



CURECRETE DISTRIBUTION, INC.

Technical Services

Bulletin No. 3, Revision 2

12-2-2000

THE ASHFORD FORMULA & ACID RESISTANCE

In certain parts of many buildings, the concrete floor may come in contact with acids from transformers, food processing, batteries, or other sources. In such environments, The Ashford Formula may be recommended, but only after careful and cautious consideration.

It is important to remember is that The Ashford Formula may not make concrete completely resistant to acids. Only after The Ashford Formula has achieved a full seal can it protect concrete from the effects of some acids. This full seal normally takes from nine months to one year. During this interim period, it is advisable to protect The Ashford Formula-treated surface with some sort of acid-resistant coating or flooring material. By the time the coating wears off, the underlying The Ashford Formula will have matured, and will then be able to provide some protection.

Even after the floor has been sealed, some acids can still cause deterioration to a concrete surface treated with The Ashford Formula. In addition, a high concentration of any acid can cause erosion over time. Fortunately, such concrete floors are generally exposed to acids that are heavily diluted with water. Before recommending The Ashford Formula for use in an acidic environment, it is always advisable to know the type of acid and probable concentrations, and as necessary, consult our chemical resistance chart.

Note: *In most cases, it is probably not prudent to recommend The Ashford Formula in environments where there will be prolonged exposure to acids. However, if The Ashford Formula is not used, it does not mean the entire job will be lost. Acids are normally used in areas of the floor that account for only a small percentage of the overall job. In these areas, an acid resistant coating is likely more suitable.*

Chemical Resistance Rating Guide

O = No Effect

M = Moderate Effect

S = Severe Effect

ALCOHOLS

Benzyl Alcohol.....	O	Methyl Ethyl Ketone.....	O
Ethyl Alcohol.....	O	Methyl Isobutyl Ketone.....	O
Isopropyl Alcohol.....	O	Glycerol.....	O
Methyl Alcohol.....	O	I-Hexanol.....	O
Ethylene Glycol.....	O	Resorcinol.....	O

Chemical Resistance Rating Guide

(Continued)

O = No Effect

M = Moderate Effect

S = Severe Effect

ALDEHYDES

Benzaldehyde.....	O
Butraldehyde.....	O
Furfural.....	O

AMINES

Aniline.....	O
Triethanolamine.....	O

CLEANING PRODUCTS

Calgonite (1%).....	O
Chlorox (1%).....	O
Chlorox (Concentrate).....	O
Joy (1%).....	O
Joy (Concentrate).....	O
Lestoil (1%).....	O
Lux Flakes.....	O
Rinse Dry (1%).....	O
Rinse Dry (Concentrate).....	O
Tide (1%).....	O

ESTERS

Amyl Acetate.....	O
Dibutyl Sebacate.....	O
Diethyl Phthalate.....	O
Ethyl Acetate.....	O
Tricresyl Phosphate.....	O

ETHERS

Dibenzyl Ether.....	O
Diethylene Glycol Monobutyl Ether.....	O
Ethyl Ether.....	O

HALOGENATED HYDROCARBONS

Ethylene Glycol Monoethyl Ether.....	O
Benzyl Chloride.....	O
Bromobenzene.....	O
Carbon Tetrachloride.....	O
Chloroform.....	O
Ethylene Dichloride.....	O
Perchloroethylene.....	O

HYDROCARBONS - Other

Benzene.....	O
Carbon Disulphide.....	O
Cyclohexane.....	O
Ethylbenzene.....	O
Heptane.....	O
Hexane.....	O
Naphthalene.....	O
Nitrobenzene.....	O
Toluene.....	O

Xylene.....	O
-------------	---

HYDRAULIC FLUIDS

Oronite 8200.....	O
Pydraul F9.....	O
Pydraul 60.....	O
Skydrol.....	O
Skydrol 500.....	O

INORGANIC ACIDS

Chlorosulphonic Acid (10%).....	S
Chromic Acid (10%).....	M
Chromic Acids (Con).....	M
Hydrochloric Acid(10%).....	M
Hydrofluoric Acid (Con).....	M
Hydrochloric Acid (Con).....	S
Nitric Acid (10%).....	S
Phosphoric Acid (Con).....	M
Sulphuric Acid (10%).....	M

INORGANIC BASES

Sulphuric Acid (Con).....	S
Barium Hydroxide (Con).....	O
Calcium Hydroxide (Con).....	O
Potassium Hydroxide (10%).....	M
Sodium Hydroxide (10%).....	M
Sodium Hydroxide (Con).....	M

INORGANIC SALTS (25%)

Ammonium Chloride.....	M
Ammonium Nitrate.....	O
Barium Chloride.....	M
Calcium Chloride.....	M
Calcium Hypochlorite.....	M
Cupric Chloride.....	M
Cupric Sulphate.....	O
Ferric Chloride.....	M
Ferric Nitrate.....	O
Ferrous Sulphate.....	O
Magnesium Chloride.....	M
Magnesium Sulphate.....	O
Nickel Sulphate.....	O
Potassium Chloride.....	M
Potassium Permanganate.....	O
Potassium Dichromate.....	M
Sodium Borate (Borax).....	O
Sodium Bicarbonate.....	O
Sodium Chloride.....	M
Zinc Nitrate.....	O
Sodium Chloride - Saturated.....	M

Chemical Resistance Rating Guide

(Continued)

O = No Effect

M = Moderate Effect

S = Severe Effect

KETONES

Acetone. **O**

MISCELLANEOUS

Gelatine (Saturated Solution). **O**

Glucose (Saturated Solution). **O**

Antifreeze. **O**

Brake Fluid. **O**

Transmission Fluid. **O**

NATURAL FATS & OILS

Butter. **O**

Castor Oil. **O**

Cottonseed Oil. **O**

Lard. **O**

Oleomargarine. **O**

Olive Oil. **O**

White Mineral Oil. **O**

OILS & FUELS

A.S.T.M. No. 1 Oil. **O**

A.S.T.M. No. 2 Oil. **O**

A.S.T.M. No. 3 Oil. **O**

A.S.T.M. Fuel A. **O**

A.S.T.M. Fuel B. **O**

A.S.T.M. Fuel C. **O**

Heating Fuel Oil. **O**

Jet Aircraft Engine Oil. **O**

ORGANIC ACIDS

Acetic Acid (10%). **M**

Acetic Acid (Glacial). **M**

Citric Acid (10%). **M**

Formic Acid (10%). **M**

Lactic Acid (10%). **M**

Oleic Acid (100%). **O**

Oxalic Acid (10%). **M**

Phenol (10%). **O**

Phenol (100%). **M**

Picric Acid (10%). **M**

Stearic Acid (100%). **O**

Tannic Acid (10%). **O**

Tartaric Acid (10%). **M**

WATER

Distilled Water. **O**

Sea Water. **M**

Note: Chemical mixtures do not necessarily have the same effect or lack of effect on The Ashford Formula than those of the individual components within a given blend. Chemical attack can be influenced by temperature, contact time, concentration, and composition. The information and recommendations contained in this bulletin are based on data believed to be reliable but all such information and recommendations are specified without guarantee or warranty.