Fact Sheets and Information Papers

Chemical Agent Resistant Coating (CARC)

April 2006

1. **BACKGROUND.** CARC is a coating system that provides surfaces that are easily and effectively decontaminated after exposure to liquid chemical agents. There are three types of coatings in the CARC system: an epoxy polyamide primer, an aliphatic polyurethane paint (PUP), and epoxy polyamide enamel. Each of the coatings is supplied as a two-component system. When the two components are combined, a terminal reaction begins which makes an impermeable coating.

2. **APPLICATION**. The surfaces to be coated with CARC must sometimes be stripped. After stripping, the surface must be cleaned of all oils, grease, and water. When the item is ready for coating, the two components are mixed and allowed to stand for a prescribed period. The mixture must then be applied within a given time period known as its "pot life" in order to be effective.

3. **WASTE STREAMS**. There are several waste streams associated with the application of CARC. The most common examples of waste are: unserviceable CARC components, CARC mixtures with expired pot life, spent thinners and stripping solvents contaminated with CARC, blasting media with dry CARC residue, and empty containers. Each individual waste stream must be handled and disposed differently.

4. **ALTERNATIVES.** A water-based CARC paint system has been developed and in its initial stages of deployment. For information about this CARC paint system and associated NSNs, please contact this Center at DSN 584-3651 or commercial 410-436-3651.

5. **DISPOSAL GUIDELINES**.

Unserviceable CARC components- reclamation is the best option, but if it is not possible, then they must be disposed as hazardous waste with the characteristic of ignitability (D001), and possibly toxicity (heavy metals).

CARC mixtures with expired pot life- should be allowed to dry. The dried mixture may be disposed in a sanitary landfill if the paints contain no hazardous heavy metals. If the mixture contains any heavy metals (see MSDS), then it should be tested using the Toxicity Characteristic Leaching Procedure (TCLP) test and disposed accordingly.

Spent thinners and stripping solvents contaminated with CARC- Generally, all spent thinners are hazardous for the characteristic of ignitability (D001).

Blasting media with dry CARC residue- if the CARC contaminated dust is free of heavy metals then the waste may be disposed in a sanitary landfill. If there are heavy metals present (see MSDS), then the waste must be analyzed using the TCLP test and disposed accordingly.

Empty containers- containers that held any CARC component may be recycled or disposed as ordinary trash as long as they meet the definition of empty provided in Title 40 Code of Federal Regulation (CFR) Part 261.7(b).

5. **INFORMATION:** The following is a list of low volatile organic compound (VOC) and low heavy metal CARC paint.

NSN	Color	VOC (g/L)	Manufacturer
8010-00-229-7541	Black	419	Pratt and Lambert INC
8010-01-229-7543	Brown	419	Hentzen Coatings INC
8010-01-229-7543	Brown	418	Hentzen Coatings INC
8010-01-229-7543	Brown	419	Pratt and Lambert INC
8010-01-229-7543	Brown	417	Hentzen Coatings INC
8010-01-229-7543	Brown	418	Hentzen Coatings INC
8010-01-229-7543	Brown	422	Pratt and Lambert INC
8010-01-229-7543	Brown	419	Hentzen Coatings INC
8010-01-229-7543	Brown	419	Hentzen Coatings INC
8010-01-229-7543	Brown	419	Hentzen Coatings INC
8010-01-229-7543	Brown	419	Pratt and Lambert INC
8010-01-229-7544	Brown	419	Hentzen Coatings INC
8010-01-229-7544	Brown	418	Hentzen Coatings INC
8010-01-229-7544	Brown	419	Pratt and Lambert INC
8010-01-229-7544	Brown	417	Hentzen Coatings INC
8010-01-229-7544	Brown	419	Hentzen Coatings INC
8010-01-229-7544	Brown	419	Pratt and Lambert INC
8010-01-229-7544	Brown	417	Hentzen Coatings INC
8010-01-229-7544	Brown	419	Hentzen Coatings INC
8010-01-229-7544	Brown	419	Hentzen Coatings INC
8010-01-229-7544	Brown	419	Pratt and Lambert INC
8010-01-229-7545	Brown	419	Hentzen Coatings INC
8010-01-229-7545	Brown	419	Hentzen Coatings INC
8010-01-229-7545	Brown	418	Hentzen Coatings INC
8010-01-229-7545	Brown	419	Pratt and Lambert INC
8010-01-229-7545	Brown	417	Hentzen Coatings INC
8010-01-229-7545	Brown	419	Hentzen Coatings INC
8010-01-229-7545	Brown	422	Pratt and Lambert INC
8010-01-229-7545	Brown	419	Hentzen Coatings INC
8010-01-229-7545	Brown	419	Hentzen Coatings INC
8010-01-229-7545	Brown	419	Hentzen Coatings INC
8010-01-229-7545	Brown	419	Pratt and Lambert INC
8010-01-229-7546	Green	419	Hentzen Coatings INC
8010-01-229-7546	Green	419	Hentzen Coatings INC
8010-01-229-7546	Green	420	Pratt and Lambert INC
8010-01-229-7546	Green	419	Hentzen Coatings INC
8010-01-229-7546	Green	419	Hentzen Coatings INC
8010-01-229-7546	Green	419	Hentzen Coatings INC

NSN	Color	VOC (g/L)	Manufacturer
8010-01-229-7546	Green	419	Pratt and Lambert INC
8010-01-229-7546	Green	419	Hentzen Coatings INC
8010-01-229-7546	Green	419	Hentzen Coatings INC
8010-01-229-7546	Green	419	Hentzen Coatings INC
8010-01-229-7546	Green	419	Hentzen Coatings INC
8010-01-229-7547	Green	419	Hentzen Coatings INC
8010-01-229-7547	Green	419	Hentzen Coatings INC
8010-01-229-7547	Green	419	Hentzen Coatings INC
8010-01-229-7547	Green	420	Pratt and Lambert INC
8010-01-229-7547	Green	419	Hentzen Coatings INC
8010-01-229-7547	Green	419	Hentzen Coatings INC
8010-01-229-7547	Green	419	Pratt and Lambert INC
8010-01-229-7547	Green	419	Hentzen Coatings INC
8010-01-229-7547	Green	419	Hentzen Coatings INC
8010-01-229-9561	Green	419	Hentzen Coatings INC
8010-01-229-9561	Green	419	Hentzen Coatings INC
8010-01-229-9561	Green	419	Hentzen Coatings INC
8010-01-229-9561	Green	420	Pratt and Lambert INC
8010-01-229-9561	Green	419	Hentzen Coatings INC
8010-01-229-9561	Green	419	Hentzen Coatings INC
8010-01-229-9561	Green	419	Hentzen Coatings INC
8010-01-229-9561	Green	419	Pratt and Lambert INC
8010-01-229-9561	Green	419	Hentzen Coatings INC
8010-01-229-9561	Green	419	Hentzen Coatings INC
8010-01-229-9561	Green	419	Hentzen Coatings INC
8010-01-229-1568	Black	419	Hentzen Coatings INC
8010-01-233-1568	Black	417	Hentzen Coatings INC
8010-01-233-1568	Black	419	Hentzen Coatings INC
8010-01-233-1568	Black	419	Pratt and Lambert INC
8010-01-234-2934	Sand	419	Hentzen Coatings INC
8010-01-234-2934	Sand	419	Hentzen Coatings INC
8010-01-234-2934	Sand	422	Pratt and Lambert INC
8010-01-234-2934	Sand	419	Hentzen Coatings INC
8010-01-234-2934	Sand	419	Pratt and Lambert INC
8010-01-234-2934	Sand	419	Hentzen Coatings INC
8010-01-234-2934	Sand	419	Hentzen Coatings INC
8010-01-234-2934	Sand	419	Hentzen Coatings INC
8010-01-234-2935	Sand	419	Hentzen Coatings INC
8010-01-234-2935	Sand	419	Hentzen Coatings INC
8010-01-234-2935	Sand	419	Hentzen Coatings INC
8010-01-234-2935	Sand	422	Pratt and Lambert INC
8010-01-234-2935	Sand	419	Hentzen Coatings INC
8010-01-234-2935	Sand	421	Pratt and Lambert INC
8010-01-234-2935	Sand	419	Hentzen Coatings INC
8010-01-234-2936	Sand	419	Hentzen Coatings INC
8010-01-234-2936	Sand	419	Hentzen Coatings INC

NSN	Color	VOC (g/L)	Manufacturer
8010-01-234-2936	Sand	422	Pratt and Lambert INC
8010-01-234-2936	Sand	419	Hentzen Coatings INC
8010-01-234-2936	Sand	419	Pratt and Lambert INC
8010-01-234-2936	Sand	419	Hentzen Coatings INC
8010-01-234-2936	Sand	419	Hentzen Coatings INC
8010-01-276-3638	Tan	419	Hentzen Coatings INC
8010-01-276-3638	Tan	419	Hentzen Coatings INC
8010-01-276-3638	Tan	419	Pratt and Lambert INC
8010-01-276-3638	Tan	418	Hentzen Coatings INC
8010-01-276-3638	Tan	419	Hentzen Coatings INC
8010-01-276-3638	Tan	419	Pratt and Lambert INC
8010-01-276-3638	Tan	419	Hentzen Coatings INC
8010-01-276-3638	Tan	420	Pratt and Lambert INC
8010-01-276-3639	Tan	419	Hentzen Coatings INC
8010-01-276-3639	Tan	419	Hentzen Coatings INC
8010-01-276-3639	Tan	419	Hentzen Coatings INC
8010-01-276-3639	Tan	418	Hentzen Coatings INC
8010-01-276-3638	Tan	419	Pratt and Lambert INC
8010-01-276-3639	Tan	418	Hentzen Coatings INC
8010-01-276-3639	Tan	419	Hentzen Coatings INC
8010-01-276-3638	Tan	419	Pratt and Lambert INC
8010-01-276-3639	Tan	419	Hentzen Coatings INC
8010-01-276-3639	Tan	420	Pratt and Lambert INC
8010-01-276-3640	Tan	419	Hentzen Coatings INC
8010-01-276-3640	Tan	419	Hentzen Coatings INC
8010-01-276-3640	Tan	419	Pratt and Lambert INC
8010-01-276-3640	Tan	418	Hentzen Coatings INC
8010-01-276-3640	Tan	419	Hentzen Coatings INC
8010-01-276-3640	Tan	419	Pratt and Lambert INC
8010-01-276-3640	Tan	419	Hentzen Coatings INC
8010-01-276-3640	Tan	419	Hentzen Coatings INC
8010-01-276-3640	Tan	420	Pratt and Lambert INC
8010-01-328-3233	White	404	Hentzen Coatings INC
8010-01-328-3233	White	403	Hentzen Coatings INC
8010-01-328-3233	White	419	Hentzen Coatings INC
8010-01-328-3233	White	419	Hentzen Coatings INC

Hazardous and Medical Waste Program, Mr. Richard Price
5158 Blackhawk Road, ATTN: MCHB-TS-EHM
Aberdeen Proving Ground, MD 21010-5403
(410) 436-3651, DSN 584-3651

Back to Fact Sheet Index