

Material Safety Data Sheet (FLOW-CAST)

INTENDED FOR PROFESSIONAL MEDICAL USE ONLY



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Company Address: 148 College Street, Macon, GA 31201
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SECTION 1 - PRODUCT and COMPANY INFORMATION

PRODUCT NAME: Flow-Cast

SYNONYM: N/A

CHEMICAL FORMULA: Not Established

CHEMICAL ABSTRACT NUMBER: Not Established

MANUFACTURER: Flow-Cast, LLC.

SECTION 2 - COMPOSITION / INFORMATION on IDENTIFICATION

Structure and Reactivity: Flow-Cast is a diester, which contains two ester bonds, that can react in a variety of chemical pathways. In addition, Flow Cast contains two carbonyl groups where the carbon atoms of each group are weakly electrophilic, and therefore are targets for attack by strong nucleophilic compounds. Flow-Cast also contains a C-H bond, whereas the hydrogen atom is weakly acidic. This makes Flow-Cast susceptible to deprotonation by a strong base. Hydrolyzation can occur under either acidic or basic conditions. Hydrolysis under acidic conditions is the reverse reaction of the Fisher-Speier esterification. Under basic conditions, hydrolysis is caused by saponification. The saponification number for Flow-Cast is approx. 360 mg KOH/g, which due to the relatively high carboxylic functional groups per molecule, makes Flow-Cast relatively unsaponifiable.

SECTION 3 - SYNTHESIS

Flow-Cast is a proprietary product of Flow-Cast, LLC. It is intended for professional medical use only. Any other application other than professional medical use is a violation of the intended use of Flow-Cast.

SECTION 4 - HAZARDS IDENTIFICATION

HIMS RATING:

Health: 1

Flammability: 1

Reactivity: 0

NFPA RATING:

Health: 1

Flammability: 1

Reactivity: 0

Flow Cast is stable under standard atmospheric pressures and temperatures.

SECTION 5 - FIRST AID MEASURES

Oral Exposure:

If Flow-Cast is swallowed, wash mouth with water, the provided person is conscious. Monitor person for any symptoms.

Inhalation Exposure:

If Flow-Cast is inhaled, remove person to fresh air. If not breathing, provide artificial respiration. If breathing is labored, administer oxygen.

Dermal Exposure:

In case of skin contact, wash exposed area with warm water and soap, at least twice. Remove contaminated clothing and shoes, and launder. It is

recommended that disposable nitrile gloves be worn when working with Flow-Cast.

Eye Exposure:

In case of contact with eyes, flush with copious amounts of clean lukewarm water, several times. Assure adequate flushing by separating the eyelids with clean fingers. It is recommended that chemical splash goggles be worn when working with Flow-Cast or any other chemicals.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Spills of Flow-Cast in amounts less than one liter can be wiped up with paper towels and disposed of. The affected area should be thoroughly cleaned with a pH neutral surfactant.

SECTION 7 - FIRE FIGHTING MEASURES

Flow-Cast is a stable compound at STP.

Flash Point: 235° F (113° C) Based on the closed cup method.

Autoignition Temperature: 449.6° F (232° C)

Flammability: N/A

Suitable Extinguishing Media: Water spray, Carbon dioxide, Dry chemical powder, or Foam.

SECTION 8 - HANDLING and STORAGE

Flow-Cast should be stored in a cool dry place away from direct sunlight.

Do not get Flow-Cast in one's eyes, skin or on clothing. Wash affected areas with lukewarm water if exposure occurs.

Use Flow-Cast in a well-ventilated area. Thoroughly wash the area in which Flow-Cast has been used.

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

Chemical Compound: Diester

Appearance and Physical State: Clear liquid at STP

Molecular Weight: Not Established

Vapor Pressure at 302° F (150° C): Approx. 0.16 mmHg

Vapor Density: Approx. 10.8 g/L

Specific Gravity/Density: Approx. 1.1 g/cm³

Flash Point: 235° F (113° C) Based on the closed cup method.

Autoignition Temperature: 449.6° F (232° C)

Flammability: N/A

SECTION 10 - STABILITY and REACTIVITY

Stability: Stable

Materials to Avoid: Strong oxidizing agents, and strong bases.

Hazardous Decomposition Products: Carbon Monoxide and Carbon Dioxide

Hazardous Polymerization: Will not occur with Flow-Cast

SECTION 11 - TOXICOLOGICAL INFORMATION

Not Established

SECTION 12 - ECOLOGICAL INFORMATION

Not Established. Avoid release into the environment. Do not dump Flow-Cast down the drain.

Biodegradable:

Method: Biotic/Aerobic

Elimination Percent: 88%

Classification: Substantially biodegradable

SECTION 13 - DISPOSAL CONSIDERATION

Appropriate Method of Disposal of Substance or Preparation: Contact a licensed professional waste disposal service to dispose of this material. Dispose or mix the material with a combustible solvent, and burn in a chemical incinerator equipped with an afterburner and scrubber. Always observe all federal, state and local environmental regulations.

SECTION 14 - OTHER INFORMATION

DISCLAIMER: The aforementioned information is believed to be correct, but does not purport to be all inclusive, and should be used only as a guide. The information contained in this document is based on the present state of our technical knowledge, and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.