ESTRON CHEMICAL

THE EDGE OF INNOVATION

GHS COMPLIANT SAFETY DATA SHEET

TO COMPLY WITH *OSHA* HAZARD COMMUNICATION STANDARD *29 CFR.1910.1200*
& THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS

SECTION 1: IDENTIFICATION

PRODUCT NAME	Butaflow BT-71
MFR.'S CODE ID/SYNONYMS	Butaflow BT-71
CAS NUMBER	Proprietary
PRODUCT USE	Resin Crosslinker
RESTRICTIONS ON USE	For industrial use only
MANUFACTURER/SUPPLIER	Estron Chemical, Inc.
ADDRESS	807 North Main Street, Calvert City, KY 42029 USA
GENERAL INFORMATION	(270) 395-4195
EMERGENCY TELEPHONE	CHEMTREC (800) 424-9300

SECTION 2: HAZARDS IDENTIFICATION

Signal Word: *Danger*

GHS Classification

Physical	Health	Environmental
OSHA Combustible Dust	Skin Corrosion/Irritation – Category 2 Eye Damage/Irritation – Category 2 Skin Sensitization – Category 1 Germ Cell Mutagenicity – Category 2 Toxic to Reproduction – Category 1B Specific Target Organ Toxicity, Single Exposure – Category 1 Specific Target Organ Toxicity, Repeated Exposure – Category 1	Hazardous to the Aquatic Environment, Chronic Hazard – Category 1

GHS Label

Symbols: Health Hazard Exclamation Mark Environment

Hazard Statements	**Precautionary Statements**
H315: Causes skin irritation H317: May cause an allergic skin reaction H319: Causes serious eye irritation H341: Suspected of causing genetic defects H360: May damage fertility or the unborn child H370: Causes damage to organs H372: Causes damage to organs through prolonged or repeated exposure H410: Very toxic to aquatic life with long lasting effects May form combustible dust concentrations in air.	*Prevention* P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P260: Do not breathe dust/fume/gas/mist/vapours/spray. P264: Wash exposed skin thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P272: Contaminated work clothing should not be allowed out of the workplace. P273: Avoid release to the environment. P280: Wear protective gloves/protective clothing/eye protection/face protection. *Response* P302+352: IF ON SKIN: Wash with soap and water. P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. P308+311: IF exposed or concerned: Call a POISON CENTER or doctor/physician. P314: Get medical advice/attention if you feel unwell. P321: Specific treatment (see supplemental first aid instructions on this label) P333+313: If skin irritation or a rash occurs: Get medical advice/attention. P337+313: If eye irritation persists, get medical advice/attention. P362+P364: Take off immediately all contaminated clothing and wash it before reuse. P391: Collect spillage. *Storage* P405: Store locked up. *Disposal* P501: Dispose of contents/container to an authorized hazardous waste handler.

HAZARDS NOT OTHERWISE CLASSIFIED: Exposure may aggravate those with pre-existing eye, skin or respiratory conditions. When heated to decomposition, emits toxic fumes.

SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	CAS #	%	CLASSIFICATION	H Codes
Dibutyltin Dilaurate	77-58-7	68 - 71	Skin Corrosion/Irritation – Category 2 Eye Damage/Irritiation – Category 2 Skin Sensitization – Category 1 Germ Cell Mutagenicity – Category 2 Toxic to Reproduction – Category 1B Specific Target Organ Toxicity, Single Exposure – Category 1 Specific Target Organ Toxicity, Repeated Exposure – Category 1 Hazardous to the Aquatic Environment, Chronic Hazard – Category 1	H315 H319 H317 H341 H360 H370 H372 H410
Silica, Amorphous, Precipitated	112926-00-8	29 - 32	OSHA Combustible Dust (*when blended with Dibutyltin Dilaurate*)	*None*

(See Section 8 for Exposure Limits) Contains no detectable crystalline silica (detection limit <0.1% by weight).

SECTION 4: FIRST-AID MEASURES

SYMPTOMS OF EXPOSURE

ACUTE Skin and serious eye irritation. May cause an allergic skin reaction. May damage fertility. Suspected of causing genetic defects. May cause repiratory irritation.

DELAYED	Stinging, tearing, redness and swelling of the eyes. Redness or burning of the skin. Shortness of breath. Nausea or gastric pain. Suspected of causing genetic defects. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.
INHALATION	Inhalation may cause respiratory irritation. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
SKIN CONTACT	Causes skin irritation. May cause an allergic skin reaction. Wash thoroughly with soap and water. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. Take off immediately all contaminated clothing and wash it before reuse.
EYE CONTACT	Causes serious eye irritation. Immediately seek medical attention. Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
INGESTION	Causes damage to organs. Suspected of causing genetic defects. May damage fertility or the unborn child. If ingested, immediately call a POISON CENTER or doctor/physician, rinse mouth. Do NOT induce vomiting.
SPECIFIC TREATMENT	No other specific treatments are known or have been identified.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABILITY CLASSIFICATION	OSHA Combustible Dust
FLAMMABLE LIMITS	No test data available
HAZARDOUS COMBUSTION PRODUCTS	Carbon Dioxide, Carbon Monoxide, Tin Oxides.
EXTINGUISHING MEDIA	Dry Chemical, Water Fog, Foam, CO_2
UNUSUAL FIRE AND EXPLOSION HAZARDS	Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard.
SPECIAL FIRE FIGHTING PROCEDURES	Do not allow run-off from fire-fighting to enter drains or water courses.
SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS	As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full (Bunker) protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	Prevent contact with skin, eyes and clothing. Ensure adequate ventilation. Wear personal protective equipment (see Section 8), including impermeable boots. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.
PROTECTIVE EQUIPMENT	See Personal Protective Equipment in Section 8.
EMERGENCY PROCEDURES	Isolate the area and eliminate all ignition sources. Ground and bond all containers and handling equipment.
ENVIRONMENTAL PRECAUTIONS	Obey relevant local, state, provincial and federal laws and regulations. Do not allow the product to enter public drainage systems or open water courses.
METHODS AND MATERIALS FOR CLEANING UP	Avoid creating excessive dust while collecting. Sweep or scoop into a suitable container for disposal.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	This material is a potential skin sensitizer. Prevent contact with skin and eyes. Prevent inhalation. Use only in an area equipped with a safety shower. If necessary, use local ventilation. Handle in accordance with good industrial hygiene and safety practice. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate

precautions, such as electrical grounding and bonding, or inert atmospheres. Refer to NFPA 654, *Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing and Handling of Combustible Particulate Solids*, for safe handling.
Containers may be hazardous when empty. Since emptied containers retain product residue follow all SDS and label warnings even after container is emptied.
When heated to decomposition, emits toxic funes, flammable gas and corrosive vapors.

CONDITIONS FOR SAFE STORAGE — Store locked up. Keep container tightly closed and store in a dry, well ventilated area away from heat and sources of ignition. To minimize degradation of the product, avoid unnecessary exposure to moisture and atmospheric oxygen by keeping the package tightly closed when not in use. The product shelf life is two years from date of manufacture in an unopened container stored at 20 °C.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENTS	CAS #	%	ACGIH TLV	OSHA PEL
Dibutyltin Dilaurate	77-58-7	68 - 71	0.1 mg/m^3	0.1 mg/m^3
Silica, Amorphous, Precipitated	112926-00-8	29 - 32	10 mg/m^3	5 mg/m^3 (*Respirable*)

APPROPRIATE ENGINEERING CONTROLS — Showers, eyewash stations and ventilation systems. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent the escape of dust into the work area. Use only appropriately classified electrical equipment and powered industrial trucks.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE — Safety glasses or goggles.

SKIN — Impervious protective gloves and clothing as appropriate to prevent skin contact.

RESPIRATORY — An appropriate NIOSH approved respirator where exposure limits are exceeded.

HYGIENE MEASURES — Handle in accordance with good industrial hygiene and safety practices. When using, do not eat, drink or smoke. Wash face and hands before breaks and at the end of work. Wash contaminated clothing before re-use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	White powder	ODOR	Very mild, aromatic
ODOR THRESHOLD	No test data available	pH	No test data available
MELTING POINT	No test data available	BOILING POINT/RANGE	No test data available
FLASH POINT	113 °C / 235 °F (*component*)	EVAPORATION RATE	No test data available
FLAMMABILITY	OSHA Combustible Dust		
FLAMMABLE LIMITS	LOWER No test data available	UPPER	No test data available
VAPOR PRESSURE	0.2 mmHg @ 160 °C	VAPOR DENSITY	No test data available
RELATIVE DENSITY	1.1 – 1.2 @ 20 °C	SOLUBILITY IN H_2O	Not readily soluble
PARTITION COEFFICIENT (n-octanol/water)	No test data available	AUTOIGNITION TEMPERATURE	No test data available
DECOMPOSITION TEMPERATURE	> 250 °C	VISCOSITY	Not applicable
% VOLATILE	No test data available	SOFTENING POINT	No test data available

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY — This product does not pose a significant reactivity hazard when stored appropriately (see Section 7).

STABILITY — This product is stable when stored appropriately (see Section 7).

CONDITIONS TO AVOID — Dust accumulation in air or on surfaces, excessive heat, moisture and open flame.

INCOMPATIBILE PRODUCTS	Oxidizing Agents, Contamination.
HAZARDOUS DECOMPOSITION PRODUCTS	Carbon Dioxide, Carbon Monoxide, Tin Oxides.
POSSIBILITY OF HAZARDOUS REACTIONS	Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

SYMPTOMS OF EXPOSURE

ACUTE	Skin and serious eye irritation. May cause an allergic skin reaction. May damage fertility. Suspected of causing genetic defects. May cause repiratory irritation.
DELAYED	Stinging, tearing, redness and swelling of the eyes. Redness or burning of the skin. Shortness of breath. Nausea or gastric pain. Suspected of causing genetic defects. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

ACUTE TOXICITY

INHALATION	Inhalation may cause respiratory irritation.			
SKIN	Causes skin irritation. May cause an allergic skin reaction.			
EYES	Causes serious eye irritation.			
INGESTION	Ingestion is likely to be harmful or have adverse effects.			
INHALATION TOXICITY	LC_{50} Rat	Dibutyl tin dilaurate Silica	No data available No data available	
DERMAL TOXICITY	LD_{50} Rat	Dibutyl tin dilaurate Silica	>2,000 mg/kg >5000 mg/kg	
SKIN IRRITATION	Draize, Rabbit, 24 hours	Dibutyl tin dilaurate Silica	Skin irritation Not established	Moderate
EYE IRRITATION	Draize, Rabbit, 24 hours	Dibutyl tin dilaurate Silica	Not established Not established	
ORAL TOXICITY	LD_{50} Rat	Dibutyl tin dilaurate Silica	>2000 mg/kg >1000 mg/kg	
SENSITIZATION	Guinea Pig	Dibutyl tin dilaurate	May cause allergic skin reaction	
	Draize, Rabbit	Dibutyl tin dilaurate Silica	500 mg Not established	Severe

CHRONIC EFFECTS

CARCINOGENICITY	Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65
MUTAGENIC EFFECTS	Suspected of causing genetic defects.
REPRODUCTIVE TOXICITY	May damage fertility or the unborn child. Dibutyl tin dilaurate - Developmental Toxicity (Rat, oral) *Specific Developmental Abnormalities*: Craniofacial (including nose and tongue). Musculoskeletal system
TARGET ORGAN EFFECTS	Causes damage to organs.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY	Very toxic to aquatic life with long lasting effects.		
TOXICITY TO FISH	LC_{50} Oryzias latipes, 96 hours	Dibutyl tin dilaurate Silica	No data available >10,000 mg/l
TOXICITY TO DAPHNIA	EC_{50} Daphnia magna, 24 hours	Dibutyl tin dilaurate Silica	1.9 – 3.8 mg/l >10,000 mg/l

PERSISTANCE AND DEGRADABILITY	Not readily biodegradable.
BIOACCUMULATIVE POTENTIAL	Dibutyl tin dilaurate Log P_{ow} = 4.44
MOBILITY IN SOIL	No data available
OTHER ADVERSE EFFECTS	Very toxic to aquatic life with long lasting effects. Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL — Dispose of in accordance with local, state and federal regulations. This product, as supplied, meets the definiation of a hazardous waste according to Federal regulations (40 CFR 261). Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste dispal 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.

US EPA WASTE NUMBER & DESCRIPTION — No information available

SECTION 14: TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

U.S. DOT
Not dangerous goods

Estron may choose to ship this product domestically as a hazardous material using one of the other codes shown in this section.

ICAO / IATA
Proper Shipping Name: Environmentally Hazardous Substance, solid, n.o.s., (contains dibutyltin dilaurate)
Classification: 9
UN#: 3077
Packing Group: III
Hazard Label: Marine pollutant

IMDG
Proper Shipping Name: Environmentally Hazardous Substance, solid, n.o.s., (contains dibutyltin dilaurate)
Classification: 9
UN#: 3077
Packing Group: III
Hazard Label: Marine pollutant

ADR/RID
Proper Shipping Name: Environmentally Hazardous Substance, solid, n.o.s., (contains dibutyltin dilaurate)
Classification: 9
UN#: 3077
Packing Group: III
Hazard Label: Marine pollutant

SECTION 15: REGULATORY INFORMATION

The components in this product are either listed or exempt from listing due to polymer exemption criteria for the following chemical listing inventories as indicated by an "X":

AIIC	Australian Inventory of Industrial Chemicals	**X**
DSL	Canadian Domestic Substances List	**X**
ECL	Korean Existing Chemicals List	**X**
ENCS	Japanese Existing and New Chemical Substances	**X**
IECSC	Inventory of Existing Chemical Substances in China	**X**
INSQ	National Inventory of Chemical Substances in Mexico	**X**
NDSL	Canadian Non-Domestic Substances List	
NZIoC	New Zealand Inventory of Chemicals	**X**
PICCS	Philippines Inventory of Chemicals and Chemical Substances	**X**
TCSI	Taiwan Chemical Substances List	**X**
TSCA	US Toxic Substances Control Act	**X**
VNECI	Vietnam National Existing Chemical Inventory	**X**

INTERNATIONAL REGULATIONS

EU REGULATION (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization, *Substances of Very High Concern*: This product does not contain any SVHC listed substances.

REACH One or more components of this product are not REACH registered. Import quantities may be subject to limitation.

C.D. 96/82/EC Council Directive 96/82/EC, Annex I not mentioned by name. With regard to possibly appropriate decomposition products see Chapter 10.

FEDERAL REGULATIONS

SARA 313 This product does not contain any chemicals which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA Section 311/312 (40 CFR 370) Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Pressure Hazard	No
Reactivity Hazard	No

CERCLA This product, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional or state level pertaining to releases of this product.

CLEAN WATER ACT This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CLEAN AIR ACT This product does not contain any substances regulated as hazardous air pollutants (HAPS under Section 112 of the Clean Air Act Amendments of 1990.

OTHER FEDERAL None known

U.S. STATE REGULATIONS

RIGHT TO KNOW The Listing requirements of the Right to Know (RTK) legislation varies by state. All information for NJ, PA, MA and other states can be derived from the listing of hazardous and non-hazardous components in Section 3 of this Safety Data Sheet.

CALIFORNIA PROP 65 No substances known to the state of California to cause cancer and/or reproductive toxicity were intentionally added to this product; however, this product may contain unknown trace amounts of substances known to the state of California to cause cancer and/or reproductive toxicity.

SECTION 16: OTHER INFORMATION

DISCLAIMER This product is intended for industrial use only and should be used in accordance with the manufacturer's recommendations. Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable. This SDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

DATE OF REVISION June 28, 2022, *replaces the October 21, 2020 version*.

REASON FOR REVISION Updated Registry Listings in Section 15.

SDS PREPARED BY Glen Pearson SDS APPROVED BY Robert Auerbach