

SAFETY DATA SHEET



Issuing Date No data available

Revision Date 21-Dec-2017

Revision Number 1

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

Product identifier

Product Name Phenoxy Resin PKHS-MI

Other means of identification

Product Code(s) PKHS-MI, PKHS-PC, PKHS-PC-LV

UN/ID no UN1866

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Coatings

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address
Gabriel Phenoxies Inc.
808 Cel-River Road
Rock Hill, SC 27930

Manufacturer Address
Gabriel Phenoxies Inc.
808 Cel-River Road
Rock Hill, SC 27930
Contact Name: Regulatory Manager
Tel: 1-866-800-2436 (CHEM)
regulatory@gabrielchem.com
www.gabrielchem.com

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300 Outside U.S. 1-703-527-3887 (COLLECT)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1
Flammable liquids	Category 3

Label elements

Warning

Hazard statements

Causes skin irritation

Causes serious eye irritation

May cause an allergic skin reaction

Harmful to aquatic life with long lasting effects
Flammable liquid and vapor



Appearance -

Physical state Liquid

Odor -

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
Avoid release to the environment
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Use explosion-proof electrical/ ventilating / lighting equipment

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

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

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

Wash contaminated clothing before reuse

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

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Not applicable

Unknown acute toxicity

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical name	CAS No	Weight-%	Trade secret
Methoxyisopropyl acetate	108-65-6	55-65	*
Standard reaction product Bisphenol A-Epichlorohydrin	25068-38-6	28-38	*
Cyclohexanone	108-94-1	2-12	*

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

4. FIRST AID MEASURES

Description of first aid measures

Inhalation	Remove to fresh air.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms persist, call a physician.
Skin contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms	No information available.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Carbon dioxide (CO2). Dry chemical. Foam.
Unsuitable extinguishing media	Water jet is unsuitable for safety reasons.
Specific hazards arising from the chemical	Vapors may form explosive mixture with air. Vapors may travel to areas away from work site before igniting/flashing back to vapor source. During fire, gases hazardous to health may be formed.
Explosion data	
Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	May be ignited by heat, sparks or flames.
Special protective equipment for fire-fighters	In the event of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do it without risk. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear protective gloves/protective clothing and eye/face protection.
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Environmental precautions

Environmental precautions	Should not be released into the environment.
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Methods and material for containment and cleaning up

Methods for containment	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Dike to collect large liquid spills.
Methods for cleaning up	Use a non-combustible material like vermiculite, sand or earth to soak up the product and

place into a container for later disposal. Following product recovery, flush area with water.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static discharges. Handle in accordance with good industrial hygiene and safety practice. Use only with adequate ventilation. Avoid contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep away from open flames, hot surfaces and sources of ignition. Keep containers tightly closed in a cool, well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Cyclohexanone 108-94-1	STEL: 50 ppm TWA: 20 ppm S*	TWA: 50 ppm TWA: 200 mg/m ³	IDLH: 700 ppm TWA: 25 ppm TWA: 100 mg/m ³

Appropriate engineering controls

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eyeface protection

Wear safety glasses with side shields (or goggles).

Hand Protection

Wear suitable gloves.

Skin and body protection

Wear suitable protective clothing.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid

Appearance	-
Odor	-
Color	Clear to hazy
Odor threshold	-

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	-	
Melting point / freezing point	-55 °C / -67 °F	
Boiling point / boiling range	63.2 °C / 148.8 °F (at 760 mm Hg)	
Flash point	44.0 °C / 111.2 °F	CC (closed cup)
Evaporation rate	0.4	
Flammability (solid, gas)	-	
Flammability Limit in Air		
Upper flammability limit:	7	
Lower flammability limit:	1.5	
Vapor pressure	0.49	@ 20 °C
Vapor density	4.6	
Relative density	-	
Water solubility	< 10 % w/w	
Solubility in other solvents	-	
Partition coefficient	-	
Autoignition temperature	-	
Decomposition temperature	-	
Kinematic viscosity	-	
Dynamic viscosity	-	
Explosive properties	-	
Oxidizing properties	-	
<u>Other Information</u>		
Softening point	-	
Molecular weight	-	
VOC Content (%)	-	
Liquid Density	-	
Bulk density	-	

10. STABILITY AND REACTIVITY

Reactivity	No hazardous reactions if stored and handled as prescribed/indicated.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Keep away from open flames, hot surfaces and sources of ignition. Incompatible materials.
Incompatible materials	Alkaline earth metals. Halogens. Strong oxidizing agents. Mineral acids.
Hazardous decomposition products	None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Product Information

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.

Ingestion

Specific test data for the substance or mixture is not available.

Information on toxicological effects**Symptoms**

Causes skin irritation. Causes serious eye irritation. May cause allergic skin reaction.

Numerical measures of toxicity**Acute toxicity**

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

ATEmix (oral)	6,915.00
ATEmix (dermal)	3,457.00
ATEmix (inhalation-dust/mist)	1.50
ATEmix (inhalation-vapor)	32.11

Unknown acute toxicity

None

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Methoxyisopropyl acetate 108-65-6	= 8532 mg/kg (Rat)	> 5 g/kg (Rabbit)	-
Standard reaction product Bisphenol A-Epichlorohydrin 25068-38-6	= 11400 mg/kg (Rat)	-	-
Cyclohexanone 108-94-1	= 1544 mg/kg (Rat)	= 947 mg/kg (Rabbit)	= 8000 ppm (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Skin corrosion/irritation**

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

May cause an allergic skin reaction.

Germ cell mutagenicity

No information available.

Carcinogenicity

Chemical name	ACGIH	IARC	NTP	OSHA
Cyclohexanone 108-94-1	A3	Group 3	-	-

Reproductive toxicity

No information available.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Aspiration hazard

No information available.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Methoxyisopropyl acetate 108-65-6	-	161: 96 h Pimephales promelas mg/L LC50 static	-	500: 48 h Daphnia magna mg/L EC50
Cyclohexanone	20: 96 h Chlorella	481 - 578: 96 h	EC50 = 18.5 mg/L 5 min	800: 24 h Daphnia

108-94-1	vulgaris mg/L EC50	Pimephales promelas mg/L LC50 flow-through 8.9: 96 h Pimephales promelas mg/L LC50	EC50 = 21.3 mg/L 10 min EC50 = 25 mg/L 5 min	magna mg/L EC50
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Persistence and degradability No information available.

Bioaccumulation .

Chemical name	Partition coefficient
Methoxyisopropyl acetate 108-65-6	0.43
Cyclohexanone 108-94-1	0.86

Other adverse effects .

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Cyclohexanone 108-94-1	-	-	-	U057

14. TRANSPORT INFORMATION

DOT

UN/ID no UN1866
 Proper shipping name Resin solution, flammable
 Hazard Class 3
 Packing Group III
 Special Provisions B1, B52, IB3, T2, TP1
 Description UN1866, Resin solution, flammable (Methoxyisopropyl acetate, Cyclohexanone), 3, III
 Emergency Response Guide Number 127

TDG

UN/ID no UN1866
 Proper shipping name Resin solution, flammable
 Hazard Class 3
 Packing Group III
 Description UN1866, Resin solution, flammable (Methoxyisopropyl acetate, Cyclohexanone), 3, III

MEX

UN/ID no UN1866
 Proper shipping name Resin solution, flammable
 Hazard Class 3
 Special Provisions 223
 Packing Group III

Description	UN1866, Resin solution, flammable (Methoxyisopropyl acetate, Cyclohexanone), 3, III
ICAO (air)	
UN/ID no	UN1866
Proper shipping name	Resin solution, flammable
Hazard Class	3
Packing Group	III
Special Provisions	A3
Description	UN1866, Resin solution, flammable (Methoxyisopropyl acetate, Cyclohexanone), 3, III
IATA	
UN/ID no	UN1866
Hazard Class	3
Packing Group	III
ERG Code	3L
Description	UN1866, Resin solution, flammable (Methoxyisopropyl acetate, Cyclohexanone), 3, III
IMDG	
UN/ID no	UN1866
Hazard Class	3
Packing Group	III
EmS-No	F-E, S-E
Special Provisions	223, 955
Marine pollutant	This material meets the definition of a marine pollutant
Description	UN1866, Resin solution, flammable (Methoxyisopropyl acetate, Cyclohexanone), 3, III, (44°C c.c.), Marine pollutant
RID	
UN/ID no	UN1866
Proper shipping name	Resin solution, flammable
Hazard Class	3
Packing Group	III
Classification code	F1
Description	UN1866, Resin solution, flammable (Methoxyisopropyl acetate, Cyclohexanone), 3, III, Environmentally Hazardous
Labels	3
ADR	
UN/ID no	UN1866
Proper shipping name	Resin solution, flammable
Hazard Class	3
Packing Group	III
Classification code	F1
Tunnel restriction code	(D/E)
Description	UN1866, Resin solution, flammable (Methoxyisopropyl acetate, Cyclohexanone), 3, III, (D/E), Environmentally Hazardous
Labels	3
ADN	
Proper shipping name	Resin solution, flammable
Hazard Class	3
Packing Group	III
Classification code	F1
Special Provisions	640E
Description	UN1866, Resin solution, flammable (Methoxyisopropyl acetate, Cyclohexanone), 3, III, Environmentally Hazardous
Hazard label(s)	3
Limited quantity (LQ)	5 L
Ventilation	VE01
Equipment Requirements	PP, EX, A

15. REGULATORY INFORMATION

International Inventories

TSCA	Listed
DSL/NDL	Listed DSL
EINECS/ELINCS	Listed EINECS
ENCS	Listed
IECSC	Listed
KECL	Listed
PICCS	Listed
AICS	Listed
NZICS	Listed
TCSI	Listed

Legend:

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

DSL/NDL - 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

NZICS - New Zealand Inventory of Chemicals

TCSI - Taiwan Chemical Substance Inventory

US 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.

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
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, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Cyclohexanone 108-94-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Cyclohexanone	X	X	X

108-94-1			
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U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Canada

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

Canadian NPRI	Not Listed
WHIMIS (Canada)	Class B3: Combustible liquid
	Class D2B: Toxic Material

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<u>NFPA</u>	Health hazards 2	Flammability 2	Instability 1	Physical and chemical properties -
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<u>HMIS</u>	Health hazards 2	Flammability 2	Physical hazards 1	Personal protection X
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Revision Date	21-Dec-2017
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Revision Note	No information available.
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Disclaimer

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