SAFETY DATA SHEET



Issuing Date 01-Mar-2017 Revision Date 05-Apr-2018 Revision Number 4

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name MITOMAX II

Other means of identification

Product Code 2108110
CAS Number MIXTURE
Formula Not available
Synonyms Not available
UN-No UN3082
EPA Registration Number 2749-577

Recommended use of the chemical and restrictions on use

Recommended Use Agriculture

Uses advised againstAvoid contact with food. Avoid prolonged contact with eyes, skin, and clothing.

Details of the supplier of the safety data sheet

Supplier Address ACETO AGRICULTURAL CHEMICALS CORPORATION

4 Tri Harbor Court

Port Washington, NY 11050-4661

Phone: (516) 627-6000 Fax: (516) 627-6093 Email: aceto@aceto.com

Emergency Telephone Number(s)

ChemTrec: 1-800-424-9300 Outside of the United States: 1-703-527-3887

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Vapors)	Category 1
Skin Corrosion/Irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin Sensitization	Category 1
Carcinogenicity	Category 2
Flammable liquids	Category 4

Label elements

Emergency Overview

Signal Word

DANGER

Hazard statements

Fatal if inhaled

Causes skin irritation

Causes serious eye damage

May cause an allergic skin reaction

Suspected of causing cancer

MAY BE HARMFUL IF SWALLOWED

Mav be harmful in contact with skin

Combustible liquid

Very toxic to aquatic life with long lasting effects



AppearancePhysical StateOdorDark brown TransulcentLiquidPungent gasoline like

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Wear respiratory protection

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep cool

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Specific treatment (see supplemental first aid instructions on this label)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Immediately call a POISON CENTER or doctor/physician

IF ON SKIN: Wash with plenty of soap and water

Call a POISON CENTER or doctor/physician if you feel unwell

Take off contaminated clothing and wash before reuse

If skin irritation or rash occurs: Get medical advice/attention

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a POISON CENTER or doctor/physician

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None known

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms Not available

Formula Not available

Chemical Name	CAS No	Weight-%	North American Hazard Indicator
Propargite	2312-35-8	75	True
Naphtha (petroleum), heavy aromatic	64742-94-5	15	True
Proprietary Component	N/A	10	False

4. FIRST AID MEASURES

First Aid Measures

General Advice Show this safety data sheet to the doctor in attendance.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Consult a physician.

Skin Contact Wash off immediately with plenty of water. Wash contaminated clothing before reuse.

Consult a physician.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial

respiration. Consult a physician.

Ingestion Rinse mouth. Never give anything by mouth to an unconscious person. Consult a physician.

Self-Protection of the First Aider Use personal protective equipment as required. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Signs and Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

<u>Suitable Extinguishing Media</u>
Water fog. Foam. Dry chemical. Carbon dioxide (CO2).

Unsuitable Extinguishing Media Do not use water jet as an extinguisher; as this will spread fire.

Hazardous Combustion Products Thermal decomposition or combustion may produce hazardous

gases and/or materials.

Explosion Data Not available

Sensitivity to mechanical impact Not available. Sensitivity to static discharge Not available.

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

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. Ensure adequate ventilation. Use personal protective

equipment as required. Avoid contact with eyes, skin and clothing. In case of insufficient

ventilation, wear suitable respiratory equipment.

Environmental PrecautionsLocal authorities should be advised if significant spillages cannot be contained. Prevent

further leakage or spillage if safe to do so. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains. Do not flush into surface

water or sanitary sewer system. Should not be released into the environment.

Methods and material for containment and cleaning up

Methods for Clean-up Pick up and transfer to properly labelled containers.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling Use only in an area equipped with a safety shower. Ensure that eyewash stations and

safety showers are close to the workstation location. Ensure adequate ventilation. Do not breathe vapours/dust. Avoid contact with eyes, skin and clothing. Avoid repeated exposure.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly

labeled containers.

Incompatible Materials Incompatible with strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Propargite 2312-35-8	-	-	-
Naphtha (petroleum), heavy aromatic 64742-94-5	-	-	-
Proprietary Component N/A	-	-	-

Appropriate engineering controls

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tight sealing safety goggles.

Skin and body protection Use suitable eye protection and gloves.

Respiratory Protection In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

No information available

Estimated

Information on basic physical and chemical properties

Appearance Dark brown Transulcent

Physical State Liquid

OdorPungent gasoline likeOdor ThresholdNo information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH 5.62

Melting point / Freezing point No data available Literary Reference

Boiling point / boiling range No information available

Flash Point 70.5 °C

Evaporation Rate

Flammability (solid, gas) Flammability Limit in Air

Upper flammability limit No information available

Lower flammability limit Not available

Vapor Pressure No information available

Vapor Density Not available

Specific GravityNo information availableWater SolubilityNo information availableSolubility in other solventsNo information available

Partition coefficient: n-octanol/waterNot available

Autoignition temperature °C No data available Decomposition temperature No data available

Kinematic Viscosity

Dynamic Viscosity

No information available
104.4 Centistokes @ 20°C
29.3 Centistokes @ 40°C

Explosive Properties No information available Oxidizing Properties No information available

Other Information

Softening Point
Molecular Weight
VOC content
Density
Bulk Density
Corrosion characteristics
No information available
No information available
No information available
No information available

10. STABILITY AND REACTIVITY

Reactivity Not applicable.

Chemical Stability Stable under recommended storage conditions

Conditions to Avoid Heat, flames and sparks.

Incompatible Materials Incompatible with strong oxidizing agents.

Hazardous Decomposition Products Carbon oxides.

Possibility of Hazardous Reactions

None under normal processing

11. TOXICOLOGICAL INFORMATION

Product Information

 Oral LD50
 1750 mg/kg; (rat)

 Dermal LD50
 > 2000 mg/kg; (rat)

 Inhalation LC50
 0.058 - 0.53 mg/L; (rat); 4H

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Propargite 2312-35-8	>2000 mg/kg	>2000 mg/kg	0.20 mg/l 4 Hr
Naphtha (petroleum), heavy aromatic 64742-94-5	-	-	-
Proprietary Component N/A	-	-	-

The following values are calculated based on chapter 3.1 of the GHS document .

Information on likely routes of exposure

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Serious eye damage/irritation Extremely irritating to eye. Causes irreversible destruction of ocular tissue.

Skin Corrosion/Irritation Moderately irritating to skin. Rabbits.

Sensitization Not a sensitizer. Buehler method - Guinea pigs.

Reproductive Effects No information available.

Mutagenic Effects No information available.

Developmental EffectsNo information available.

STOT - single exposureNo information available.

STOT - Repeated Exposure No information available.

Aspiration Hazard No information available.

Numerical measures of toxicity - Product Information

Acute Toxicity

 Oral LD50
 1750 mg/kg (rat)

 Dermal LD50
 > 2000 mg/kg (rat)

 Inhalation LC50
 0.058 - 0.53 mg/L (rat) 4H

12. ECOLOGICAL INFORMATION

This product contains a chemical which is listed as a marine pollutant according to DOT.

Ecotoxicity

Very toxic to aquatic life with long lasting effects

10 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Propargite	> 1.08 mg/L EC50	0.022 - 0.043: 96 h Lepomis		0.0661 - 0.0847 mg/L EC50
2312-35-8	1.08: 96 h	macrochirus mg/L LC50		0.0661 - 0.0847: 48 h
	Pseudokirchneriella	static 0.096 - 0.146: 96 h		Daphnia magna mg/L EC50
	subcapitata mg/L EC50	Oncorhynchus mykiss mg/L		Flow through
		LC50 static 0.105 - 0.231: 96		
		h Oncorhynchus mykiss		
		mg/L LC50 flow-through		
Naphtha (petroleum), heavy		1740: 96 h Lepomis		= 0.95 mg/L EC50
aromatic		macrochirus mg/L LC50		0.95: 48 h Daphnia magna
64742-94-5		static 19: 96 h Pimephales		mg/L EC50
		promelas mg/L LC50 static		
		2.34: 96 h Oncorhynchus		
		mykiss mg/L LC50 41: 96 h		
		Pimephales promelas mg/L		
		LC50 45: 96 h Pimephales		
		promelas mg/L LC50		
		flow-through		

Persistence/Degradability No information available.

Bioaccumulation/Accumulation No information available.

Mobility in Soil No information available.

Chemical Name	log Pow =
Propargite 2312-35-8	5.76 - 5.77
Naphtha (petroleum), heavy aromatic 64742-94-5	2.9 - 6.1

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal MethodsContact waste disposal services. Dispose of in accordance with local regulations.

Contaminated Packaging Dispose of in accordance with local regulations. Empty containers should be taken to an

approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

DOT

UN-No UN3082

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.

Hazard Class 9
Packing Group III

Reportable Quantity (RQ) Propargite: RQ kg= 4.54

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Marine PollutantThis product contains a chemical which is listed as a marine pollutant according to DOT.DescriptionUN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Propargite),

9, III, Marine pollutant, RQ

Emergency Response Guide

Number

TDG

UN-No UN3082

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.

Hazard Class 9
Packing Group III

Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III

MEX

UN-No UN3082

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.

Hazard Class 9

Packing Group

Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III

ICAO

UN-No UN3082

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.

Hazard Class 9
Packing Group III

Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III

IATA

UN-No UN3082

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.

Hazard Class 9

Packing Group

Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III

IMDG/IMO

UN-No UN3082

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.

Hazard Class 9
Packing Group III

EmS No. F-A. S-F

Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III

RID

UN-No UN3082

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.

Hazard Class 9
Packing Group III
Classification Code M6

Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III

ADR/RID-Labels 9

<u>ADR</u>

UN-No UN3082

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.

Hazard Class 9
Packing Group III
Classification Code M6

Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III

ADR/RID-Labels 9

<u>ADN</u>

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.

Hazard Class 9
Packing Group III
Classification Code M6

Special Provisions 274, 335, 375, 601

Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III

Hazard Labels

Limited Quantity 5 L

15. REGULATORY INFORMATION

International Inventories

U.S.A. (TSCA) Does not comply Canada (DSL) Does not comply **EU (EINECS)** Does not comply **EU (ELINCS)** Does not comply Does not comply Japan (ENCS) China (IECSC) Does not comply Korea (KECL) Does not comply Philippines (PICCS) Does not comply Australia (AICS) Does not comply **Mexico INV** Does not comply **Taiwan INV** Does not comply

Chemical Name	U.S.A. (TSCA)	Canada (DSL)	EU	(EINECS)		EU (ELINCS)
Propargite	-	-		Present		-	
Naphtha (petroleum), heavy aromatic	Present	Presei	nt	F	Present		-
Proprietary Component	-	-			-		-
Component	Japan (ENCS)	China (IECSC)	Korea	(KECL)	Philippines (Pl	CCS)	Australia (AICS)
Propargite 2312-35-8 (75)	-	Present	Pre	esent	Present		Present
Naphtha (petroleum), heavy aromatic 64742-94-5 (15)	Present (9)-2578	Present	Pre	esent	Present		Present
Proprietary Component N/A (10)	-	-		-	-		-
Chemica	l Name	M	exico INV			Taiw	an INV
Propargite 2312-35-8			Present		Present		
	ohtha (petroleum), heavy aromatic 64742-94-5		Present			Pre	esent
Proprietary Component N/A			-				-

This material as a whole is exempt from the TSCA Inventory // FIFRA Regulated Pesticide

Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Component	SARA 313 - Threshold Values		
Propargite	1.0 % de minimis concentration		
2312-35-8 (75)			

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
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

Chemical Name	CERCLA/SARA Hazardous Substances	CERCLA/SARA RQ	RQ
Propargite 2312-35-8	10 lb final RQ; 4.54 kg final RQ		10 lb final RQ; 4.54 kg final RQ

State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

Chemical Name	CAS No	Category	Type
Propargite	2312-35-8	carcinogen, initial date 10/1/94 developmental toxicity, initial date 6/15/99	carcinogen, initial date 10/1/94

State Right-to-Know

This product contains the following State Right-to-Know chemicals:

The product contains the it					
Chemical Name	New Jersey	Massachusetts	Illinois	Rhode Island	Pennsylvania
Propargite	sn 1596	Present			Environmental
2312-35-8					hazard

U.S. EPA Label Information

EPA Pesticide Registration Number 2749-577

Canada

WHMIS Statement

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

NFPA

Health 4 Flammability 2 Instability 0 Physical Hazard 0



Issuing Date Revision Date Revision Summary Not available Disclaimer 01-Mar-2017 05-Apr-2018

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet