

Depending on the specific solvent stream, there could be multiple different approaches to recover each individual solvent. Batch fractional distillation columns are available for mixed solvent separation, as are thin film evaporators for solids separation and recovery. Processes have been developed to yield selected products up to a 99.5 percent minimum purity, with a water content under 500 ppm, no uncharacteristic odor, and no color. Below is a list of typical solvents and equipment used in solvent recovery.

## Recoverable solvents, partial list

Acetone

Acetonitrile (ACN)

Automotive purge solvent

Butanol

Chlorobenzene

Cyclohexanone

Dimethylformamide (DMF)

Ethanol

Ethyl acetate

Ethylene glycol

Ethyl lactate

Heptane

Hexane

Isopropyl alcohol (IPA)

Isoamyl acetate

Isobutyl acetate

Isopropylacetate (IPAc)

Methyl ethyl ketone (MEK)

Methanol

Methylene chloride

MIBK methylisobutylketone

n-methyl pyrrolidone (NMP)

n-propyl bromide (NPB)

Propanol

Propyl acetate

Propylene carbonate

Propylene glycol methyl ether

acetate

Propylene glycol

Tetrahydrofuran (THF)

Thinner

Toluene

Trichloroethylene (TCE)

Xylene

All Flourinert® liquids

All Vertrel® solvents

Freon® solvents





## Equipment approaches to solvent recovery

Reclaim equipment type	Typical streams processed
Thin/wiped film evaporator	Spent solvents or solvent mixtures containing solids/ non-volatile residues
Post still	Spent solvents or solvent mixtures with no solids that do not require fractionation
Distillation column	Spent solvents or solvent mixtures with no solids that require fractionation
Glass lined distillation column	High value spent solvents with no solids that require high purity fractionation
Liquid-liquid extractor	Spent solvents or solvent mixtures that azeotrope, have close boiling points or high energy requirements
Molecular sieve	Recovered solvents or solvent mixtures requiring water and/or azeotropic water removal

Contact our expert with any questions or to learn more:

## James G. Reddy

 $\label{eq:main_product} \textbf{National Reclaim Product Sales Manager}$  Industrial Business

## Veolia North America

tel: +1412-303-1960 4119 Infirmary Road Miamisburg, OH 45342 jim.reddy@veolia.com















