THE BLACKTOPPER'S RAG

We all want Beautiful Roads

But Asphalt is Best!

Index

Welcome to our first Newsletter!

We offer this little newsletter to assist you through your daily trials and tribulations. The sophistication level of our industry is so great today that a great deal of knowledge and understanding is now required in order to build the best economical roadways. It is our goal to provide you with current information on the important developments in equipment technology, operating and safety practices, and news about the many issues of materials, especially relating to asphalt.

Let us know what you like or dislike about this "rag", as well as, topics you would like to see presented. Also, we will be happy to research any questions you may have.

COOPER EQUIPMENT CO.

This Cooper Equipment publication is dedicated to informing you of the "latest and greatest" in road building equipment, materials, safety and methodologies.

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Types of Oils (Emulsions) for Asphalt Distributors

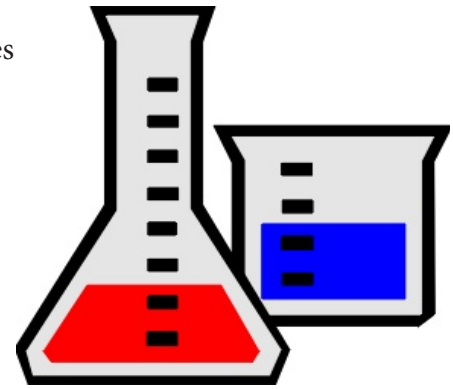
The following list is an introduction to some of the most common types of asphalt emulsion oils available. Each has their advantages and disadvantages.

These oils come in two main groups: Asphalt & cutbacks and emulsions. The cutbacks use different solvents to thin (lower the viscosity) of the asphalt oil. Emulsions use water and other minor ingredients to suspend microparticles of asphalt in water. Emulsions have about 1/3 or more water, so more of it must be applied to obtain the same amount of asphalt oil once evaporation and any absorption has taken place.

EMULSION NAMES	DESCRIPTION	GENERAL USE
AE-P	Prime	Applied to base as a prime before paving
RS	Rapid Setting	Tack coat (pothole patching), chip seal
RS-2P	Rapid Setting, polymer	Chip seal with stronger-holding oil
MS	Medium Setting	Chip seals
SS	Slow Setting	Chip seals. [Much longer storage life.]
RA	Rejuvenator	Sealing pavements

There are many more "flavors" of emulsions to choose from, but most are a version of one of the above. The introduction of many different additives to these basic emulsions, providing property improvements, has caused this basic list to grow extensively.

Also, the above is the anionic emulsions list only. Add a "C" in front of most of these and you have the Cationic version. (see below for details).



Anionic vs. Cationic

It is easy to get confused with the use of the terms "cationic" and "anionic". Anionic has a negative electrical charge. [A way to remember this is that the first two letters anionic is the same as "a negative...]. Typically, the anionic emulsions (negatively charged) work best on the cationic (positively charged) surfaces.

The importance of the electrical charge of the oils and road surfaces can often be a bit trivial. The best determination on which oil to use will almost always come from your oil suppliers and most of the salesmen here in central and south Texas are veterans in our industry.

COOPER EQUIPMENT CO.

Types of Oils (AC & Cutbacks) for Asphalt Distributors

The following list is an introduction to some of the most common other types of asphalt oils available. Once again, each has their advantages and disadvantages.

These oils come in two main groups: Asphalt & cutbacks and emulsions. The cutbacks use different solvents to thin (lower the viscosity) of the asphalt oil. Pure asphalt (i.e. AC) does not become liquid until about 250^0 F. Distributor shooting temperatures are often around 300^0 F and transports deliver AC at these hot temperatures. Thus, there is a safety concern that must be heeded when using any of the following AC oils and its cutback "flavors".

ASPHALT NAMES	DESCRIPTION	GENERAL USE
AC	"Asphalt Cement"	Chip Seals
RC	"Rapid Cure"	Tack Coating, Chip Seals
		[Warning: Ignites easily]
MC	"Medium Cure"	Prime Oil
		[Cutback is diesel]

There are many additives available for these three basic groups. Latex and tire rubber are just two examples of additives for the AC group. The popular RC "flavor" is RC 250 and the MC "flavor" is MC 30.

RC is special oil that has its pros and cons:

Advantages: RC uses naphtha as a solvent, which does a great job of thinning the AC. This allows it to be used at lower temperatures, minimizing the chance of burning someone when it is handled. Also, naphtha will quickly evaporate from the RC oil when the oil is shot onto the ground, thus it is a rapid curing (i.e. fast-setting) asphalt oil, which, after the naphtha quickly evaporates, leaves the desired final AC in-place. For quick pot-hole repairs, RC's fast-curing time has made it popular, but...

Disadvantages: It can blow-up! The Flash Point (see below) of naptha used in RC is 85^0 F. There are many stories of distributors caught on fire due to the accidental ignition of this oil. This problem alone has caused many users to turn to the emulsion group of asphalts, which offer greater handling safety.

Important Definition:

Flash Point: the lowest temperature at which the *vapor* of a combustible liquid can be ignited in air.

New "Guns" and Features

Etnyre

Variable in & out spraybar option that automatically turns on and off spray valves in 4" increments as you slide the bar in and out. Can now go to 24 feet in spray width. Safety break-a-way outer bar is standard.

CARLSON
an Astec company

The Number 1 manufacturer of electric screeds in the U.S. has introduced their new paver to South Texas - the Carlson model CP90 paver!

Heavy Duty and high quality performance, you bet! And why not? Carlson is the number one screed manufacturer of highway class pavers! Now they have advanced their screed talents into building a completely new paver. For city and county roadways, it gives you "big bang for the bucks".

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