

1185 Ethyl Acetate

Some of its uses in Entomology

Ethyl Acetate is the current material of choice for use in killing jars. Back in the early years of Entomology, the materials of choice for the common killing jar were either Carbon Tetrachloride or Cyanide, both very fast acting but highly poisonous materials. If one didn't have access to either they would use Mom's fingernail polish remover. Back then, it was primarily made of straight ethyl acetate. After removing the polish from her fingernails, Mom would then use some material to soften and recondition the dried cuticles and skin around her fingernails because the ethyl acetate would not only remove the fingernail polish, but also take most of the oils from the skin and surrounding area making them very dry. Today's fingernail polish removers rarely contain any ethyl acetate but usually use acetone plus several conditioning oils designed to leave the fingers smooth and supple. It is no longer a good substitute for use in killing jars and it more often than not leaves specimens greasy and unuseable if used for this purpose.

To use Ethyl Acetate in BioQuip's killing jars, either the plaster bottom type or the top cartridge type, pour a small amount into the jar (or onto a cotton ball in the cartridge chamber) and let it sit long enough for the material to be absorbed by the plaster. Pour off the excess back into your can or container. Allow the surface of the plaster to dry of any liquid seen on top and then put the lid back on the container. It is also a good practice to put a small amount of tissue or paper towel into the jar for the specimen to cling to, rather than crawl around or beat its wings up badly. Specimens should be "knocked down" within 10-15 seconds and typically expire within a minute or two. There are a few insects and beetles that will take considerably longer to expire. With these specimens, it is better to inject them with ethyl acetate, ammonia water, alcohol, or other suitable material to dispatch them immediately.

Ethyl acetate can also be used as a degreaser for many specimens. Immersion in ethyl acetate will usually pull the grease from both the outside and inside of the specimen leaving it cleaner and brighter but considerably more brittle. It is better to use as a degreaser on already spread and pinned specimens than on papered or fresh specimens.

Ethyl Acetate is a very flammable material so it must be kept away from open flames and it is not suitable for taking onto airplanes. Usually if it is spilled on the exposed skin or hands, the only outcome is a very dry patch a skin, but there are always those individuals who might be allergic so proper care and supervision is highly recommended. If ethyl acetate is spilled on most plastics or painted surfaces, it will usually melt or mar then permanently. If spilled on most clothing material, you will usually have a very clean spot but, again, caution is suggested and proper handling and supervision is a must.

Ethyl acetate should only be used in well ventilated areas or outside. Please refer to the MSDS for more information and precautions.