## The OEMCtrl VOC Solution

VOCs are Volatile Organic Compounds (VOCs) emitted from paint, cleaning products, humans, and countless other sources. The OEMCtrl VOC Sensor detects dozens of potentially harmful contaminants to provide a much more complete measurement of total indoor air quality.

Unlike other VOC sensors, The OEMCtrl VOC Sensor has also been optimized for use in Demand Controlled Ventilation (DCV) by providing an output calibrated to highly correlate with CO2 levels, allowing for use with ASHRAE's occupancy-based VRP schedule. The OEMCtrl VOC Room sensor also offers Temperature and Humidity sensing, Temperature setpoint, override and display, providing for total occupant comfort.

## Families of VOCs detected are:

- CO, CH4, LPG
- Alcohols
- Ketones. Ketones are solvents. The best known are Acetone and Methyl Ethyl Ketone or MEK.
- Organic Acids. Common organic acids are Lactic acid, Acetic acid, Formic acid, Citric acid and Oxalic acid
- Amines. Amines are derivatives of ammonia.
- Aliphatic Hydrocarbons. Aliphatic hydrocarbons are flammable hydrocarbons with little or no odor. Such as hexane, paraffin, methane and acetylene.
- · Aromatic Hydrocarbons. Aromatic hydrocarbons are flammable hydrocarbons with a discernible odor. Examples are benzene, furan, pyridine, toluene, asphaltene and picric acid.

VOC	Typical Source
Dipropylene glycol	Surface cleaners
Ethanol	Disinfectants, Human metabolism
Ethyl Alcohol	Cosmetics, Cleaners, Disinfectants, Detergents, Paints, Human Metabolism
Eucalyptol	Cosmetics, Artificial flavors, Insecticides
Formaldehyde	Biocides, Disinfectants
Heptane	Human metabolism
Hydrocarbons	Waxes, Polishes
Isobutene	Aerosol cleaners
Isoprene	Synthetic rubber, Human metabolism
Limonene	Cosmetics, Cleaners, Artificial flavors, Prescription drugs
Methane	Natural gas, Human metabolism
Methoxyethanol	Surface cleaners
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Methylcyclohexane	Human metabolism
Methylethylketone	Adhesives, coatings, Plastics, Lubricants
Methyl methacrylate	Hard surface cleaners
Naphthalene	Disinfectants, Repellants
Nonanal	Artificial flavors, Perfume, Human metabolism
Pentane	Polystyrene foam, Refrigerants
Phenol	Plastics, Cosmetics, Disinfectants
Pinene	Perfume, Human metabolism
Propane	Fuel based heating, Cooking appliances, Cleaners
Siloxanes	Waxes, Polishes
Tetrachloroethene	Dry cleaning
Tetrachloroethylene	Spot cleaners
Toluene	Paints, Coatings, Cleaners, Detergents, Smoking, Polyurethane lacquers
Trichloromethane	Human metabolism
r (1-methylethyl) cyclopropane	Adhesives, Coatings, Plastics, Lubricants

