Safety Behind Sealcoating—Sorting Through Fact vs. Fiction

Sometimes it's hard to differentiate the facts through the noise surrounding the sealcoating industry. Below are facts and common misconceptions to help ease the confusion and encourage responsible, educated decisions when it comes to sealcoating.

Pavement sealers—specifically refined tar-based sealers—are hazardous.
FICTION

Air sampling studies showed refined tar-based sealers pose insignificant inhalation risk to applicators, manufacturers or the general public. In fact, every day, millions of people world-wide use coal tar soaps, shampoos and creams approved for use as over-the-counter medicines to treat skin disorders such as eczema, psoriasis and dandruff.

Research with insurance carriers (both in liability and workers compensation) shows a general lack of insurance claims over the history of sealer use.

Refined tar-based sealants should be applied with caution.
FACT

Appropriate clothing is recommended when applying refined tar sealers. This includes: long sleeves, full length pants and work gloves. If refined tar sealers contact skin in the presence of sunlight, irritation can occur and applicators may experience moderate to severe "sunburn" effects. Depending on the method of application and weather conditions, a hat and face shield may also be appropriate. Protective creams are available to minimize skin contact with sealer and to block the sun's ultraviolet rays that can enhance skin irritation.

However, when proper handling and personal hygiene precautions are observed, skin irritation should not be a problem.

It's bad for me that I can smell the sealcoat in the parking lot.
FICTION

The odor of refined tar-based sealer is easily identifiable, for good reason: refined tar-based sealer has a very distinct odor, and the human nose is able to detect it at extremely low concentrations. The smell is primarily the presence of one substance among the many that are part of refined tar-based sealer – naphthalene. The odor threshold for naphthalene is about three parts per billion (ppb), which is a very low concentration. To put this into perspective, the odor threshold for nail polish remover is 7,000.

According to the American Conference of Governmental Industrial Hygienists, the level of naphthalene that is considered safe for workers is ten thousand parts per billion. Therefore, the difference between being able to smell it and worrying about it is huge. Even refined tar-based sealer workers don't

experience those levels of exposure. Bottom line: if there is a presence of smell, it does not indicate that it's harmful.

Refined tar-based sealers are bad for my health.
FICTION

Some activists say that refined tar-based sealers are a health threat, but generations of family-owned companies in the business of making or applying sealcoat have zero reports of adverse chronic health effects – including cancer – that can be attributed to exposure of sealcoat.

Coal tar and coal tar derivatives are listed by the US Food and Drug Administration (FDA) as "generally recognized as safe and effective" active ingredients for use to treat these skin ailments with coal tar concentrations up to five percent in over-the-counter products. Because of its use in medicines, many studies have been performed over nearly a century to see if the patients who intentionally expose themselves to high level doses of coal tar for long periods of time have increased risk of cancer. All the studies have reached the same conclusion – there is no evidence of cancer.

Refined tar-based sealant is a significant environmental contaminant.
FICTION

Activists point to the US Geological Survey (USGS) research to claim that sealants are the main source of polycyclic aromatic hydrocarbons (PAHs) in the environment. However, the USGS has been shown to have manipulated data and used circular reasoning in their sealant studies. Independent studies of New York Harbor and Puget Sound (Seattle) found sealant contributes less than 1% of PAHs to sediments in those locations. A recent independent statistical study of the Illinois River by the Universities of Illinois and Milwaukee-Wisconsin suggested a sealcoat contribution of no more than a few percent. The independent studies are consistent with industry-funded analyses.

Be informed. Seal success. To learn more, visit pavementcouncil.org/education