

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	Benzoin
MFR.'S CODE ID/SYNONYMS	Benzoin, α -Hydroxy- α -phenylacetophenone, α -Hydroxybenzyl phenyl ketone, 2-Hydroxy-2-phenylacetophenone
CAS NUMBER	119-53-9
PRODUCT USE	Degasser for Powder Coatings
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: *Warning*
GHS Classification

Physical	Health	Environmental
OSHA Combustible Dust	None	None

GHS Label

Symbols: <i>No symbol</i>	
Hazard Statements May form combustible dust concentrations in air.	Precautionary Statements None

HAZARDS NOT OTHERWISE CLASSIFIED: None identified.

SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	%	CLASSIFICATION
Benzoin	119-53-9	98 - 100	OSHA Combustible Dust

(See Section 8 for Exposure Limits)
SECTION 4: FIRST-AID MEASURES
SYMPTOMS OF EXPOSURE

ACUTE	Temporary mild skin or eye irritation.
DELAYED	Stinging, tearing, redness and swelling of the eyes. Redness or burning of the skin.
INHALATION	Not applicable, unless heated past the decomposition point or dust is allowed to accumulate in the air while handling. If so, remove to fresh air.
SKIN CONTACT	Mildly irritating to the skin. Wash thoroughly with soap and water. If skin irritation persists consult a doctor.
EYE CONTACT	Mildly irritating to the eyes. Wash with plenty of water for 15 minutes. Consult a physician.

INGESTION If ingested, seek medical attention.

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 monoxide and carbon dioxide.

EXTINGUISHING MEDIA Dry Chemical, Water Fog, CO₂

UNUSUAL FIRE AND EXPLOSION HAZARDS May represent a combustion hazard if dust from this material is allowed to accumulate in the air.

SPECIAL FIRE FIGHTING PROCEDURES None known.

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 Avoid contact with skin, eyes and clothing.

PROTECTIVE EQUIPMENT See Personal Protective Equipment in Section 8.

EMERGENCY PROCEDURES Avoid unnecessary exposure to bystanders, prevent contact with open flames or other ignition sources.

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 Do not allow dust to concentrate in the air from handling. If necessary, use local ventilation. Handle in accordance with good industrial hygiene and safety practice.

CONDITIONS FOR SAFE STORAGE Store in cool areas. Keep containers closed.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENTS	CAS #	%	ACGIH TLV	OSHA PEL
Benzoin	119-53-9	98 - 100	<i>None established</i>	<i>None established</i>

APPROPRIATE ENGINEERING CONTROLS None required.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE Safety glasses or goggles.

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

RESPIRATORY An appropriate NIOSH approved respirator for Dust.

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 to yellow powder	ODOR	Mild, acrid
ODOR THRESHOLD	No test data available	pH	No test data available
MELTING POINT	137 °C (279 °F)	BOILING POINT/RANGE	>200 °C
FLASH POINT	Over 200 °F	EVAPORATION RATE	No test data available
FLAMMABILITY	OSHA Combustible Dust		

FLAMMABLE LIMITS	LOWER No test data available	UPPER No test data available	
VAPOR PRESSURE	No test data available	VAPOR DENSITY	No test data available
RELATIVE DENSITY	1.31 @ 20 °C	SOLUBILITY IN H ₂ O	Very slightly soluble in cold water
PARTITION COEFFICIENT (n-octanol/water)	No test data available	AUTOIGNITION TEMPERATURE	550 °C (1022 °F)
DECOMPOSITION TEMPERATURE	No test data available	VISCOSITY	No test data available
% VOLATILE	2 Maximum	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	Excessive heat and open flame, material dust accumulation.
INCOMPATIBLE PRODUCTS	Strong oxidizing or reducing agents.
HAZARDOUS DECOMPOSITION PRODUCTS	Carbon dioxide and carbon monoxide.
POSSIBILITY OF HAZARDOUS REACTIONS	Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

SYMPTOMS OF EXPOSURE	
ACUTE	Temporary mild skin or eye irritation. Coughing.
DELAYED	Stinging, tearing, redness and swelling of the eyes. Redness or burning of the skin. Irritation of the lungs and airways.
ACUTE TOXICITY	
INHALATION	May be mildly irritating.
SKIN	In some cases, eye contact will cause mild, but reversible, irritation.
EYES	In some cases, skin contact will cause mild, but reversible, irritation.
INGESTION	Not likely to have harmful effects in normal exposures, may cause nausea or gastric distress if ingested in quantity.
INHALATION TOXICITY	LC ₅₀ Rat Not established
DERMAL TOXICITY	LD ₅₀ Rat 8,870 mg/kg
SKIN IRRITATION	Draize, Rabbit, 24 hours Not established
EYE IRRITATION	Draize, Rabbit, 24 hours Not established
ORAL TOXICITY	LD ₅₀ Rat 10,000 mg/kg
SENSITIZATION	Draize, Rabbit Not established
CHRONIC EFFECTS	
CARCINOGENICITY	Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65
MUTAGENIC EFFECTS	Genotoxicity in vitro, Rat, Liver DNA damage, Unscheduled DNA synthesis Genotoxicity in vitro, Hamster, Ovary Sister chromatid exchange Genotoxicity in vivo, Rat, Oral Unscheduled DNA synthesis Genotoxicity in vivo, rat, Intraperitoneal DNA damage
REPRODUCTIVE TOXICITY	None known

TARGET ORGAN EFFECTS None known

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY Not known to be harmful to aquatic life.

TOXICITY TO FISH Not established

TOXICITY TO DAPHNIA Not established

PERSISTENCE AND DEGRADABILITY No data available

BIOACCUMULATIVE POTENTIAL No data available

MOBILITY IN SOIL No data available

OTHER ADVERSE EFFECTS None known

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL Dispose of in accordance with local, state and federal regulations. This product, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This product could become a hazardous waste, if chemical additions are made or if the product is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste.

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.

DOT	Not regulated	TDG	Not regulated	MEX	Not regulated
ICAO	Not regulated	IATA	Not regulated	IMDG/IMO	Not regulated
RID	Not regulated	ADR	Not regulated	ADN	Not regulated

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	Giftliste 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.

REACH All components of this product are REACH pre-registered.

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	No
Chronic Health Hazard	No
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 July 14, 2015, *replaces the 6/26/14 version*

REASON FOR REVISION Revised to Arabic numerals from Roman numerals for Section numbering. Added Restrictions on Use to Section 1. Added Specific Treatment to Section 4. Added Protective Equipment and Emergency Procedures to Section 6. Added Reactivity to Section 10. Added US EPA Waste Number & Description to section 13. Added Taiwan (ECN) to the listings in Section 15.

SDS PREPARED BY Glen Pearson

SDS APPROVED BY Robert Auerbach