



Safety Data Sheet

Section 1: Identification

Product identifier

Product Name

- **Starbar Golden Malrin Fly Bait**

Synonyms

- 100527078; 3006196; 3006197; 3006481; EPA Reg. No.: 2724-274; Golden Malrin RF-128 Fly Killer

Product Description

- Blue granules.

Relevant identified uses of the substance or mixture and uses advised against

Recommended use

- Fly attractant.

Restrictions on use

- Avoid contact with eyes, skin or clothing. Keep out of the reach of children and domestic animals.

Details of the supplier of the safety data sheet

Manufacturer

- Wellmark International
1501 E. Woodfield Road, Suite 200 West
Schaumburg, IL 60173
United States

Emergency telephone number

Manufacturer

- 1-800-424-9300 - CHEMTREC

Manufacturer

- 1-703-527-3887 - CHEMTREC - Outside North America - Collect Calls Accepted

Manufacturer

- 1-800-347-8272

Section 2: Hazard Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012

- Combustible Dust
Specific Target Organ Toxicity Single Exposure 1
Specific Target Organ Toxicity Repeated Exposure 1

Label elements

OSHA HCS 2012

DANGER



- Hazard statements**
- May form combustible dust concentrations in air.
 - Causes damage to organs via inhalation, dermal, ingestion
 - Causes damage to organs through prolonged or repeated exposure via inhalation, dermal, ingestion

Precautionary statements

- Prevention**
- Wash thoroughly after handling.
 - Do not eat, drink or smoke when using this product.
 - Do not breathe dust, fume, gas, mist, vapors and/or spray.
- Response**
- IF exposed: Call POISON CENTER or doctor/physician.
 - Get medical advice/attention if you feel unwell.
- Storage/Disposal**
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
 - Store locked up.

Other hazards

OSHA HCS 2012

- This pesticide is toxic to birds, fish, aquatic invertebrates and mammals. Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Section 3 - Composition/Information on Ingredients

Substances

- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is not considered a substance.

Mixtures

Composition		
Chemical Name	Identifiers	%
Methomyl	CAS:16752-77-5	1%
9-Tricosene, (Z)	CAS:27519-02-4	0.049%
Sucrose	CAS:57-50-1	98.886%
Other ingredients	NDA	0.065%

Section 4: First-Aid Measures

Description of first aid measures

Inhalation

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician or poison control center immediately.

Skin

- IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

- **Eye** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- **Ingestion** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately.

Most important symptoms and effects, both acute and delayed

- Contains Methomyl, an N-methyl carbamate that inhibits cholinesterase. May affect central nervous system with a single or with repeated inhalation, skin or oral exposure. Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

- NOTE TO PHYSICIAN: Contains Methomyl, an N-methyl carbamate that inhibits cholinesterase. Atropine is antidotal, if signs of cholinesterase inhibition are present. Early symptoms of poisoning in humans include: excessive sweating, headache, nausea, vomiting, blurred vision, slurred speech, and muscle twitching. Symptoms of poisoning in animals include: salivation, labored breathing, diarrhea, vomiting, tremors, and pinpoint pupils. Treat symptomatically and supportively.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media • Use water, foam, carbon dioxide, or dry chemical or sand.

Unsuitable Extinguishing Media • Do not use direct water stream.

Firefighting Procedures • Move containers from fire area if you can do it without risk. Stay upwind.
Combustible dust - use low-pressure medium fog streams to avoid dust clouds.
Eliminate ignition sources.
Do not walk through spilled material.
Do not breathe gas/fumes/vapor/spray.

Special hazards arising from the substance or mixture

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.

Hazardous Combustion Products • Thermal decomposition, at temperatures in excess of 365°F, may release flammable gases and acrid fumes and smoke, including aldehydes, carbon monoxide, carbon dioxide, and steam.

Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions

- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not walk through spilled material. Keep all sources of ignition away and avoid creating dusty conditions. Use appropriate Personal Protective Equipment (PPE) Ventilate enclosed areas.

Emergency Procedures

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Contain spill and monitor for excessive dust accumulation. Keep unauthorized personnel away. Ventilate closed spaces before entering.

Environmental precautions

- Avoid release to the environment.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Use clean nonsparking tools to collect material. 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. Wear appropriate personal protective equipment, avoid direct contact.

Section 7 - Handling and Storage

Precautions for safe handling

Handling

- Avoid breathing dust. Avoid contact with skin, eyes, and clothing. Take precautionary measures against static charges. Wear appropriate personal protective equipment including long-sleeved shirt, long pants, chemical resistant gloves, shoes and socks. Avoid direct contact. Avoid contact with heat and ignition sources.

Conditions for safe storage, including any incompatibilities

Storage

- Store in cool, dry, secure place. Keep container tightly closed. Keep away from sources of ignition – No Smoking. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store away from strong oxidizing agents.

Incompatible Materials or Ignition Sources

- Heat, sparks, open flame. Strong acids, strong bases, and oxidizing agents.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines

- It is recommended that 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.

Exposure Limits/Guidelines			
Result	ACGIH	NIOSH	OSHA

Methomyl (16752-77-5)	TWAs	0.2 mg/m3 TWA (inhalable fraction and vapor)	2.5 mg/m3 TWA	Not established
Sucrose (57-50-1)	TWAs	10 mg/m3 TWA	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)

Exposure Control Notations

ACGIH

- Methomyl (16752-77-5): **Skin:** (Skin - potential significant contribution to overall exposure by the cutaneous route)

Exposure Limits Supplemental

ACGIH

- Methomyl (16752-77-5): **TLV Basis - Critical Effects:** (acetylcholinesterase inhibition; male reproductive damage; hematologic effects)
- Sucrose (57-50-1): **TLV Basis - Critical Effects:** (dental erosion)

Exposure controls

Engineering Measures/Controls

- Local exhaust ventilation. 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 (i.e., there is not leakage from the equipment). Use only appropriately classified electrical equipment. It is recommended that 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.

Personal Protective Equipment

Pictograms



Respiratory

- Not required with normal use.

Eye/Face

- Wear safety glasses.

Hands

- Wear appropriate gloves.

Skin/Body

- Long sleeve shirt, long pants, shoes, and socks should be worn.

General Industrial Hygiene Considerations

- 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.

Environmental Exposure Controls

- No data available

Other Information

- See product label for specific use PPE instructions.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Blue granules.
Color	Blue	Odor	No data available.
Odor Threshold	No data available		
General Properties			
Boiling Point	No data available	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	pH	Not relevant

Specific Gravity/Relative Density	1.5g/cc @ 20°C (68°F)	Bulk Density	50 lb/ft ³ (0.8 g/cc)
Water Solubility	Soluble	Viscosity	Not relevant
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	Not relevant	UEL	No data available
LEL	No data available	Autoignition	No data available
Flammability (solid, gas)	Data lacking		
Environmental			
Octanol/Water Partition coefficient	No data available		

Section 10: Stability and Reactivity

Reactivity

- This material is friable and can create small dust particles during any handling, processing, and transfer operations. This material can form explosive dust/air suspensions that are ignitable under some conditions.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- May form combustible dust concentrations in the air.

Conditions to avoid

- Heat, sparks, open flame, other ignition sources, and oxidizing conditions. Strong acids and strong bases.

Incompatible materials

- Strong acids, strong bases and oxidizing agents.

Hazardous decomposition products

- Thermal decomposition may produce toxic vapors and/or gases.

Section 11 - Toxicological Information

Information on toxicological effects

	CAS	
Starbar Golden Malrin Fly Bait	NDA	Acute Toxicity: Ingestion/Oral-Rat LD50 • 3106 mg/kg; Inhalation-Rat LC50 • >2.722 mg/L; Skin-Rabbit LD50 • >2100 mg/kg; Irritation: Eye-Rabbit • Mild irritation; Skin-Rabbit • Essentially non-irritating

GHS Properties	Classification
Acute toxicity	OSHA HCS 2012 • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Classification criteria not met; Acute Toxicity - Oral - Classification criteria not met
Skin corrosion/Irritation	OSHA HCS 2012 • Classification criteria not met

Serious eye damage/Irritation	OSHA HCS 2012 • Classification criteria not met
Skin sensitization	OSHA HCS 2012 • Classification criteria not met
Respiratory sensitization	OSHA HCS 2012 • Classification criteria not met
Aspiration Hazard	OSHA HCS 2012 • Classification criteria not met
Carcinogenicity	OSHA HCS 2012 • Classification criteria not met
Germ Cell Mutagenicity	OSHA HCS 2012 • Classification criteria not met
Toxicity for Reproduction	OSHA HCS 2012 • Classification criteria not met
STOT-SE	OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 1
STOT-RE	OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 1

Route(s) of entry/exposure • Inhalation, Skin, Eye, Ingestion

Potential Health Effects

Inhalation

- Acute (Immediate)** • Inhalation of methomyl may result in cholinesterase depression.
- Chronic (Delayed)** • Repeated exposure to methomyl via inhalation may result in cholinesterase depression.

Skin

- Acute (Immediate)** • Dermal absorption of methomyl may result in cholinesterase depression.
- Chronic (Delayed)** • Repeated dermal exposure to methomyl may result in cholinesterase depression.

Eye

- Acute (Immediate)** • May cause mild irritation.
- Chronic (Delayed)** • No data available.

Ingestion

- Acute (Immediate)** • Ingestion of methomyl may result in cholinesterase depression.
- Chronic (Delayed)** • Repeated ingestion methomyl may result in cholinesterase depression.

Mutagenic Effects

- Methomyl was negative in numerous assays to evaluate mutagenicity and genotoxicity, including Ames test, Reverse Mutation Assay, Recessive Lethal Assay, three DNA damage studies, an unscheduled DNA Synthesis Assay, and in vitro and in vivo cytogenetic assays.

Carcinogenic Effects

- Methomyl is not listed as a carcinogen by the IARC, NTP, OSHA and ACGIH.

Reproductive Effects

- Methomyl: A 3-generation rat reproduction study at rates of 50 and 100 ppm showed no adverse effect upon fertility, and no compound related histologic effect. A 2-generation rat study conducted at 75, 600, and 1,200 ppm in the diet showed similar results. In rats, no embryotoxic or teratogenic effects were observed at levels up to 400 ppm (highest level fed). In rabbits, the highest dietary dose level (100 mg/kg) did not cause any observed compound related abnormalities.

Section 12 - Ecological Information

Toxicity

Components	
	Aquatic Toxicity-Fish: 96 Hour(s) LC50 <i>Rainbow trout</i> 2.49 mg/L [acute]

Methomyl (1%)	16752-77-5	96 Hour(s) LC50 <i>Blue gill</i> 0.63 mg/L [acute] 96 Hour(s) LC50 <i>Fathead minnow</i> 2.8 mg/L [acute] LC50 <i>Sheepshead minnow</i> 1.16 mg/L [acute] NOEC <i>Fathead minnow</i> 0.076 mg/L [chronic] NOEC <i>Sheepshead minnow</i> 0.26 mg/L [chronic] Aquatic Toxicity-Crustacea: NOEC <i>Daphnia magna</i> 0.0007 mg/L [chronic] NOEC <i>Mysid shrimp</i> 0.029 mg/L [chronic] 48 Hour(s) LC50 <i>Daphnia magna</i> 0.017 mg/L [acute] 96 Hour(s) LC50 <i>Mysid shrimp</i> 0.234 mg/L [acute] LC50 <i>Pink shrimp</i> 0.019 mg/L [acute]
9-Tricosene, (Z) (0.049%)	27519-02-4	Aquatic Toxicity-Fish: 96 Hour(s) LC50 <i>Rainbow Trout</i> >1000 mg/L [Acute] 96 Hour(s) LC50 <i>Blue Gill</i> >1000 mg/L [Acute] Aquatic Toxicity-Crustacea: 48 Hour(s) LC50 <i>Daphnia magna</i> 1.08 mg/L [Acute]

Persistence and degradability

- No data available.

Bioaccumulative potential

- No data available.

Mobility in Soil

- No data available.

Other adverse effects

Potential Environmental Effects

- This pesticide is toxic to birds, fish, aquatic invertebrates and mammals.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Do not reuse or refill this container. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. See product label for disposal instructions.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	UN3077	Packaging 1,000 lbs. or greater: Environmentally hazardous substance, solid, n.o.s. (Methomyl)	9	III	RQ = Methomyl = 100 lbs.
IMO/IMDG	UN3077	Packaging 5 kg. or greater: Environmentally hazardous substance, solid, n.o.s. (Methomyl)	9	III	Marine Pollutant
IATA/ICAO	UN3077	Packaging 5 kg. or greater: Environmentally hazardous substance, solid, n.o.s. (Methomyl)	9	III	Acute Aquatic Toxicity

Special precautions for user

- None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Not relevant.

Other information

- DOT** • Environmental Hazards: RQ (Methomyl = 100 lb).
- IMO/IMDG** • No data available
- IATA/ICAO** • No data available

Section 15 - Regulatory Information**Safety, health and environmental regulations/legislation specific for the substance or mixture**

SARA Hazard Classifications • Chronic, Acute, Pressure(Sudden Release of), SARA Title III Section 313

FIFRA – Pesticide Labeling

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 hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

WARNING

Precautionary Statements • KEEP OUT OF THE REACH OF CHILDREN.

Hazards to Humans and Domestic Animals

HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION: Harmful if swallowed, or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Do not allow children or pets into treated areas.

First Aid

Call a poison control center or doctor immediately for treatment advice. If swallowed • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. If on skin or clothing • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. If in eyes • 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.

NOTE TO PHYSICIAN/VETERINARIAN: Contains Methomyl, an N-methyl carbamate that inhibits cholinesterase. Atropine is antidotal, if signs of cholinesterase inhibition are present. Early symptoms of poisoning in humans include: excessive sweating, headache, nausea, vomiting, blurred vision, slurred speech, and muscle twitching. Symptoms of poisoning in animals include: salivation, labored breathing, diarrhea, vomiting, tremors, and pinpoint pupils.

Environmental Hazards

This pesticide is toxic to birds, fish, aquatic invertebrates, and mammals. Collect, cover, or incorporate any piles of granules spilled on the soil surface. Runoff may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water, or to areas where surface water is present. This chemical is known to leach through soil into groundwater, especially where soils are permeable or water table is near the surface.

Inventory		
Component	CAS	TSCA
9-Tricosene, (Z)	27519-02-4	Yes
Methomyl	16752-77-5	No
Sucrose	57-50-1	Yes

United States

Environment

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Sucrose	57-50-1	Not Listed
• 9-Tricosene, (Z)	27519-02-4	Not Listed
• Methomyl	16752-77-5	100 lb final RQ; 45.4 kg final RQ

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Sucrose	57-50-1	Not Listed
• 9-Tricosene, (Z)	27519-02-4	Not Listed
• Methomyl	16752-77-5	100 lb EPCRA RQ

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Sucrose	57-50-1	Not Listed
• 9-Tricosene, (Z)	27519-02-4	Not Listed
• Methomyl	16752-77-5	500 lb lower TPQ; 10000 lb upper TPQ

U.S. - RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261

• Sucrose	57-50-1	Not Listed
• 9-Tricosene, (Z)	27519-02-4	Not Listed
• Methomyl	16752-77-5	waste number P066

U.S. - RCRA (Resource Conservation & Recovery Act) - P Series Wastes - Acutely Toxic Wastes

• Sucrose	57-50-1	Not Listed
• 9-Tricosene, (Z)	27519-02-4	Not Listed
• Methomyl	16752-77-5	waste number P066

Section 16 - Other Information

Revision Summary

Revision Date	MSDS Number	Changes
15/August/2016		• Section 1: added SKU.

- Revision Date**
 - 15/August/2016
- Last Revision Date**
 - 28/December/2015
- Preparation Date**
 - 22/September/2015

Disclaimer/Statement of Liability

- The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. **NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.**