

Attachment C: Chemical Compatibility Charts

CHEMICAL COMPATIBILITY

Chemicals in Columns A and B should be kept separate. Oxidizing agents include the types of compounds listed in the entry for alkali and alkali earth metals.

COLUMN A	COLUMN B
ACIDS	BASES
ALKALI AND ALKALINE EARTH METALS: Carbides Hydrides Hydroxides Oxides Peroxides	WATER ACIDS HALOGENATED ORGANIC COMPOUNDS OXIDIZING AGENTS: Chromates, dichromates Halogens Halogenating agents Hydrogen peroxide and peroxides Nitric acid, nitrates Perchlorates and chlorates Permanganates Persulfates
INORGANIC AZIDES	ACIDS HEAVY METALS AND THEIR SALTS OXIDIZING AGENTS
INORGANIC CYANIDES	ACIDS STRONG BASES
INORGANIC NITRATES	ACIDS METALS NITRITES SULFUR
INORGANIC NITRITES	ACIDS OXIDIZING AGENTS
INORGANIC SULFIDES	ACIDS
ORGANIC COMPOUNDS: Organic acyl halides Organic anhydrides Organic halogen compounds Organic nitro compounds	ALUMINUM METAL OXIDIZING AGENTS ORGANIC HYDROXY COMPOUNDS STRONG BASES
POWDERED METALS	ACIDS OXIDIZING AGENTS

SPECIFIC CHEMICAL INCOMPATIBILITIES

COLUMN A	COLUMN B
ACETYLENE AND MONOSUBSTITUTED ACETYLENE (R-C CH)	HALOGENS METALS AND THEIR SALTS
AMMONIA AND AMMONIUM HYDROXIDE	HALOGENS HALOGENATING AGENTS SILVER MERCURY
CARBON, ACTIVATED	OXIDIZING AGENTS
HYDROGEN PEROXIDE	METALS AND THEIR SALTS
MERCURY AND IT'S AMALGAMS	AMMONIA AND AMMONIUM HYDROXIDE
NITRIC ACID	METALS SULFURIC ACID SULFIDES NITRITES AND OTHER REDUCING AGENTS CHROMIC ACID AND CHROMATES PERMANGANATES
OXALIC ACID	SILVER MERCURY
PHOSPHORUS (YELLOW)	OXYGEN OXIDIZING AGENTS STRONG BASES
PHOSPHORUS PENTOXIDE	WATER HALOGENATING AGENTS
SULFURIC ACID	METALS CHLORATES PERCHLORATES PERMANGANATES NITRIC ACID