



Organic Peroxide Producers
Safety Division

Disposal of Solid Organic Peroxides

Note: This guidance is NOT intended for disposal of liquid organic peroxides. Please review the separate guidance for disposal of liquid organic peroxides for that scenario. It may be found on the OPPSD website and/or contact your supplier for additional information.

Hazard Concerns for Solid Organic Peroxides

All organic peroxides are thermally reactive. Some product formulations require temperature-controlled storage because they may be dangerously reactive at ambient temperature.

Many organic peroxide formulations may react dangerously with certain materials of construction or other chemicals.

Some solid organic peroxide formulations include phlegmatizing agents (inert organic diluent, water, or inert solids) to reduce the energy content that may be released due to failure to control temperature or contact with incompatible materials. If those phlegmatizing agents are separated from the organic peroxide component, the hazard may be significantly increased.

Some solid organic peroxide formulations are subject to dangerous (even explosive) outcomes due to excessive friction or shock.

Some solid organic peroxide formulations may represent explosive dust risks.

Waste solid organic peroxides should be stored at the same temperature as specified in original manufacturer's documentation.

Regulatory Compliance regarding Disposal of Solid Organic Peroxide Formulations

If there is a need to dispose of solid organic peroxide formulations (e.g., material that is beyond the shelf life or off-specification), please consult with your supplier before acting. Such material should be stored, treated, or disposed of only by authorized hazardous disposal facilities. There may be a need to pretreat the formulations to prepare them for the third-party disposal firms. Pretreatment may involve the comingling of the formulation with additives, such as water or inert solids, or repackaging the material into smaller packaging.

Disposal Options

Incineration is one potential method of disposal for both refrigerated and ambient storage solid organic peroxides. Incineration has the advantages of providing rapid and complete decomposition along with the elimination of decomposition products. Disposal must comply with Federal, State and Local regulations.

As in all cases involving safety issues, contact your organic peroxide supplier for assistance regarding the formulation that is to be disposed in order to learn about specific hazards that must be addressed. Make careful plans before undertaking disposal.

More information on safe handling of organic peroxides may be found on the OPPSD website.

This document is not intended to serve as legal advice, a substitute for in-depth training or specific handling or storage requirements, nor is it designed or intended to define or create legal rights or obligations. All persons involved in the responsible disposal of wastes and containers have an independent obligation to ascertain that their actions are in compliance with current federal, state and local laws and regulations and should consult with legal counsel concerning such matters. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

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