

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 11/13/2019 Revision date: 12/12/2019 Supersedes: 11/13/2019 Version: 1.1

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : Custom Acid Hebicides Mix

Product code AL0-130415

Recommended use and restrictions on use

No additional information available

Phenova

6390 Joyce Dr. Suite 100

Golden, CO 80403 - United States T 1-866-942-2978 - F 1-866-283-0269

info@phenova.com - www.phenova.com

1.4. Emergency telephone number

Emergency number : ChemTel Assistance (US/Canada) 1-800-255-3924

ChemTel Assistance (International) +1 813-248-0585

SECTION 2: Hazard(s) identification

GHS US classification

Flammable liquids H225 Highly flammable liquid and vapour

Category 2

Acute toxicity (oral) H301 Toxic if swallowed

Category 3

Acute toxicity (dermal) H311 Toxic in contact with skin

Category 3

Serious eye damage/eye H319 Causes serious eye irritation irritation Category 2 Suspected of causing cancer

Carcinogenicity Category 2 H351 Specific target organ H370

toxicity (single exposure)

Category 1

Specific target organ H336

toxicity (single exposure)

Category 3

Full text of H statements : see section 16

May cause drowsiness or dizziness

Causes damage to organs

GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)









Signal word (GHS US) : Danger

Hazard statements (GHS US) H225 - Highly flammable liquid and vapour

H301+H311 - Toxic if swallowed or in contact with skin

H319 - Causes serious eye irritation H336 - May cause drowsiness or dizziness H351 - Suspected of causing cancer H370 - Causes damage to organs

Precautionary statements (GHS US) : P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

P233 - Keep container tightly closed.

P260 - Do not breathe dust/fume/gas/mist/vapors/spray. P261 - Avoid breathing dust/fume/gas/mist/vapors/spray. P264 - Wash hands, forearms and face thoroughly after handling.

12/12/2019 EN (English US) Page 1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P270 - Do not eat, drink or smoke when using this product.

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 - If swallowed: Immediately call a poison center or doctor

P302+P352 - If on skin: Wash with plenty of water

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing P307+P311 - If exposed: Call a poison center/doctor

P308+P313 - If exposed or concerned: Get medical advice/attention.

P312 - Call a poison center or doctor if you feel unwell

P321 - Specific treatment (see supplemental first aid instruction on this label)

P322 - Specific treatment (see supplemental first aid instruction on this label)

P330 - Rinse mouth.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P361+P364 - Take off immediately all contaminated clothing and wash it before reuse.

P370+P378 - In case of fire: Use media other than water to extinguish. P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P403+P235 - Store in a well-ventilated place. Keep contain

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Conc.
methanol	(CAS-No.) 67-56-1	49.34031
acetone	(CAS-No.) 67-64-1	49.34031
MCPA (Component)	(CAS-No.) 94-74-6	0.64

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation : Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed

by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms

: Based on available data, the classification criteria are not met.

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

12/12/2019 EN (English US) 2/10

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect

spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Provide good ventilation in process area to prevent formation

of vapor.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container

closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Custom Acid Hebicides Mix		
ACGIH	Local name	Methanol
ACGIH	ACGIH TWA (ppm)	200 ppm
ACGIH	ACGIH STEL (ppm)	250 ppm
ACGIH	Remark (ACGIH)	Headache; eye dam; dizziness; nausea
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m³)	260 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	200 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA

MCPA (94-74-6)

Not applicable

methanol (67-56-1)		
ACGIH	Local name	Methanol
ACGIH	ACGIH TWA (ppm)	200 ppm (Methanol; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	ACGIH STEL (ppm)	250 ppm (Methanol; USA; Short time value; TLV - Adopted Value)

12/12/2019 EN (English US) 3/10

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

methanol (67-56-1)			
ACGIH	Remark (ACGIH)	Headache; eye dam; dizziness; nausea	
ACGIH	Regulatory reference	ACGIH 2018	
OSHA	OSHA PEL (TWA) (mg/m³)	260 mg/m³	
OSHA	OSHA PEL (TWA) (ppm)	200 ppm	
OSHA	Regulatory reference (US-OSHA)	OSHA	
acetone (67-64-1)	acetone (67-64-1)		
ACGIH	Local name	Acetone	
ACGIH	ACGIH TWA (ppm)	250 ppm	
ACGIH	ACGIH STEL (ppm)	500 ppm	
ACGIH	Remark (ACGIH)	eye irr; CNS impair; BEI	
ACGIH	Regulatory reference	ACGIH 2018	
OSHA	OSHA PEL (TWA) (mg/m³)	2400 mg/m³	
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm	
OSHA	Regulatory reference (US-OSHA)	OSHA	

8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves.

Eye protection:

Chemical goggles or safety glasses

Respiratory protection:

Wear appropriate mask

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical	and chemical properties
Physical state	: Liquid
	: Colorless
	: characteristic
Odor threshold	: No data available
рН	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available

12/12/2019 EN (English US) 4/10

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Solubility : No data available : No data available Log Pow Auto-ignition temperature : No data available Decomposition temperature : No data available : No data available Viscosity, kinematic Viscosity, dynamic : No data available **Explosion limits** : No data available Explosive properties : No data available Oxidizing properties : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Custom Acid Hebicides Mix		
ATE US (oral)	202.674 mg/kg body weight	
ATE US (dermal)	608.022 mg/kg body weight	
MCPA (94-74-6)		
LD50 oral rat	1160 mg/kg body weight (Rat; OECD 401: Acute Oral Toxicity; Experimental value; 700 mg/kg; Rat; Literature study)	
LD50 dermal rat	> 4000 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)	
LD50 dermal rabbit	> 2000 mg/kg (Rabbit; Literature study)	
LC50 inhalation rat (mg/l)	> 6.4 mg/l/4h (Rat; Experimental value)	
ATE US (oral)	1160 mg/kg body weight	
methanol (67-56-1)		
LD50 oral rat	> 5000 mg/kg (Rat; BASF test; Literature study; 1187-2769 mg/kg bodyweight; Rat; Weight of evidence)	
LD50 dermal rabbit	15800 mg/kg (Rabbit; Literature study)	
LC50 inhalation rat (mg/l)	85 mg/l/4h (Rat; Literature study)	
LC50 inhalation rat (ppm)	64000 ppm/4h (Rat; Literature study)	
ATE US (oral)	100 mg/kg body weight	
ATE US (dermal)	300 mg/kg body weight	
ATE US (gases)	700 ppmV/4h	
ATE US (vapors)	3 mg/l/4h	
ATE US (dust, mist)	0.5 mg/l/4h	
acetone (67-64-1)		
LD50 oral rat	5800 mg/kg (Equivalent or similar to OECD 401, Rat, Female, Experimental value, Oral)	
LD50 dermal rabbit	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal)	
12/12/2010	TN /Fadiab UC)	

12/12/2019 EN (English US) 5/10

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

acetone (67-64-1)	
LC50 inhalation rat (mg/l)	76 mg/l (Other, 4 h, Rat, Female, Experimental value, Inhalation (vapours))
ATE US (oral)	5800 mg/kg body weight
ATE US (dermal)	20000 mg/kg body weight
ATE US (vapors)	76 mg/l/4h
ATE US (dust, mist)	76 mg/l/4h
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified : Not classified

Carcinogenicity : Suspected of causing cancer.

MCPA (94-74-6)

IARC group 2B - Possibly carcinogenic to humans

Reproductive toxicity : Not classified

STOT-single exposure : Causes damage to organs. May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and

symptoms

: Based on available data, the classification criteria are not met.

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 12: Ecological information

12.1. Toxicity

MCPA (94-74-6)		
LC50 fish 1	50 mg/l (LC50; 96 h; Salmo gairdneri; Flow-through system)	
EC50 Daphnia 1	3.2 mg/l (EC50; 48 h; Daphnia magna)	
Threshold limit algae 1	0.152 mg/l (EC50; 336 h; Lemna gibba)	
methanol (67-56-1)		
LC50 fish 1	15400 mg/l (LC50; EPA 660/3 - 75/009; 96 h; Lepomis macrochirus; Flow-through system; Fresh water; Experimental value)	
EC50 Daphnia 1	> 10000 mg/l (EC50; DIN 38412-11; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)	
LC50 fish 2	10800 mg/l (LC50; 96 h; Salmo gairdneri)	
acetone (67-64-1)		
LC50 fish 1	5540 mg/l (EU Method C.1, 96 h, Salmo gairdneri, Static system, Fresh water, Experimental value, Nominal concentration)	

12.2. Persistence and degradability

Custom Acid Hebicides Mix		
Persistence and degradability	Not established.	
MCPA (94-74-6)		
Persistence and degradability	Not readily biodegradable in water. No significant hydrolysis. Not readily biodegradable in the soil. Adsorbs into the soil.	
methanol (67-56-1)		
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.	
Biochemical oxygen demand (BOD)	0.6 - 1.12 g O₂/g substance	
Chemical oxygen demand (COD)	1.42 g O₂/g substance	
ThOD	1.5 g O₂/g substance	
BOD (% of ThOD)	0.8 (Literature study)	

12/12/2019 EN (English US) 6/10

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

acetone (67-64-1)	
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.43 g O₂/g substance
Chemical oxygen demand (COD)	1.92 g O₂/g substance
ThOD	2.2 g O₂/g substance
BOD (% of ThOD)	0.872 (20 day(s), Literature study)

12.3. Bioaccumulative potential

Custom Acid Hebicides Mix		
Bioaccumulative potential	Not established.	
MCPA (94-74-6)		
BCF fish 1	1 (BCF; 672 h; Pisces)	
Log Pow	2.86 (Experimental value; Other; 20 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
methanol (67-56-1)		
BCF fish 1	< 10 (BCF; 72 h; Leuciscus idus)	
Log Pow	-0.77 (Experimental value; Other)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
acetone (67-64-1)		
BCF fish 1	0.69 (Pisces)	
BCF other aquatic organisms 1	3 (BCFWIN, Calculated value)	
Log Pow	-0.24 (Test data)	
Bioaccumulative potential	Not bioaccumulative.	

12.4. Mobility in soil

MCPA (94-74-6)		
Ecology - soil	Toxic to flora.	
methanol (67-56-1)		
Surface tension	0.023 N/m (20 °C)	
Log Koc	Koc,PCKOCWIN v1.66; 1; Calculated value	
acetone (67-64-1)		
Surface tension	0.0237 N/m	
Ecology - soil	No (test)data on mobility of the substance available.	

12.5. Other adverse effects

Custom Acid Hebicides Mix				
MCPA (94-74-6)				
methanol (67-56-1)				
acetone (67-64-1)				

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

12/12/2019 EN (English US) 7/10

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1230 Methanol (methanol; acetone; MCPA), 3 (6.1), II

UN-No.(DOT) : UN1230
Proper Shipping Name (DOT) : Methanol

methanol; acetone; MCPA

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Packing group (DOT) : II - Medium Danger

Subsidiary risk (DOT) : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132

Hazard labels (DOT) : 3 - Flammable liquid 6.1 - Poison





DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Symbols : +- Fixes (cannot be altered) proper shipping name, hazard class, and packing group,I - Proper

shipping name appropriate for international and domestic transportation

DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110

kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.

T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)

TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C

(59 F) and 50 C (122 F), respectively.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Quantity Limitations Passenger aircraft/rail : 1 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L

CFR 175.75)

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25

passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this

section is exceeded.

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

Emergency Response Guide (ERG) Number : 131

Other information : No supplementary information available.

Transportation of Dangerous Goods

Not applicable

Transport by sea

Transport document description (IMDG) : UN 1230 METHANOL (methanol; acetone; MCPA), 3 (6.1), II (12°C c.c.)

UN-No. (IMDG) : 1230

Proper Shipping Name (IMDG) : METHANOL

Class (IMDG) : 3 - Flammable liquids

Packing group (IMDG) : II - substances presenting medium danger

Subsidiary risks (IMDG) : 6.1 - Toxic substances

12/12/2019 EN (English US) 8/10

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Limited quantities (IMDG) : 1 L

Air transport

Transport document description (IATA) : UN 1230 Methanol (methanol; acetone; MCPA), 3 (6.1), II

UN-No. (IATA) : 1230
Proper Shipping Name (IATA) : Methanol

Class (IATA) : 3 - Flammable Liquids
Packing group (IATA) : II - Medium Danger
Subsidiary hazards (IATA) : 6.1 - Toxic substances

SECTION 15: Regulatory information

15.1. US Federal regulations

MCPA (94-74-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

methanol (67-56-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ 5000 lb

acetone (67-64-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313

CERCLA RQ 5000 lb

15.2. International regulations

CANADA

MCPA (94-74-6)

Listed on the Canadian NDSL (Non-Domestic Substances List)

methanol (67-56-1)

Listed on the Canadian DSL (Domestic Substances List)

acetone (67-64-1)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

methanol (67-56-1)

Listed on EPA Hazardous Air Pollutant (HAPS)

15.3. US State regulations

methanol (67-56-1)					
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
No	Yes	No	No		47000 μg/day (inhalation); 23,000 μg/day (oral)

SECTION 16: Other information

Revision date : 12/12/2019

12/12/2019 EN (English US) 9/10

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Other information : None.

Full text of H-phrases:

H225	Highly flammable liquid and vapour	
H301	Toxic if swallowed	
H311	Toxic in contact with skin	
H319	Causes serious eye irritation	
H336	May cause drowsiness or dizziness	
H351	Suspected of causing cancer	
H370	Causes damage to organs	

Phenova US SDS REV

Copyright 2015 Phenova, Inc. License granted to make paper copies for internal use. The information contained in this Safety Data Sheet is based on our current knowledge. The information contained in this document should be used only as a guide for appropriate safety precautions and should not be considered to be all inclusive. Users should make their own investigation to determine the suitability of the information for their particular purposes. The document does not represent any guarantee of the properties of the product. Plenova, Inc. shall not be held liable for any damage resulting from the handling or use of this product. Visit the Terms and Conditions of Sale link at www.phenova.com for additional terms and conditions of sale.

12/12/2019 EN (English US) 10/10