

Section 1: IDENTIFICATION

1.1 PRODUCT IDENTIFIER

Product Name: Magnavu Dip
Product Code: Not available.

1.2 RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE

Use: Non-Destructive Testing.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Name/Address: Magnaflux

155 Harlem Ave, Glenview, Illinois

60025

Telephone Number: 847-657-5300

1.4 EMERGENCY TELEPHONE NUMBER

Emergency Telephone Number: CHEMTREC 800-424-9300

Date of Preparation: December 2, 2014 Version #: 1.1

Section 2: HAZARD(S) IDENTIFICATION

2.1 CLASSIFICATION OF THE CHEMICAL ACCORDING TO OSHA HAZCOM 2012

Hazard class

Skin corrosion 1C Serious eye damage 1

2.2 LABEL ELEMENTS ACCORDING TO OSHA HAZCOM 2012

Hazard Pictogram:



Signal Word: Danger

Hazard Statement: Causes severe skin burns and eye damage.

Prevention: Do not breathe dust/fume/gas/mist/vapours/spray. Wash hands

thoroughly after handling. Wear protective gloves/protective clothing/

eye protection/face protection.

Response: If on skin (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a poison center/doctor. 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/doctor. If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center/doctor. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a

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poison center/doctor.

Storage: Store locked up.

Disposal: Dispose of contents and container in accordance with all local,

regional, national and international regulations.

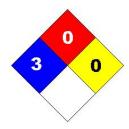
2.3 ADDITIONAL INFORMATION

Hazards not otherwise classified: Not applicable.

12 % of the mixture consists of ingredient(s) of unknown acute toxicity.

This product is a hazardous chemical as defined by NOM-018-STPS-2000.

Mexico Classification:



Blue = Health Red = Flammability Yellow = Reactivity White = Special

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

WHMIS Classification(s):

Class D2A - Teratogenicity and Embryotoxicity

Class E - Corrosive Material

WHMIS Hazard Symbols:





WHMIS Signal Word: DANGER

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 MIXTURES

Ingredient	UN#	H/F/R/*	CAS No	Wt. %
Alachala C42.45 athey dated proposition	Not available	Not ovelleble	COEE4 40 0	F 40
Alcohols, C12-15, ethoxylated propoxylated	Not available.	Not available.	68551-13-3	5 - 10
Tetrapotassium pyrophosphate	Not available.	Not available.	7320-34-5	1 - 5
Trisodium hydrogendicarbonate	Not available.	Not available.	533-96-0	1 - 5
Poly(oxy-1,2-ethanediyl),.alphahydro-				
.omegahydroxy-, mono-C6-12-alkyl ethers,				
phosphates	Not available.	Not available.	68921-24-4	0.5 - 1.5
Imidazolium compounds,1-[2-(2-carboxyethoxy)				
ethyl]-1(or 3)-(2-carboxyethyl)-4,5-di hydro-2-				
norcoco alkyl, hydroxides, disodium salts	Not available.	Not available.	68604-71-7	0.5 - 1.5
Potassium hydroxide	UN1814	3/0/1	1310-58-3	0.1 - 1
Methyl alcohol	UN1230	1/3/0	67-56-1	0.1 - 1

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Ethylene oxide	UN1040	3/4/3	75-21-8	< 0.1
Acetaldehyde	UN1089	3/4/2	75-07-0	< 0.1
1,4-Dioxane	UN1165	2/3/1	123-91-1	< 0.1
Propylene oxide	UN1280	3/4/2	75-56-9	< 0.1

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

Section 4: FIRST- AID MEASURES

4.1 DESCRIPTION OF THE FIRST AID MEASURE

Eye: In case of contact, immediately flush eyes with plenty of water for at

least 15 minutes. If easy to do, remove contact lenses, if worn. Get

medical attention immediately.

Skin: In case of contact, immediately flush skin with plenty of water.

Remove contaminated clothing and shoes. Wash clothing before

reuse. Get medical attention immediately.

Inhalation: If inhaled, remove victim to fresh air and keep at rest in a position

comfortable for breathing. Get medical attention immediately.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an

unconscious person. Get medical attention immediately.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Eye: Causes serious eye damage. Symptoms may include discomfort or

pain, excess blinking and tear production, with marked redness and

swelling of the conjunctiva. May cause burns.

Skin: Causes severe skin burns. Symptoms may include irritation,

redness, pain, blisters, serious skin burns.

Inhalation: Irritating to respiratory system.

Ingestion: May be harmful if swallowed. May cause stomach distress, nausea

or vomiting. May cause burns.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENTS NEEDED

Note to Physicians: Symptoms may not appear immediately.

Specific Treatments: In case of accident or if you feel unwell, seek medical advice

immediately (show the label or SDS where possible).

Section 5: FIRE-FIGHTING MEASURES

5.1 FLAMMABILITY

Flammability: Not flammable by WHMIS/OSHA/NOM-018-STPS-2000 criteria.

5.2 EXTINGUISHING MEDIA

Suitable Extinguishing Media: Powder, water spray, foam, carbon dioxide.

Unsuitable Extinguishing Media: Do not use a solid water stream as it may scatter and spread fire.

^{*} Per NOM-018-STPS-2000



5.3 SPECIAL HAZARDS ARISING FROM THE CHEMICAL

Products of Combustion: May include, and are not limited to: oxides of carbon.

Explosion Data:

Sensitivity to Mechanical Impact: Not available. Sensitivity to Static Discharge: Not available.

5.4 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS

Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Avoid contact with skin and eyes.

6.2 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING - UP

Methods for Containment: Contain and/or absorb spill with inert material (e.g. sand, vermiculite),

then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for Cleaning-Up: Scoop up material and place in a disposal container. Provide ventilation.

Section 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Handling: Do not get in eyes, on skin, or on clothing. Do not swallow. Do not

breathe dust/fume/gas/mist/vapours/spray. Use only in well-ventilated areas. Handle and open container with care. Do not eat,

drink or smoke when using this product. (See section 8)

General Hygiene Advice: Launder contaminated clothing before reuse. Wash hands before

eating, drinking, or smoking.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage: Keep out of the reach of children. Keep container tightly closed and

in a well-ventilated place. Store locked up. Store between 4 °C (40

°F) and 49 °C (120 °F). (See section 10)

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

Exposure Guidelines

Occupational Exposure Limits			
Ingredient OSHA-PEL ACGIH-T			
Alcohols, C12-15, ethoxylated propoxylated	Not available.	Not available.	
Tetrapotassium pyrophosphate	Not available.	Not available.	
Trisodium hydrogendicarbonate	Not available.	Not available.	
Poly(oxy-1,2-ethanediyl), .alphahydroomegahydroxy-,	Not available.	Not available.	

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mono-C6-12-alkyl ethers, phosphates		
Imidazolium compounds, 1-[2-(2-carboxyethoxy)ethyl]-1(or 3)-(2-carboxyethyl)-4,5-dihydro-2-norcoco alkyl, hydroxides,		
disodium salts	Not available.	Not available.
Potassium hydroxide	2 mg/m ³	2 mg/m ³
Methyl alcohol	200 ppm	200 ppm
Ethylene oxide	1 ppm	1 ppm
Acetaldehyde	200 ppm; 360 mg/m ³	Not available.
1,4-Dioxane	100 ppm	20 ppm
Propylene oxide	100 ppm; 240 mg/m ³	2 ppm

8.2 EXPOSURE CONTROLS

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust,

fume, vapor, etc.) below recommended exposure limits.

8.3 INDIVIDUAL PROTECTIVE MEASURES

Personal Protective Equipment:

Eye/Face Protection: Wear approved eye protection (properly fitted dust- or splash-proof

chemical safety goggles) and face protection (face shield).

Skin Protection:

Hand Protection: Wear chemical resistant gloves.Body Protection: Wear suitable protective clothing.

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

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the

selected respirator.

General Health and Safety Measures:

Do not eat, smoke or drink where material is handled, processed or

stored. Wash hands carefully before eating or smoking.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Thin liquid.

Color: Blue.

Odor: Not available.
Odor Threshold: Not available.

Physical State: Liquid. pH: 12

Melting Point/Freezing Point: Not available.

Initial Boiling Point and Boiling Range: Not available.

Flash Point: None.

Evaporation Rate: 1.0 (Water = 1)

Flammability: Not flammable.

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Lower Flammability/Explosive Limit:Not available.Upper Flammability/Explosive Limit:Not available.Vapor Pressure:Not available.

Vapor Density: Not available.

Relative Density/Specific Gravity: ~ 1.06

Solubility: Complete.

Partition coefficient: n-octanol/water: Not available.

Auto-ignition Temperature: Not available.

Decomposition Temperature: Not available.

Viscosity: Not available.

Oxidizing Properties: Not available.

Section 10: STABILITY AND REACTIVITY

Not available.

10.1 REACTIVITY

No dangerous reaction known under conditions of normal use.

10.2 CHEMICAL STABILITY

Explosive Properties:

Stable under normal storage conditions.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reaction known under conditions of normal use.

10.4 CONDITIONS TO AVOID

Heat. Incompatible materials.

10.5 INCOMPATIBLE MATERIALS

Acids. Bases. Caustic products. Halogens. Strong oxidizing agents.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

May include, and are not limited to: oxides of carbon.

Section 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

Likely Routes of Exposure: Skin contact, eye contact, inhalation, and ingestion.

Symptoms related to physical/chemical/toxicological characteristics:

Eye: Causes serious eye damage. Symptoms may include discomfort or pain,

excess blinking and tear production, with marked redness and swelling of

the conjunctiva. May cause burns.

Skin: Causes severe skin burns. Symptoms may include irritation, redness,

pain, blisters, serious skin burns.

Ingestion: May be harmful if swallowed. May cause stomach distress, nausea or

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vomiting. May cause burns.

Inhalation: Irritating to respiratory system.

Acute Toxicity:

Ingredient	IDLH	LC50	LD50
Alcohols, C12-15, ethoxylated			
propoxylated	Not available.	Not available.	Not available.
			Oral 2000 mg/kg, mouse
Tetrapotassium pyrophosphate	Not available.	Not available.	Dermal >4640 mg/kg, rabbit
Trisodium hydrogendicarbonate	Not available.	Not available.	Oral >4000mg/kg, rat
Poly(oxy-1,2-ethanediyl), .alpha.			
-hydroomegahydroxy-, mono-			
C6-12-alkyl ethers, phosphates	Not available.	Not available.	Not available.
Imidazolium compounds, 1-[2-			
(2-carboxyethoxy)ethyl]-1(or 3)-			
(2-carboxyethyl)-4,5-dihydro-2-			
norcoco alkyl, hydroxides,			
disodium salts	Not available.	Not available.	Not available.
Potassium hydroxide	Not available.	Not available.	Oral 214 mg/kg, rat
		Inhalation	
		83.2 mg/L 4 h, rat	Oral 5628 mg/kg, rat
Methyl alcohol	6000 ppm	64000 ppm 4 h, rat	Dermal 15800 mg/kg, rabbit
		Inhalation	
Ethylene oxide	Ca [800 ppm]	800 ppm 4 h, rat	Oral 72 mg/kg, rat
		Inhalation	
Acetaldehyde	Ca [2000 ppm]	13300 ppm 4h, rat	Oral 1930 mg/kg, rat
		Inhalation	Oral 4200 mg/kg, rat
1,4-Dioxane	Ca [500 ppm]	48.5 mg/L 4h, rat	Dermal 7600 mg/kg, rabbit
		Inhalation	
		4000 ppm 4h, rat;	Oral 380 mg/kg, rat;
Propylene oxide	Ca [400 ppm]	1740 ppm 4h, mouse	Dermal 1244 mg/kg, rabbit

Calculated overall Chemical Acute Toxicity Values			
LC50 (inhalation) LD50 (oral) LD50 (dermal)			
> 20 mg/L 4 h, rat > 2000 mg/kg, rat > 2000 mg/kg, rabbit			

	Chemical Listed as Carcinogen or Potential Carcinogen
Ingredient	(NTP, IARC, OSHA, ACGIH, CP65)*
Alcohols, C12-15, ethoxylated propoxylated	Not listed.
Tetrapotassium pyrophosphate	Not listed.
Trisodium hydrogendicarbonate	Not listed.
Poly(oxy-1,2-ethanediyl), .alphahydroomegahydroxy-,	
mono-C6-12-alkyl ethers, phosphates	Not listed.
Imidazolium compounds, 1-[2-(2-carboxyethoxy)ethyl]-1(or 3)-	
(2-carboxyethyl)-4,5-dihydro-2-norcoco alkyl, hydroxides,	
disodium salts	Not listed.
Potassium hydroxide	Not listed.
Methyl alcohol	CP65
Ethylene oxide	O, G-A2, I-1, N-1, CP65



Acetaldehyde	G-A3, I-2B, N-2, CP65
1,4-Dioxane	G-A3, I-2B, N-2, CP65
Propylene oxide	G-A3, I-2B, N-2, CP65

^{*} See Section 15 for more information.

11.2 DELAYED, IMMEDIATE, AND CHRONIC EFFECTS OF SHORT- AND LONG-TERM EXPOSURE

Skin Corrosion/Irritation: Causes severe skin burns.

Serious Eye Damage/Irritation: Causes serious eye damage.

Respiratory Sensitization:

Skin Sensitization:

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

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

STOT-Single Exposure:

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

Chronic Health Effects:

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

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

Reproductive Toxicity:

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

Teratogenicity: Hazardous by WHMIS criteria. **Embryotoxicity:** Hazardous by WHMIS criteria.

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

STOT-Repeated Exposure: Based on available data, the classification criteria are not met.

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

Toxicologically Synergistic Materials: Not available.

Other Information: Not available.

Section 12: ECOLOGICAL INFORMATION

12.1 ECOTOXICITY

Acute/Chronic Toxicity: May cause long-term adverse effects in the aquatic environment.

12.2 PERSISTENCE AND DEGRADABILITY

Biodegradable.

12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: Not available.

12.4 MOBILITY IN SOIL

Not available.

12.5 OTHER ADVERSE EFFECTS

Not available.

Section 13: DISPOSAL CONSIDERATIONS

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13.1 WASTE TREATMENT METHODS

Disposal Method: This material must be disposed of in accordance with all

local, state, provincial, and federal regulations.

Other disposal recommendations: Not available.

Section 14: TRANSPORT INFORMATION

DOT	UN1760, Corrosive liquid, n.o.s. (Poly(oxy-1,2-ethanediyl), .alphahydroomegahydroxy-, mono-C6-12-alkyl ethers, phosphates; Potassium hydroxide), 8, III
IATA	Prohibited
IMDG	UN1760, Corrosive liquid, n.o.s. (Poly(oxy-1,2-ethanediyl), .alphahydroomegahydroxy-, mono-C6-12-alkyl ethers, phosphates; Potassium hydroxide), 8, III
TDG	UN1760, Corrosive liquid, n.o.s. (Poly(oxy-1,2-ethanediyl), .alphahydroomegahydroxy-, mono-C6-12-alkyl ethers, phosphates; Potassium hydroxide), 8, III
NOM-004- SCT2-1994	UN1760, Corrosive liquid, n.o.s. (Poly(oxy-1,2-ethanediyl), .alphahydroomegahydroxy-, mono-C6-12-alkyl ethers, phosphates; Potassium hydroxide), 8, III

Section 15: REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/ LEGISLATIONS SPECIFIC FOR THE CHEMICAL

Canada: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

US: SDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Mexico: SDS prepared pursuant to NOM-018-STPS-2000.

SARA Title III				
Ingredient	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
Alcohols, C12-15, ethoxylated propoxylated	Not listed.	Not listed.	Not listed.	Not listed.
Tetrapotassium pyrophosphate	Not listed.	Not listed.	Not listed.	Not listed.
Trisodium hydrogendicarbonate	Not listed.	Not listed.	Not listed.	Not listed.
Poly(oxy-1,2-ethanediyl), .alphahydro- .omegahydroxy-, mono-C6-12-alkyl ethers, phosphates Imidazolium compounds, 1-[2-(2-carboxy ethoxy)ethyl]-1(or 3)-(2-carboxyethyl)-4,5- dihydro-2-norcoco alkyl, hydroxides,	Not listed.	Not listed.	Not listed.	Not listed.
disodium salts	Not listed.	Not listed.	Not listed.	Not listed.
Potassium hydroxide	Not listed.	Not listed.	1,000	Not listed.
Methyl alcohol	Not listed.	Not listed.	5,000	313
Ethylene oxide	1,000	10	10	313
Acetaldehyde	Not listed.	Not listed.	1,000	313
1,4-Dioxane	Not listed.	Not listed.	100	313
Propylene oxide	10,000	100	100	313



State Regulations

California Proposition 65:

This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Global Inventories:

Ingredient	Canada DSL/NDSL	USA TSCA
Alcoholo 040 45 other letelesses letel	DOI	\/
Alcohols, C12-15, ethoxylated propoxylated	DSL	Yes.
Tetrapotassium pyrophosphate	DSL	Yes.
Trisodium hydrogendicarbonate	DSL	Yes.
Poly(oxy-1,2-ethanediyl), .alphahydroomegahydroxy-, mono-C6-12-		
alkyl ethers, phosphates	DSL	Yes.
Imidazolium compounds, 1-[2-(2-carboxyethoxy)ethyl]-1(or 3)-(2-carboxy		
ethyl)-4,5-dihydro-2-norcoco alkyl, hydroxides, disodium salts	DSL	Yes.
Potassium hydroxide	DSL	Yes.
Methyl alcohol	DSL	Yes.
Ethylene oxide	DSL	Yes.
Acetaldehyde	DSL	Yes.
1,4-Dioxane	DSL	Yes.
Propylene oxide	DSL	Yes.

NFPA-National Fire Protection Association:		
Health: 3		
Fire: 0		
Reactivity: 0		

HMIS-Hazardous Materials Identification System:	
Health:	3*
Fire:	0
Physical Hazard:	0

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

CP65 California Proposition 65

OSHA (O) Occupational Safety and Health Administration.

ACGIH (G) American Conference of Governmental Industrial Hygienists.

A1 - Confirmed human carcinogen.

A2 - Suspected human carcinogen.

A3 - Animal carcinogen.

A4 - Not classifiable as a human carcinogen.

A5 - Not suspected as a human carcinogen.

IARC (I) International Agency for Research on Cancer.

1 - The agent (mixture) is carcinogenic to humans.

2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.

3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.

4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.



NTP (N) National Toxicology Program.

1 - Known to be carcinogens.

2 - Reasonably anticipated to be carcinogens.

Section 16: OTHER INFORMATION

Date of Preparation: December 2, 2014

Expiry Date: December 2, 2017

Version: 1.1

Revision Date: October 16, 2015

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

Prepared by: Nexreg Compliance Inc.

Phone: (519) 488-5126

www.nexreg.com

Prepared for: Magnaflux

End of Safety Data Sheet

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Trade Name: Magnavu Dip

Conforms to OSHA HazCom 2012, CPR & NOM-018-STPS-2000 Standards