

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	None
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	Acute Toxicity, Oral – Category 3 Acute Toxicity, Dermal – Category 5 Skin Corrosion – Category 1C Eye Damage – Category 1 Skin Sensitization – Category 1 Germ Cell Mutagenicity – Category 2 Toxic to Reproduction – Category 1B Specific Target Organ Toxicity, Single Exposure – Category 1	Hazardous to the Aquatic Environment, Acute Hazard – Category 1 Hazardous to the Aquatic Environment, Chronic Hazard – Category 1

GHS Label

<p>Symbols: Skull and Crossbones  Corrosion  Health Hazard  Exclamation Mark  Environment </p>	
<p>Hazard Statements H301: Toxic if swallowed. H313: May be harmful in contact with skin H314: Causes severe skin burns and eye damage H317: May cause an allergic skin reaction H318: Causes serious eye damage H341: Suspected of causing genetic defects H360: May damage fertility or the unborn child H370: Causes damage to organs H410: Very toxic to aquatic life with long lasting effects May form combustible dust concentrations in air.</p>	<p>Precautionary Statements <i>Prevention</i> 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. <i>Response</i> P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p>

	<p>P302+352: IF ON SKIN: Wash with soap and water. P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. P310: Immediately call a POISON CENTER or doctor/physician. P321: Specific treatment (see supplemental first aid instructions on this label) P330: Rinse mouth. P333+313: If skin irritation or a rash occurs: Get medical advice/attention. P362+P364: Take off immediately all contaminated clothing and wash it before reuse. P391: Collect spillage.</p> <p><i>Storage</i> P405: Store locked up.</p> <p><i>Disposal</i> P501: Dispose of contents/container to an authorized hazardous waste handler.</p>
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HAZARDS NOT OTHERWISE CLASSIFIED: None identified.

SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	%	CLASSIFICATION
Dibutyltin Dilaurate	77-58-7	68 - 71	Acute Toxicity, Oral – Category 3 Acute Toxicity, Dermal – Category 5 Skin Corrosion – Category 1C Eye Damage – Category 1 Skin Sensitization – Category 1 Germ Cell Mutagenicity – Category 2 Toxic to Reproduction – Category 1B Specific Target Organ Toxicity, Single Exposure – Category 1 Hazardous to the Aquatic Environment, Acute Hazard – Category 1 Hazardous to the Aquatic Environment, Chronic Hazard – Category 1
Silica, Amorphous, Precipitated	112926-00-8	29 - 32	OSHA Combustible Dust (<i>when blended with Dibutyltin Dilaurate</i>)

(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	Toxic if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Causes damage to organs. May be harmful in contact with skin. May cause an allergic skin reaction. Suspected of causing genetic defects. May damage fertility or the unborn child.
DELAYED	Stinging, tearing, redness and swelling of the eyes. Redness or burning of the skin. Shortness of breath. Nausea or gastric pain.
INHALATION	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
SKIN CONTACT	Causes severe skin burns. May be harmful in contact with skin. 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 damage. Immediate medical attention is required. Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
INGESTION	Toxic if swallowed. 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 and seek immediate medical attention. 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	<p>This material is TOXIC and 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.</p> <p>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, <i>Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing and Handling of Combustible Particulate Solids</i>, for safe handling.</p> <p>Containers may be hazardous when empty. Since emptied containers retain product residue follow all SDS and label warnings even after container is emptied.</p>
CONDITIONS FOR SAFE STORAGE	Store locked up. Store in cool, dry, well-ventilated areas. Keep containers closed. Do not store near extreme heat, open flame or sources of ignition. Keep away from strong oxidizers and contaminants.

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 (<i>Respirable</i>)

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 (<i>component</i>)	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 ₂ O	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.
INCOMPATIBLE 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	Toxic if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Causes damage to organs. May be harmful in contact with skin. May cause an allergic skin reaction. Suspected of causing genetic defects. May damage fertility or the unborn child.
DELAYED	Stinging, tearing, redness and swelling of the eyes. Redness or burning of the skin. Shortness of breath. Nausea or gastric pain.
ACUTE TOXICITY	
INHALATION	Inhalation may cause immediate severe irritation progressing quickly to chemical burns.
SKIN	Corrosive. Causes severe skin burns. May cause an allergic skin reaction.

EYES	Causes serious eye damage.			
INGESTION	Toxic if swallowed. 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	100 mg Not established	Moderate
ORAL TOXICITY	LD ₅₀ Rat	Dibutyl tin dilaurate Silica	175 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) <i>Specific Developmental Abnormalities:</i> 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, 48 hours 96 hours	Dibutyl tin dilaurate Silica	1 mg/l >10,000 mg/l
TOXICITY TO DAPHNIA	EC ₅₀ Daphnia magna, 24 hours	Dibutyl tin dilaurate Silica	0.463 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	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 definition 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 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.
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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

Proper Shipping Name: Corrosive solids, Toxic, n.o.s.,
(contains dibutyltin dilaurate)
Classification: 8, (6.1)
UN#: 2923
Packing Group: III
Hazard Label: Poison, Corrosive

ICAO / IATA

Proper Shipping Name: Corrosive solids, Toxic, n.o.s.,
(contains dibutyltin dilaurate)
Classification: 8, (6.1)
UN#: 2923
Packing Group: III
Hazard Label: Poison, Corrosive, Marine pollutant

IMDG

Proper Shipping Name: Corrosive solids, Toxic, n.o.s.,
(contains dibutyltin dilaurate)
Classification: 8, (6.1)
UN#: 2923
Packing Group: III
EmS#: F-A, S-A
Hazard Label: Poison, Corrosive, Marine pollutant

ADR/RID

Proper Shipping Name: Corrosive solids, Toxic, n.o.s.,
(contains dibutyltin dilaurate)
Classification: 8, (6.1)
UN#: 2923
Packing Group: III
Hazard Label: Poison, Corrosive, 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":

AICS	Australian Inventory of Chemical Substances	X
DSL	Canadian Domestic Substances List	X
ECL	Korean Existing Chemicals List	X
ECN	Taiwan Chemical Substances List	X
ELINCS	European List of Notified Chemical Substances	
ENCS	Japanese Existing and New Chemical Substances	X
IECSC	Inventory of Existing Chemical Substances in China	X
ISRAEL	Proposed Israel Hazardous Substances List	
NDSL	Canadian Non-Domestic Substances List	
NZIoC	New Zealand Inventory of Chemicals	X
PICCS	Philippines Inventory of Chemicals and Chemical Substances	X
SWISS	Giftlist 1 and Inventory of Notified New Substances	X
TSCA	US Toxic Substances Control Act	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.

EINECS All of the components of this product are included on the European Inventory of Existing Commercial Chemical Substances.

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 Sections 2 and 15 of this Safety Data Sheet.

CALIFORNIA PROP 65 This product does not contain any 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 January 26, 2016, *replaces the September 11, 2015 version.*

REASON FOR REVISION Revised the Appearance in Section 9.

SDS PREPARED BY Glen Pearson

SDS APPROVED BY Robert Auerbach