Close valve after each use and when empty. Open valve slowly. Administration of this gas mixture may be hazardous or contraindicated. For use only by or under the supervision of a licensed practitioner who is experienced in the use and administration of gas mixtures and is familiar with the indications, effects, dosages, methods, and frequency and duration of administration, and with the hazards, contraindications and side effects and the precautions to be taken. Use in accordance with the appropriate MSDS for each mixture

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The Specialty Gas Manager – System Settings

The Specialty Gas Manager is highly configurable to your specific needs. Your preferences are entered into the System Settings. Your company logos, fill procedures, units of measure, cylinder preferences, labor/gas cost assumptions, print preferences, etc. are easily entered and modified. Additionally, system information is displayed: validation certificate, upgrade history, etc.

Specialty Gas Manager - [Company Information]

File Edit Records Help

Company Name: Your Company Req'd
Address1:
Address2:
City: Your City Req'd
State: State Req'd
ZipCode:
Emergency Ph#:
Website:

Recipe Preferences

Units

Pressure: PSIA
Temperature: F
Volume: CF
Mass: G

Starting Temp: 50
Temperature Increments: 10

LEL Level

Warning: 0.25
Maximum: 0.8

Allow 10% overfill

Notes
Supply your company info here

Confirmations

Program exit?
 Print destination?

Print Destination

Printer
 Print Preview

AsteRisk recommends UN1014 for 30% Oxygen; Balance Carbon Dioxide. Enter your preference.
1014

Validation Certificate
Year 2000 Certificate

Company Logos
Cylinders
Cost Assumptions
System Maint.
Fill Procedure
Select Gases
Vapor Pressures
CoA Disclaimers
Upgrade History
Mixture Manager

Evaluation Version Availability

AsteRisk has a full featured evaluation version available of the Specialty Gas Manager on CD or through e-mail.

- The CD version includes a free copy of Microsoft Access97 runtime engine which drives the Specialty Gas Manager. The CD version requires approximately 18 MB of hard drive space in order to install all components.
- The e-mail version does not include the Microsoft Access97 runtime engine and requires approximately 2 MB of disk space. The e-mail version assumes that Microsoft Access97 is already running on your computer. **Other versions of Microsoft Access (1.0, 1.1, 2.0, 95 and 2000) are not compatible with the Specialty Gas Manager.**

Evaluation Version Request Form

Fax to 1-888-869-9673

Or E-Mail to Info@AsteRisk-Inc.com
Or call Tom Badstubner at (800) 432-5038

Please send me the following:

Name: _____ **E-mail Address:** _____

Company: _____

Address: _____

City, State, Zip: _____

There is no cost or obligation to use the evaluation version of the Specialty Gas Manager. The evaluation version is exactly the same as the full Specialty Gas Manager except that it will expire in four to five weeks. If additional time is needed to completely evaluate the software, simply give us a call. We are pleased to extend the evaluation period when necessary.

Which evaluation version of the Specialty Gas Manager would you like to try?

- CD Evaluation Version of the Specialty Gas Manager**
- E-mail Evaluation Version of the Specialty Gas Manager**