



SAFETY DATA SHEET

Issue Date: 02-Nov-2020

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Version: 7

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name: BUTACIDE® PBO

EPA Registration Number: 1021-974

Other means of identification

Part Code: R419900, R419902, R419903

Recommended use of the chemical and restrictions on use

Recommended Use: An Insecticide for Manufacturing Use Only.

Details of the supplier of the safety data sheet

Manufacturer Address:

McLaughlin Gormley King Company
7325 Aspen Lane North
Minneapolis, MN 55428
USA

FAX #:

(763) 544-6437

Telephone Number: (800) 645-6466, or (763) 544-0341

e-Mail Address: mgk-sds@mgk.com

Emergency telephone number

24 Hour TRANSPORTATION Emergency: CHEMTREC®: (800) 424-9300

International: (703) 527-3887

24 Hour MEDICAL Emergency: SafetyCall®: (888) 740-8712, or (952) 852-9509

Comments:

MGK® Hours of operation are 8:00 a.m. to 4:30 p.m. CST, 14:00 to 22:30 GMT.
For MEDICAL EMERGENCIES or PESTICIDE INCIDENTS, call 24 hours a day to
(888) 740-8712, or (952) 852-9509.

2. HAZARDS IDENTIFICATION

Classification:

OSHA Regulatory Status:

This chemical is **not** considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Label elements

Emergency Overview

Appearance: light yellow

Physical state: Liquid

Odor: Mild, Sweet

Precautionary Statements - Prevention:

P262 - Do not get in eyes, on skin, or on clothing

Precautionary Statements - Response:

P321 - Specific treatment (see Section 4/ First Aid).

Precautionary Statements - Storage:

P404 - Store in a closed container

Precautionary Statements - Disposal:

P501 - Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC):

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
Piperonyl Butoxide (PBO)	51-03-6	100.0

*The exact percentage (concentration) of composition has been withheld as a trade secret

Comments: Ingredients not identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

Aspiration pneumonia hazard: • Not applicable

Description of first aid measures**Eye contact:**

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin Contact:

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Ingestion:

If swallowed, IMMEDIATELY call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or a doctor. Never give anything by mouth to an unconscious person.

Inhalation:

Remove affected person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Self-protection of the First Responder:

Use personal protective equipment as required.

Note to physicians:

For skin effects, a highly efficient therapeutic agent for Pyrethrin/ Pyrethroid exposure is topical application of tocopherol acetate (Vitamin E).

5. FIRE-FIGHTING MEASURES**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media:

Caution: Use of water spray when fighting fire may be inefficient.

Hazardous combustion products: Carbon monoxide, Carbon dioxide (CO₂).

Specific hazards arising from the chemical

No information available.

Explosion data

Sensitivity to Mechanical Impact: None.

Sensitivity to Static Discharge: None.

Protective equipment and precautions for firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions: Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective equipment as required.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment: Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth or other non-combustible absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling: Use with local exhaust ventilation. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. For more information, see product label.

Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. For more information, see product label.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines: This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering Controls: Safety showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection: Protective eyewear is recommended, but is not required.

Skin and body protection: Protective gloves are recommended, but are not required.

Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations: When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties:**

Physical state: Liquid
Appearance: light yellow
Odor: Mild , Sweet
Odor threshold: No information available
Color (Gardner Scale): 3

<u>Property:</u>	<u>Values:</u>	<u>Comment: • Method</u>
pH:	No information available	.
Melting point / freezing point:	No information available	
Boiling point / boiling range:	356 °F @ 1 mm Hg; 203 °C @ 0.278 kPa	
Flash point:	130.0 °C / 266.0 °F	Pensky-Martens Closed Cup (PMCC). .
Evaporation rate:	No information available	
Flammability (solid, gas):	No information available	
Upper flammability limit (UEL):	No information available	
Lower flammability limit (LEL):	No information available	
Vapor pressure:	No information available	
Vapor density:	No information available	
Specific Gravity:	1.059	@ 20.0 °C
Water solubility:	25.2 mg/ L @ 25°C	
Partition coefficient; n-Octanol/ Water:	No information available	
Autoignition temperature:	509 °F/ 265 °C	
Decomposition temperature:	No information available	
Kinematic viscosity:	No information available	
Dynamic viscosity:	34 cPs	@ 22.0 °C
Refractive Index:	1.4990	@ 25.0 °C

Other Information:

Molecular weight 338.44
VOC Content (%): 0%

Miscibility/ Solubility:

Water: Partially miscible
Alcohol: Partially miscible
Aromatic solvents: Miscible
Petroleum distillates: Miscible

10. STABILITY AND REACTIVITY**Reactivity**

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization: Hazardous polymerization does not occur.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials:

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

Hazardous Decomposition Products

Carbon monoxide, Carbon dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION**Numerical measures of toxicity - Product Information**

Oral LD₅₀ 4,570 mg/kg (rat)
Dermal LD₅₀ >2,000 mg/kg (rabbit)
Inhalation LC₅₀ >5.9 mg/L, (rat; 4 hours)
Eye contact: Minimal eye irritation. Irritation clearing in 48 hours. (rabbit).
Skin Contact: Minimal skin irritation. Irritation cleared in 24 hours. (rabbit).
Skin Irritation Index: 0.17

Sensitization: Negative. (guinea pig).

Piperonyl Butoxide: Marginally higher incidences of benign liver tumors in mice were observed following lifetime high dose exposures to PBO. The significance of these observations is questionable and under review. The doses at which tumors were observed for PBO greatly exceeded potential human exposure from labeled uses. Doses at which these effects were observed greatly exceeded anticipated human dietary intake. At anticipated dietary exposure levels, it is highly unlikely that this product will result in carcinogenic effects.

Carcinogenicity/ Oncogenicity: This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP

Reproductive toxicity: No information available.

Developmental Toxicity	No information available.
Teratogenicity:	No information available.
STOT - single exposure:	No information available.
STOT - repeated exposure:	No information available.
Chronic toxicity:	Avoid repeated exposure.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects: No information available

Environmental hazards (EPA):

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes: Disposal should be in accordance with applicable regional, national and local laws and regulations. For more information, see product label.

Contaminated packaging: For more information, see product label.

14. TRANSPORT INFORMATION

DOT (Department of Transportation)

Proper Shipping Name: Insecticides, Insect or Animal Repellent, Liquid
Hazard Class: This material is not hazardous.

Other DOT Shipping Information: This material is **not** regulated by the DOT as a hazardous material when shipped in Non-Bulk quantities (*i.e.*, less-than 119 Gallons / 450 Liters).

When shipping in Bulk-quantities (*i.e.*, more than 119 Gallons / 450 Liters), please contact MGK® for the proper shipping description.

Air (IATA/ ICAO)

Proper Shipping Name: Insecticides, Insect or Animal Repellent, Liquid
Hazard Class: This material is not hazardous.

Vessel (IMO/ IMDG)

UN/ID Number: UN3082
Proper Shipping Name: Environmentally hazardous substance, Liquid, n.o.s.(Piperonyl Butoxide)
Hazard Class: 9
Packing Group: III
Marine Pollutant: Yes

15. REGULATORY INFORMATION

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Piperonyl Butoxide (PBO) - 51-03-6	1.0

SARA 311/312 Hazard

Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (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)

CERCLA

This material, 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 material

US State Regulations:

California Proposition 65:

This product does not contain any intentionally added Proposition 65 chemicals

U.S. EPA Label Information:

EPA Registration Number: 1021-974

Difference between SDS and EPA (FIFRA) Pesticide label:

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for Safety Data Sheets (SDS), and for workplace labels of non-pesticide chemicals. The pesticide label also includes other important information, including directions for use. The hazard information required on the pesticide label is reproduced below:

Signal word: **CAUTION**

Precautionary Statements:

- Causes skin irritation
- May cause eye irritation
- Harmful if swallowed
- Harmful if absorbed through the skin.

International Inventories:

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION
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<u>NFPA</u>	Health hazards 1	Flammability 1	Instability 0	Physical and Chemical Properties
<u>HMIS</u>	Health hazards 1	Flammability 1	Physical hazards 0	- Personal protection X

*Chronic Hazard Star Legend * = Chronic Health Hazard*

Issue Date:
02-Nov-2020

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02-Nov-2020

Revision Note:
- SDS sections updated
- 1
- 14
- Product Code Changed

SDS Prepared By:
e-Mail Address:

Troy Azzivitto, MGK® Chemistry Department.
mgk-sds@mgk.com

Disclaimer:

The information provided in this Safety Data Sheet (SDS) is provided in good faith and believed to be accurate at the time of preparation of the SDS. However, to the extent consistent with applicable law, MGK® and its subsidiaries or affiliates extend no warranties, make no representations, and assume no responsibility as to the accuracy, suitability, or completeness of such information. Additionally, to the extent consistent with applicable law, neither MGK® nor any of its subsidiaries or affiliates represents or guarantees that this information or product may be used without infringing the intellectual property rights of others. Except to the extent a particular use and particular information are expressly stated on the product label,

it is the users' own responsibility to determine the suitability of this information for their own particular use of this product. If necessary, contact MGK® to confirm that you have the most current product label and SDS.

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABEL (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use as required by the Occupational Health and Safety Act (29 CFR 1910.1200, "Hazcom"). The product label provides information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products is regulated by the EPA under the authority of FIFRA through the product label. All necessary hazard classification and appropriate precautionary use, storage, and disposal information is set forth on that label or labeling accompanying the pesticide or to which reference is made on the label. It is a violation of federal law to use an EPA-registered pesticide product in any manner inconsistent with its labeling.

End of Safety Data Sheet