SECTION 1 PRODUCT & COMPANY IDENTIFICATION

Product name :	CELOGEN® MS DU-140
Chemical name:	Thermally expandable microspheres
Use of substance/preparation:	Foaming Agent
Supplier:	CelChem LLC 6519 Carema Lane Naples, FL 34113 USA
Emergency telephone number:	INFOTRAC 24 hour numbers: USA & Canada: 1-800-535-5053 Mexico: 01-800-681-1530 Outside North America: +1-352-323-3500 (collect)
Contact:	(239) 228-2285:
Email:	customerservice@celchemllc.com

SECTION 2 HAZARDS IDENTIFICATION

Hazards Identification

GHS Classification of Isobutane in the product:
Flammable gases (Category 1)
Gases under pressure (Liquefied gas)
Specific target organ systemic toxicity (single exposure) (Category 3) The hazards not mentioned are not applicable or no data available.

Emergency Overview

Expand when heated, evolving flammable vapor.
Isobutane: Extremely flammable gas. Contain gas under pressure; may explode if heated. May cause drowsiness or dizziness.

SECTION 3 INFORMATION ON INGREDIENTS

Product name: Celogen MS DU140

Ingredient	Concentration	CASNO.	ECNO.
Acrylicacidcopolymer	75%	30396-85-1	/
Isobutane	20-25%	75-28-5	200-857-2

SECTION 4 FIRST-AID MEASURES

Skin Exposure

In case of contact, immediately wash skin with copious amounts of water for at least 15 minutes. If irritation persists, call a physician.

Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Inhalation Exposure

If inhaled, remove to fresh air. If breathing 1S difficult, give oxygen.

Oral Exposure

If victim is conscious, wash mouth out with water. Get medical aid immediately.

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Firefighting

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Procedure of Personal Precaution

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation.

Methods for Cleaning up

Sweep up with spade and transfer to a dry, clean, lidded container for disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 7 HANDLING AND STORAGE

Handling

Wear appropriate protective clothing and chemical safety gloves. Avoid dust formation. Avoid inhalation. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Mechanical exhaust required. Keep away from ignition sources, heat and flame. Incompatibilities: Strong oxidizing agents. No smoking at working site.

Storage

Store in a cool, well-ventilated and dry area. Keep away from ignition sources, heat and flame.
Store in a tightly closed container. Incompatibilities: Strong oxidizing agents.

SECTION 8 EXPOSURE CONTROL

Engineering Controls

Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment

Respiratory: Government approved respirator.
Eye: Chemical safety goggles.
Clothing: Wear appropriate protective clothing.
Hand: Protective gloves.

Other Protect

No smoking, drinking and eating at working site. Wash thoroughly after handling.

SECTION 9 PHYSICAL/CHEMICAL PROPERTIES

Appearance
Off-white granule powder and power

Odor
Weak odor

Melting Point/℃
>200 ℃ decomposition

pH value
5.6 (25 ℃, 50. 0g/ L)

Solubility
Slightly insoluble in water

SECTION 10 STABILITY AND REACTIVITY

Stability
Stable under normal temperature and pressure.

Materials to Avoid
Strong oxidizing agents.

Hazardous Polymerization
Will not occur

Hazardous Decomposition Products
Carbon oxides.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute Toxicity
Isobutane : Rat Inhalation LC50: 57 pph/ 15M.

Skin corrosion/irritation
No data available.

Serious eye damage/irritation No data available.

Specific target organ toxicity - single exposure
Isobutane: May cause drowsiness or dizziness.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity
No data available.

Persistence and degradability
No data available.

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

SECTION 13 DISPOSAL

Appropriate Method of Disposal of Substance

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

SECTION 14 TRANSPORT INFORMATION

RID/ADR

Proper Shipping Name: Polymeric beads, expandable, evolving flammable vapor
UN Number: UN2211
Hazard Class: 9
Packing Group: III

IATA

Proper Shipping Name: Polymeric beads, expandable, evolving flammable vapor
UN Number: UN2211
Hazard Class: 9
Packing Group: III

IMO

Proper Shipping Name: Polymeric beads, expandable, evolving flammable vapor
UN Number: UN2211
Hazard Class: 9
Packing Group: III
EmS No: F-A, S-I

SECTION 15 REGULATORY INFORMATION

Regulation(EC) No.1272/2008

Isobutane in the product
Flammable gases (Category 1)
Gases under pressure (Liquefied gas)
Specific target organ systemic toxicity (single exposure) (Category 3)

SECTION 16 Additional Information

Abbreviations:

PH-Relates to hydrogen ion concentration-this value will relate to a scale of 0-14, where 0 is highly acidic and 14 is highly alkaline

OSHA:

Administration NTP-National Toxicology
Program
IARC-International Agency for Research on Cancer
CAS# Chemical Abstract Service number-used to uniquely identify chemical compounds