

Worksite: _____ Instructor: _____ Date/Time: _____

Topic C457: Acetone

Introduction: Acetone is an organic compound that works as an excellent solvent; it is also known as dimethyl ketone. Acetone can be used to clean oil, grease, paint, and resin off of many materials. Acetone can be found in a spray or liquid form and can be found blended into other cleaning solutions. Following are safety guidelines for the safe use of acetone:

Hazardous Properties: Acetone is a highly flammable liquid that evaporates rapidly and gives off excessive amounts of fumes when exposed to the atmosphere. Acetone has a flashpoint of 0°F. This means that, even at this very low temperature, it will ignite very easily. A spark can ignite acetone, even in open air settings where the dissipation rate of fumes is higher than in an enclosed space. Water with ten percent acetone will still ignite at a temperature of 80°F.

Application hazards: Use caution with acetone cleaning grease off engine parts, cleaning a paint brush, or cleaning the protective coatings off new glass. Spraying acetone or other cleaning solutions that contain acetone onto parts or other materials will release fumes. Using paint brushes or rags, to apply acetone to oily or dirty surfaces will release fumes as well, but less.

Safety precautions: Always follow these safety precautions when using acetone, or cleaning products containing acetone:

- **Proper planning** before the cleaning job will reduce the risk of injury or fire.
- **Always** be alert to the possibility of fume exposure to the public.
- **Under no circumstances** should acetone be stored in direct sunlight or near any heat source.
- **Store** acetone in covered and well-ventilated areas.
- **Keep** acetone stored in a secure area where unauthorized access will be prevented.
- **When possible**, use acetone in an open, shaded, well-ventilated area.
- **Use** a ventilation system sufficient to expel acetone fumes from enclosed areas.
- **Always** allow parts to cool before applying acetone.
- **Always** remove the keys to prevent engines from being started when applying acetone.
- **Never** smoke when cleaning with acetone or other products containing acetone.
- **Wear** a respirator when using acetone or cleaning solutions containing acetone.
- **Prevent** direct skin contact when handling acetone on the job.
- **Quickly remove** any clothing that becomes wet or saturated with acetone.
- **Cleaning rags** saturated with acetone must be placed in an approved container.
- **Under no circumstances** should acetone saturated rags be placed into a trash can.
- **Fully rinse** all acetone out of paint brushes or other applicators before storing them.
- **Leftover** or waste acetone must always be disposed of at an approved disposal site.
- **ABC rated fire extinguishers**, with dry chemical or foam retardant, must be on site.
- **Safety data sheets** (SDS) must be provided to employees working with acetone products.

Acetone is highly flammable and releases excessive hazardous fumes. Care must be taken to prevent sparks or flame around acetone

Personal protective equipment: Using acetone or other cleaning solutions that contain acetone will require the following PPE and be trained to use it properly:

- Full Face Respirator
- Eye Protection
- Cover-All Clothing
- Heavy Chemical Resistant Gloves
- Non-Slip Chemical Resistant Safety Boots

First Aid: Over-exposure to acetone will cause irritation of the eyes, nose, throat, headache, dizziness, and dermatitis. Excessive inhalation of acetone fumes may require oxygen assisted respiratory support. An emergency eye-wash station, or eye-wash equipment, must be readily available to employees. Excessive skin contact will require a thorough washing with soap, and water.

Conclusion: Using acetone on the job is safe when caution and the proper safety methods are used. Always be aware and recognize the hazards at the workplace. Always utilize these safety guidelines when handling or working with acetone, or other cleaning solutions containing acetone.

Employee Attendance: (Names or signatures of personnel who are attending this meeting)

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

These guidelines do not supersede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.