Operating Guidelines

**IMPORTANT**

These warnings and instructions are written for easy understanding and directly refer to the kit you have purchased. For safe operations, please read them thoroughly and fully comply with all instructions. When in doubt, consult a certified Safety Engineer or your OSHA consultant.

**WARNING!**

Flammable or combustible liquids can only be handled with grounded and bonded air motors or explosion proof electrical motors with all steel components. Do not use plastic components in flammable or hazardous duty environments. The insulating nature of certain plastics prevents proper bonding and grounding. Processing liquids through plastic can generate static electricity and may create a static spark causing fume ignition, flames or an explosion resulting in fire, injury or death.

Bonding and Grounding are Essential

Bonding is an electrical connection between a primary metal vessel and a metal receiving vessel. (See schematic.) Grounding is an electrical connection between a metal vessel, metal equipment and motor and a constant ground, that is, a metal rod inserted into the earth. Bonding and grounding are required when processing flammable materials or in hazardous duty environments. Failure to bond and ground properly can cause a discharge of static electricity resulting in fire, injury or death. All grounding wire connections must be properly in place and checked for tightness. Never leave operating equipment unattended.

Follow the Safety Rules

These explosion proof cables should only be installed by a qualified, professional electrician. Before operating equipment, ensure a Safety Engineer checks all components and safety procedures. Do not use any equipment without proper and full knowledge of all the operation and safety procedures. Follow NFPA (National Fire Protection Code) #77 and #30 procedures at all times. Bonding and grounding safety procedures as described in the code must be used when handling flammables, operating in a flammable or hazardous duty environment or when the danger of a static discharge is present. If in doubt, do not operate the equipment! Ensure bonding and grounding wires are secure before starting any operation. Ground and bond cables must have less than 1 ohm resistance for safe usage. Check continuity before starting. Always check with a safety engineer when any safety question arises and periodically check safety procedures with a safety engineer. Follow all Local, State and Federal safety and electrical codes.

Operator Safety Apparel and Safe Equipment Condition

The operator must wear all necessary safety equipment including safety gloves, apron, shoes, eye protection and other suitable protective equipment according to the hazardous nature of the operation. Ignoring equipment safety instructions could result in operator endangerment, equipment damage, failure or destruction or environmental contamination. Only use liquids compatible with the materials of construction for this equipment.

Limited Warranty and Statement of Liability

This product has a limited warranty against manufacturers defects in materials of construction for 90 days from the date of sale. Do not modify this product or change its physical construction without written permission from the manufacturer. This limited warranty is automatically void if improper selection, installation, unauthorized modifications or physical abuse beyond the manufacturers control has occurred. Manufacturers responsibility is strictly limited to repair or replacement of defective components supplied herewith as deemed reasonable. The manufacturer assumes no further warranty responsibility.

The manufacturer or supplier of this equipment assumes no liability for unsafe or inappropriate use of this equipment in any application, including but not limited to flammable environments, and in conjunction with or use in or around volatile, noxious, poisonous, radioactive or hazardous liquids or gases. Upon purchase of this equipment the owner or operator of this equipment accepts full responsibility for determining suitability for its application or operation including, but not limited to, safety, chemical compatibility with materials of construction, correct installation, general use, maintenance and repair according to Local, State/province, Federal or other safety guidelines that might apply.

DRUM-MATES® equipment assemblies are provided as separate components, each sold on a separate basis. Ask for literature on DRUM-MATES® drum & IBC mixers, drum tumblers, drum & IBC pumps & hand nozzles. DRUM-MATES® Inc., Drum Mixer & Pump Div., Tel: 1-800-621-3786 and 609-261-1033, Fax: 609-261-1034