



Drying Flowers in a Desiccant

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Since flowers that are air-dried often become deformed in the process, a good alternative is to use a desiccant. The main advantage of using a drying agent is that it absorbs water from the flowers while still allowing the flowers to retain their shape and color.

This method works for flowers that are delicate as well those that wilt readily, have a high moisture content, have open forms, or those with thick, deep shapes. The drying agent absorbs water from the flowers. The idea is to get the water out of the flower as rapidly as possible. There are various drying agents that can be used -- some better than others. Silica gel is probably the best drying agent of all. It is a fine, white, sand-like material that can absorb up to 40% its weight in water vapor, yet looks and feels dry. When flowers are placed in silica gel, the silica absorbs

water from the plant tissues. It is expensive, but lightweight, trouble-free, and dries quickly. Cobalt chloride crystals are added to the silica gel to help determine its moisture-retention. When it absorbs moisture, the material changes from pale blue to pink. At this point, the gel must be heated in an oven to release the moisture so the gel can be used again. You can do this by spreading the gel on a cookie sheet and heating it in an oven at 250-300° for 2 to 3 hours. As the moisture is released, the color indicator returns to blue.

There are less expensive alternatives to silica gel. A good substitute is silica sand from a building supply store. You can also use a mixture of 2 parts borax with 1 part fine sand, 1 part borax and 6 parts cornmeal, or just fine, sifted, well-dried beach sand. Borax alone will bleach the flowers so mix it with sand or cornmeal. This method is relatively inexpensive and the flowers dry in 1 to 2 weeks. Add 2 tablespoons of un-iodized salt to help the flowers retain their original color. Sand is inexpensive but heavy, which can distort the flower forms, and it can take 2-3 weeks for the flowers to dry.

Cover the bottom of a container with 1/2 to 1 inch of the agent. Remove all but an inch of the flower stems and replace with a piece of florist's wire about 2 inches long. Flat flowers can be placed face down; all others should be face up. Don't let the flowers overlap. Foliage should be laid flat on the material. Carefully sift the agent over the flowers and into open-form flowers until they are covered with at least a 1/4 -inch layer. Add the drying agent slowly; otherwise the flowers may drop their petals or

become misshapen if the material is added too fast and there's no support beneath. Don't cover the container unless you are using silica gel.

Place the container in a dark, cool, dry location. If you are using silica gel, refer to the chart below for the length of drying time. For other materials, it may take from 1 to 3 weeks depending on the type of drying agent, the type of flower used, the thickness of the petals, and the temperature and humidity levels. Thin-petaled flowers usually take about a week, while thicker-petaled flowers take anywhere from 10 days to 2 weeks. The best way to determine if they are dry is to carefully brush aside the agent and check the flowers. When thoroughly dry, gently remove the flowers and carefully use a fine-haired brush to remove any of the particles of desiccant that remain after drying.

Length of Time for Drying Flowers in Silica Gel

(Time given is approximate and will vary with temperature and humidity; actual time may take longer)

Ageratum (<i>Ageratum houstonianum</i>)	2 days
Alyssum (<i>Lobularia maritima</i>)	2 days
Anemone (<i>Anemone</i> sp.)	2-3 days
Aster (<i>Aster</i> sp.)	2-4 days
Astilbe (<i>Astilbe</i> sp.)	2 days
Azalea (<i>Rhododendron</i> sp.)	2 days
Baby's-Breath (<i>Gypsophila paniculata</i>)	2-3 days
Bachelor's button (<i>Centaurea cyanus</i>)	2 days
Balsam (<i>Impatiens balsamina</i>)	2 days
Beech foliage (<i>Fagus sylvatica</i>)	2 days
Begonia (<i>Begonia</i> sp.)	4 days
Bells-of-Ireland (<i>Molucella laevis</i>)	2 days
Black-eyed Susan (<i>Rudbeckia</i> sp.)	2 days
Bleeding heart (<i>Dicentra</i> sp.)	2 days
Camellia (<i>Camellia japonica</i>)	2-4 days
Canterbury bells (<i>Campanula medium</i>)	3-4 days
Candytuft (<i>Iberis sempervirens</i>)	2 days
Carnation (<i>Dianthus caryophyllus</i>)	2-3 days
Columbine (<i>Aquilegia</i> sp.)	2-3 days
Coneflower (<i>Echinacea</i> sp.)	2 days
Coreopsis (<i>Coreopsis</i> sp.)	2 days
Cosmos (<i>Cosmos</i> sp.)	2-3 days
Crabapple (<i>Malus</i> sp.)	2 days
Crocus (<i>Crocus</i> sp.)	2 days
Daffodil (<i>Narcissus</i> sp.)	2-3 days
Dahlia (<i>Dahlia</i> hybrids)	2-3 days

Daisy (<i>Leucanthemum x superbum</i>)	2 days
Daylily (<i>Hemerocallis</i> sp.)	1 day
Delphinium (<i>Delphinium elatum</i>)	2-3 days
Dianthus (<i>Dianthus</i> sp.)	2 days
Dogwood (<i>Cornus florida</i>)	2-3 days
Feverfew (<i>Chrysanthemum parthenium</i>)	1-2 days
Foxglove (<i>Digitalis purpurea</i>)	3 days
Forsythia (<i>Forsythia</i> sp.)	2 days
Freesia (<i>Freesia x hybrida</i>)	2 days
Gaillardia (<i>Gaillardia x grandiflora</i>)	2 days
Geranium (<i>Pelargonium</i> sp.)	3 days
Gladiolus (<i>Gladiolus x hortulanus</i>)	2-3 days
Goldenrod (<i>Solidago</i> hybrids)	2 days
Grape hyacinth (<i>Muscari armeniacum</i>)	2 days
Heather (<i>Calluna vulgaris</i>)	2-3 days
Hollyhock (<i>Alcea rosea</i>)	2 days
Hyacinth (<i>Hyacinthus orientalis</i>)	4-5 days
Iris (<i>Iris</i> sp.)	2-3 days
Larkspur (<i>Consolida ambigua</i>)	2 days
Liatris (<i>Liatris spicata</i>)	2 days
Lilac (<i>Syringa vulgaris</i>)	2 days
Lily-of-the-Valley (<i>Convallaria majalis</i>)	2 days
Love-in-a-Mist (<i>Nigella damascena</i>)	2 days
Lupine (<i>Lupinus</i> hybrids)	2-3 days
Magnolia (<i>Magnolia</i> sp.)	2 days
Marigold (<i>Tagetes</i> sp.)	3-4 days
Mexican Sunflower (<i>Tithonia rotundifolia</i>)	3 days
Morning glory (<i>Ipomoea purpurea</i>)	2 days
Nicotiana (<i>Nicotiana alata</i>)	2 days
Oriental Poppy (<i>Papaver orientale</i>)	2 days
Pansy (<i>Viola x wittrockiana</i>)	2-3 days
Peony (<i>Paeonia</i> hybrids)	2-3 days
Petunia (<i>Petunia x hybrida</i>)	2 days
Phlox (<i>Phlox</i> sp.)	2 days
Portulaca (<i>Portulaca grandiflora</i>)	2 days
Queen Anne's Lace (<i>Daucus carota</i>)	2 days
Ranunculus (<i>Ranunculus asiaticus</i>)	3-4 days
Rose (<i>Rosa</i> sp.)	2-3 days
Salvia (<i>Salvia</i> sp.)	2 days
Scilla (<i>Scilla sibirica</i>)	2 days
Stock (<i>Consolida ambigua</i>)	3-4 days
Sunflower (<i>Helianthus annuus</i>)	2 days
Sweet Pea (<i>Lathyrus odoratus</i>)	2 days

Sweet William (<i>Dianthus barbatus</i>)	2 days
Tuberous begonia (<i>Begonia x tuberhybrida</i>)	4 days
Tulip (<i>Tulip</i> sp.)	2 days
Verbena (<i>Verbena</i> sp.)	2 days
Violet (<i>Viola</i> sp.)	1-2 days
Yarrow (<i>Achillea</i> sp.)	1 day
Zinnia (<i>Zinnia</i> sp.)	2-3 days