

## Technical Bulletin

### JEFFSOL<sup>®</sup> ALKYLENE CARBONATES PAINT REMOVER FORMULATIONS

JEFFSOL<sup>®</sup> alkylene carbonates can replace the traditional methylene chloride in paint remover formulations.

They offer advantages over methylene chloride and other major solvents targeted for replacement such as 1,1,1-trichloroethane, perchloroethylene, trichloroethylene, NMP, acetone, and MEK, among others.

The JEFFSOL<sup>®</sup> alkylene carbonates advantages include:

- High solvency
- High boiling points
- High flash points
- Low toxicity
- Low evaporation rates
- Low odor
- Formulations easily thickened with methylcellulose thickeners
- Not damaging to the atmosphere
- Readily biodegradable
- Reasonable cost

Some starting paint remover formulations based on JEFFSOL<sup>®</sup> PC and EC-50 are illustrated below. These formulations rival the performance of traditional solvent-based formulations.

PAINT REMOVER FORMULATIONS (PATENT PENDING)	
Ingredients	Ingredient Ratios
JEFFSOL <sup>®</sup> PC/DBE/EEP	19.5 / 40.5 / 40
JEFFSOL <sup>®</sup> EC-50/DBE/EEP	19.5 / 40.5 / 40
JEFFSOL <sup>®</sup> PC/DBE/EEP/DMSO	19.5 / 34.5 / 23.5 / 22.5
JEFFSOL <sup>®</sup> PC/DBE/EEP/DMSO/DPM/MIAK	19.5 / 20.5 / 20 / 20.5 / 10.5 / 9

JEFFSOL<sup>®</sup> PC = propylene carbonate

JEFFSOL<sup>®</sup> EC-50 = 50/50 by wt. ethylene carbonate and propylene carbonate

DBE = dibasic ether mixture (DuPont)

EEP = 3-ethoxyethyl propionate

DMSO = dimethyl sulfoxide

DPM = dipropylene glycol methyl ether

MIAK = methyl isoamyl ketone

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