

SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Name: MAGNETIC HEAD CLEANER

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Type:	Denatured Ethanol	Emergency Contact:	Chemtrec
Product Name:	MAGNETIC HEAD CLEANER	Phone:	(800) 424-9300
Part Number(s):	19-5302		

SECTION 2. HAZARD(S) IDENTIFICATION

Physical hazards	Flammable liquids	Category 2
Health hazards	Acute toxicity, oral	Category 4
	Acute toxicity, dermal	Category 3
	Acute toxicity, inhalation	Category 4
	Serious eye damage/eye irritation	Category 2A
	Germ cell mutagenicity	Category 1B
	Carcinogenicity	Category 1B
	Reproductive toxicity (fertility)	Category 2
	Specific target organ toxicity, single exposure	Category 2
	Specific target organ toxicity, repeated exposure	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 2
OSHA defined hazards	Not classified.	
Label elements		



Signal word

Danger

Hazard statement

Highly flammable liquid and vapor. Harmful if swallowed. Toxic in contact with skin. Causes serious eye irritation. Harmful if inhaled. May cause genetic defects. May cause cancer. Suspected of damaging fertility. May cause damage to organs. Causes damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.



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SDS Number: 116
Revision Date: 06/24/2015
Supersedes Date: 01/28/2013

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SECTION 2. HAZARD(S) IDENTIFICATION (CONTINUED)

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear eye protection/face protection. Wear protective gloves/protective clothing/eye protection/face protection.

Response

If swallowed: Call a poison center/doctor if you feel unwell. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Call a poison center/doctor. Rinse mouth. If eye irritation persists: Get medical advice/attention. Take off immediately all contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage.

Storage

Store in a well-ventilated place. Keep cool. Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

Supplemental information

0.41% of the mixture consists of component(s) of unknown acute oral toxicity. 88.39% of the mixture consists of component(s) of unknown acute dermal toxicity. 1.96% of the mixture consists of component(s) of unknown acute inhalation toxicity. 7.09% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 7.09% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

SECTION 3. COMPOSITION/ INFORMATION ON INGREDIENTS

Mixtures

Chemical name	Common name and synonyms	CAS number	%
ETHANOL		64-17-5	86.7866
METHANOL		67-56-1	4.5118
ACETIC ACID ETHYL ESTER		141-78-6	1.073
2-PENTANONE, 4-METHYL-		108-10-1	0.9824
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPH.		64742-89-8	0.4124
HEXANE		110-54-3	0.4078



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SECTION 3. COMPOSITION/ INFORMATION ON INGREDIENTS (CONTINUED)

2-PROPANOL, 2-METHYL-	75-65-0	0.11
BENZENE, METHYL-	108-88-3	0.0533
CYCLOHEXANE	110-82-7	0.0083
Other components below reportable levels		5.6544

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

SECTION 4. FIRST-AID MEASURES

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention if you feel unwell. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
Most important symptoms/effects, acute and delayed	Headache. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Take off immediately all contaminated clothing. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Alcohol resistant foam. Water fog. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
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SECTION 5. FIRE-FIGHTING MEASURES (CONTINUED)

Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Highly flammable liquid and vapor.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.



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SECTION 6. ACCIDENTAL RELEASE MEASURES (CONTINUED)

Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases. Use appropriate containment to avoid environmental contamination.
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SECTION 7. HANDLING AND STORAGE

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.
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For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).
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SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
2-PENTANONE, 4-METHYL- (CAS 108-10-1)	PEL	410 mg/m ³
		100 ppm
2-PROPANOL, 2-METHYL- (CAS 75-65-0)	PEL	300 mg/m ³
		100 ppm
ACETIC ACID ETHYL ESTER (CAS 141-78-6)	PEL	1400 mg/m ³
		400 ppm
CYCLOHEXANE (CAS 110-82-7)	PEL	1050 mg/m ³
		300 ppm
ETHANOL (CAS 64-17-5)	PEL	1900 mg/m ³
		1000 ppm
HEXANE (CAS 110-54-3)	PEL	1800 mg/m ³
		500 ppm
METHANOL (CAS 67-56-1)	PEL	260 mg/m ³
		200 ppm

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
BENZENE, METHYL- (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
2-PENTANONE, 4-METHYL- (CAS 108-10-1)	STEL	75 ppm



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SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION (CONTINUED)

US. ACGIH Threshold Limit Values Components

Components	Type	Value
	TWA	20 ppm
2-PROPANOL, 2-METHYL- (CAS 75-65-0)	TWA	100 ppm
ACETIC ACID ETHYL ESTER (CAS 141-78-6)	TWA	400 ppm
BENZENE, METHYL- (CAS 108-88-3)	TWA	20 ppm
CYCLOHEXANE (CAS 110-82-7)	TWA	100 ppm
ETHANOL (CAS 64-17-5)	STEL	1000 ppm
HEXANE (CAS 110-54-3)	TWA	50 ppm
METHANOL (CAS 67-56-1)	STEL	250 ppm
	TWA	200 ppm

US. NIOSH: Pocket Guide to Chemical Hazards Components

Components	Type	Value
2-PENTANONE, 4-METHYL- (CAS 108-10-1)	STEL	300 mg/m3
		75 ppm
	TWA	205 mg/m3
		50 ppm
2-PROPANOL, 2-METHYL- (CAS 75-65-0)	STEL	450 mg/m3
		150 ppm
	TWA	300 mg/m3
		100 ppm
ACETIC ACID ETHYL ESTER (CAS 141-78-6)	TWA	1400 mg/m3
		400 ppm
BENZENE, METHYL- (CAS 108-88-3)	STEL	560 mg/m3
		150 ppm
	TWA	375 mg/m3
		100 ppm
CYCLOHEXANE (CAS 110-82-7)	TWA	1050 mg/m3



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SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION (CONTINUED)

ETHANOL (CAS 64-17-5)	TWA	300 ppm 1900 mg/m3
HEXANE (CAS 110-54-3)	TWA	1000 ppm 180 mg/m3
METHANOL (CAS 67-56-1)	STEL	50 ppm 325 mg/m3
	TWA	250 ppm 260 mg/m3 200 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
2-PENTANONE, 4-METHYL- (CAS 108-10-1)	1 mg/l	Methyl isobutyl ketone	Urine	*
BENZENE, METHYL- (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*
HEXANE (CAS 110-54-3)	0.4 mg/l	2,5-Hexanedion, without hydrolysis	Urine	*
METHANOL (CAS 67-56-1)	15 mg/l	Methanol	Urine	*

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

BENZENE, METHYL- (CAS 108-88-3)	Can be absorbed through the skin.
HEXANE (CAS 110-54-3)	Can be absorbed through the skin.
METHANOL (CAS 67-56-1)	Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

BENZENE, METHYL- (CAS 108-88-3)	Skin designation applies.
METHANOL (CAS 67-56-1)	Skin designation applies.

US - Tennessee OELs: Skin designation

METHANOL (CAS 67-56-1)	Can be absorbed through the skin.
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US ACGIH Threshold Limit Values: Skin designation

HEXANE (CAS 110-54-3)	Can be absorbed through the skin.
METHANOL (CAS 67-56-1)	Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

METHANOL (CAS 67-56-1)	Can be absorbed through the skin.
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SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION (CONTINUED)

Appropriate engineering controls	Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. Eye wash fountain and emergency showers are recommended.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Chemical respirator with organic vapor cartridge and full facepiece.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	Chemical respirator with organic vapor cartridge and full facepiece.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical state	Liquid.
Form	Liquid.
Color	WATER WHITE
Odor	SOLVENT
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	-170.28 °F (-112.38 °C) estimated / 999 °F (537.22 °C)
Initial boiling point and boiling range	174.98 °F (79.44 °C) estimated
Flash point	24.0 °F (-4.4 °C)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	6.8 % estimated



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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES (CONTINUED)

Flammability limit - upper (%)	29.4 % estimated
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	79.09 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	676.57 °F (358.09 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	6.60 lbs/gal estimated
Explosive properties	Not explosive.
Flammability class	Flammable IB estimated
Oxidizing properties	Not oxidizing.
Percent volatile	99.18 % estimated
Specific gravity	0.79 estimated
VOC (Weight %)	93.53 % estimated

SECTION 10. STABILITY AND REACTIVITY

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.



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SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

- Inhalation** Harmful if inhaled. May cause damage to organs by inhalation. May cause damage to organs through prolonged or repeated exposure by inhalation.
- Skin contact** Toxic in contact with skin.
- Eye contact** Causes serious eye irritation.
- Ingestion** Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics Headache. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing.

Information on toxicological effects

Acute toxicity Toxic in contact with skin. Harmful if inhaled. Harmful if swallowed.

Components	Species	Test Results
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2-PENTANONE, 4-METHYL- (CAS 108-10-1)

Acute

Dermal

LD50 Rabbit > 16000 mg/kg

Inhalation

LC50 Rat 8.2 mg/l, 4 Hours

Oral

LD50 Rat 2080 mg/kg

Components	Species	Test Results
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2-PROPANOL, 2-METHYL- (CAS 75-65-0)

Acute

Oral

LD50 Rabbit 3.6 g/kg

Rat 3.5 g/kg

ACETIC ACID ETHYL ESTER (CAS 141-78-6)

Acute

Inhalation

LC50 Rat 16000 ppm, 6 Hours

LD50 Mouse 1500 ppm, 4 Hours

Rabbit 2500 ppm, 4 Hours

Rat 4000 ppm, 4 Hours



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SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

Components	Species	Test Results
Oral		
LD50	Mouse	0.44 g/kg
	Rabbit	4.9 g/kg
	Rat	11.3 ml/kg
		5.6 g/kg
BENZENE, METHYL- (CAS 108-88-3)		
Acute		
Dermal		
LD50	Rabbit	12124 mg/kg
		14.1 ml/kg
Inhalation		
LC50	Mouse	5320 ppm, 8 Hours
		400 ppm, 24 Hours
	Rat	26700 ppm, 1 Hours
		12200 ppm, 2 Hours
		8000 ppm, 4 Hours
Oral		
LD50	Rat	2.6 g/kg
CYCLOHEXANE (CAS 110-82-7)		
Acute		
Inhalation		
NOEL	Monkey	1243 ppm, 6 Hours
Oral		
LD50	Mouse	1300 mg/kg
	Rat	29820 mg/kg
ETHANOL (CAS 64-17-5)		
Acute		
Inhalation		
LC50	Mouse	39 mg/l, 4 Hours
	Rat	20000 ppm, 10 Hours



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SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

Components	Species	Test Results
Oral LD50	Dog	5.5 g/kg
	Guinea pig	5.6 g/kg
	Mouse	3450 mg/kg
	Rat	6.2 g/kg
HEXANE (CAS 110-54-3)		
Acute Inhalation LC50	Mouse	48000 ppm, 4 Hours
Oral LD50	Rat	24 mg/kg
	Wistar rat	49 mg/kg
METHANOL (CAS 67-56-1)		
Acute Dermal LD50	Rabbit	15800 mg/kg
Inhalation LC50	Cat	85.41 mg/l, 4.5 Hours 43.68 mg/l, 6 Hours
	Rat	64000 ppm, 4 Hours 87.5 mg/l, 6 Hours
Oral LD50	Dog	8000 mg/kg
	Monkey	2 g/kg
	Mouse	7300 mg/kg
	Rabbit	14.4 g/kg
	Rat	5628 mg/kg

* Estimates for product may be based on additional component data not shown.



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SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

Components	Species	Test Results
Skin corrosion/irritation		Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation		Causes serious eye irritation.
Respiratory or skin sensitization		
Respiratory sensitization		Not a respiratory sensitizer.
Skin sensitization		This product is not expected to cause skin sensitization.
Germ cell mutagenicity		May cause genetic defects.
Carcinogenicity		May cause cancer.
IARC Monographs. Overall Evaluation of Carcinogenicity		
2-PENTANONE, 4-METHYL- (CAS 108-10-1)		2B Possibly carcinogenic to humans.
BENZENE, METHYL- (CAS 108-88-3)		3 Not classifiable as to carcinogenicity to humans.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		
Not listed.		
Reproductive toxicity		Suspected of damaging fertility.
Specific target organ toxicity - single exposure		May cause damage to organs.
Specific target organ toxicity - repeated exposure		Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard		Not an aspiration hazard.
Chronic effects		Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity Toxic to aquatic life with long lasting effects.

Components	Species	Test Results
2-PENTANONE, 4-METHYL- (CAS 108-10-1)		
Aquatic		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 492 - 593 mg/l, 96 hours
2-PROPANOL, 2-METHYL- (CAS 75-65-0)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) 4607 - 6577 mg/l, 48 hours
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 6130 - 6700 mg/l, 96 hours



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SECTION 12. ECOLOGICAL INFORMATION (CONTINUED)

Components	Species	Test Results
ACETIC ACID ETHYL ESTER (CAS 141-78-6)		
Aquatic		
Fish	LC50	Indian catfish (Heteropneustes fossilis) 200.32 - 225.42 mg/l, 96 hours
BENZENE, METHYL- (CAS 108-88-3)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) 5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Coho salmon, silver salmon (Oncorhynchus kisutch) 8.11 mg/l, 96 hours
CYCLOHEXANE (CAS 110-82-7)		
Aquatic		
Fish	LC50	Fathead minnow (Pimephales promelas) 23.03 - 42.07 mg/l, 96 hours
ETHANOL (CAS 64-17-5)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) 7.7 - 11.2 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) > 100 mg/l, 96 hours
HEXANE (CAS 110-54-3)		
Aquatic		
Fish	LC50	Fathead minnow (Pimephales promelas) 2.101 - 2.981 mg/l, 96 hours
METHANOL (CAS 67-56-1)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) > 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) > 100 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

2-PENTANONE, 4-METHYL-	1.31
2-PROPANOL, 2-METHYL-	0.35
ACETIC ACID ETHYL ESTER	0.73
BENZENE, METHYL-	2.73
CYCLOHEXANE	3.44
ETHANOL	-0.31



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SECTION 12. ECOLOGICAL INFORMATION (CONTINUED)

Components	Species	Test Results
HEXANE		3.9
METHANOL		-0.77
Mobility in soil	No data available.	
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

DOT

UN number	UN1170
UN proper shipping name	ETHANOL SOLUTIONS
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	II
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
ERG number	127
DOT information on packaging may be different from that listed.	

SAFETY DATA SHEET

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Product Name: MAGNETIC HEAD CLEANER

SECTION 14. TRANSPORT INFORMATION (CONTINUED)

DOT



General information

IMDG Regulated Marine Pollutant.

SECTION 15. REGULATORY INFORMATION

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

2-PENTANONE, 4-METHYL- (CAS 108-10-1)	Listed.
ACETIC ACID ETHYL ESTER (CAS 141-78-6)	Listed.
BENZENE, METHYL- (CAS 108-88-3)	Listed.
CYCLOHEXANE (CAS 110-82-7)	Listed.
HEXANE (CAS 110-54-3)	Listed.
METHANOL (CAS 67-56-1)	Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes
	Delayed Hazard - Yes
	Fire Hazard - Yes
	Pressure Hazard - No
	Reactivity Hazard - No



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SECTION 15. REGULATORY INFORMATION (CONTINUED)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
METHANOL	67-56-1	4.5118

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

- 2-PENTANONE, 4-METHYL- (CAS 108-10-1)
- BENZENE, METHYL- (CAS 108-88-3)
- HEXANE (CAS 110-54-3)
- METHANOL (CAS 67-56-1)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

- 2-PENTANONE, 4-METHYL- (CAS 108-10-1) 6715
- BENZENE, METHYL- (CAS 108-88-3) 6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

- 2-PENTANONE, 4-METHYL- (CAS 108-10-1) 35 %WV
- BENZENE, METHYL- (CAS 108-88-3) 35 %WV

DEA Exempt Chemical Mixtures Code Number

- 2-PENTANONE, 4-METHYL- (CAS 108-10-1) 6715
- BENZENE, METHYL- (CAS 108-88-3) 594

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

- 2-PENTANONE, 4-METHYL- (CAS 108-10-1)
- 2-PROPANOL, 2-METHYL- (CAS 75-65-0)
- BENZENE, METHYL- (CAS 108-88-3)
- HEXANE (CAS 110-54-3)
- METHANOL (CAS 67-56-1)



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SECTION 15. REGULATORY INFORMATION (CONTINUED)

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPH. (CAS 64742-89-8)

US. Massachusetts RTK - Substance List

2-PENTANONE, 4-METHYL- (CAS 108-10-1)
2-PROPANOL, 2-METHYL- (CAS 75-65-0)
ACETIC ACID ETHYL ESTER (CAS 141-78-6)
BENZENE, METHYL- (CAS 108-88-3)
CYCLOHEXANE (CAS 110-82-7)
ETHANOL (CAS 64-17-5)
HEXANE (CAS 110-54-3)
METHANOL (CAS 67-56-1)

US. New Jersey Worker and Community Right-to-Know Act

2-PENTANONE, 4-METHYL- (CAS 108-10-1)
2-PROPANOL, 2-METHYL- (CAS 75-65-0)
ACETIC ACID ETHYL ESTER (CAS 141-78-6)
BENZENE, METHYL- (CAS 108-88-3)
CYCLOHEXANE (CAS 110-82-7)
ETHANOL (CAS 64-17-5)
HEXANE (CAS 110-54-3)
METHANOL (CAS 67-56-1)

US. Pennsylvania Worker and Community Right-to-Know Law

2-PENTANONE, 4-METHYL- (CAS 108-10-1)
2-PROPANOL, 2-METHYL- (CAS 75-65-0)
ACETIC ACID ETHYL ESTER (CAS 141-78-6)
BENZENE, METHYL- (CAS 108-88-3)
CYCLOHEXANE (CAS 110-82-7)
ETHANOL (CAS 64-17-5)
HEXANE (CAS 110-54-3)
METHANOL (CAS 67-56-1)

US. Rhode Island RTK

2-PENTANONE, 4-METHYL- (CAS 108-10-1)
2-PROPANOL, 2-METHYL- (CAS 75-65-0)
ACETIC ACID ETHYL ESTER (CAS 141-78-6)
BENZENE, METHYL- (CAS 108-88-3)
CYCLOHEXANE (CAS 110-82-7)
HEXANE (CAS 110-54-3)
METHANOL (CAS 67-56-1)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.



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SECTION 15. REGULATORY INFORMATION (CONTINUED)

- US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**
 2-PENTANONE, 4-METHYL- (CAS 108-10-1) Listed: November 4, 2011
- US - California Proposition 65 - CRT: Listed date/Developmental toxin**
 2-PENTANONE, 4-METHYL- (CAS 108-10-1) Listed: March 28, 2014
 BENZENE, METHYL- (CAS 108-88-3) Listed: January 1, 1991
 METHANOL (CAS 67-56-1) Listed: March 16, 2012
- US - California Proposition 65 - CRT: Listed date/Female reproductive toxin**
 BENZENE, METHYL- (CAS 108-88-3) Listed: August 7, 2009

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
 A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).



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SECTION 16: OTHER INFORMATION

HMIS® ratings	Health: 3* Flammability: 3 Physical hazard: 0
NFPA ratings	Health: 3 Flammability: 3 Instability: 0

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Product Name: MAGNETIC HEAD CLEANER

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Type:	Denatured Ethanol	Emergency Contact:	Chemtrec
Product Name:	MAGNETIC HEAD CLEANER	Phone:	(800) 424-9300
Part Number(s):	19-5302-A		

SECTION 2. HAZARD(S) IDENTIFICATION

***** EMERGENCY OVERVIEW ***:** Highly flammable liquid and vapor. May be fatal or cause blindness if swallowed. Can cause permanent injury to the eyes.

GHS Classification

Acute Tox. 3, Eye Irrit. 2, Flam. Liq. 2, STOT SE 2, STOT SE 3 NE, STOT SE 3 RTI, Skin Irrit. 2

Symbol(s) of Product



Signal Word

Danger

GHS HAZARD STATEMENTS

Flammable Liquid, category 2	H225	Highly flammable liquid and vapor.
Acute Toxicity, Oral, category 3	H301	Toxic if swallowed.
Skin Irritation, category 2	H315	Causes skin irritation.
Eye Irritation, category 2	H319	Causes serious eye irritation.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.
STOT, single exposure, category 3, NE	H336	May cause drowsiness or dizziness.
STOT, single exposure, category 2	H371	May cause damage to organs.

GHS PRECAUTIONARY STATEMENTS

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.



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SECTION 2. HAZARD(S) IDENTIFICATION (CONTINUED)

P264	Wash thoroughly after handling.
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/doctor/physician
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.
P308+P311	IF exposed or concerned: Call a POISON CENTER/doctor/physician
P312	Call a POISON CENTER/doctor/physician if you feel unwell.
P321	Specific treatment (see first aid section on this label).
P330	Rinse mouth.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use appropriate method to extinguish.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt. %</u>	<u>GHS Symbols</u>	<u>GHS Statements</u>
Ethyl alcohol	64-17-5	75-100	GHS02-GHS07	H225-312-315-319-335-336
Ethyl acetate	141-78-6	2.5-10	GHS02-GHS07-GHS08	H225-320-336-370
Methanol	67-56-1	2.5-10	GHS02-GHS06-GHS08	H225-300-332-370
4-methyl-2-pentanone	108-10-1	0.1-1.0	GHS02-GHS06	H225-319-331-335

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.



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SECTION 4. FIRST-AID MEASURES



FIRST AID - EYE CONTACT: Immediately flush eyes with water. Flush eyes with water for a minimum of 15 minutes, occasionally lifting and lowering upper lids. Get medical attention promptly. Remove contact lenses if worn. In case of irritation from airborne exposure, move to fresh air. If easy to do, remove contact lenses. Get medical attention if symptoms persist.

FIRST AID - SKIN CONTACT: Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately and clean shoes before reuse.

FIRST AID - INHALATION: Rescuers should put on appropriate protective gear. Remove from area of exposure. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep victim warm. Get immediate medical attention. To prevent aspiration, keep head below knees.

FIRST AID - INGESTION: Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

SECTION 5. FIRE-FIGHTING MEASURES

UNUSUAL FIRE AND EXPLOSION HAZARDS: Highly flammable liquid and vapor. May cause flash fire or explosion. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. Also, do not reuse container without commercial cleaning or reconditioning.

SPECIAL FIREFIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear. Avoid use of solid water streams. Use water with caution. Material will float and may ignite on surface of water. Water may be ineffective in fighting the fire. Water spray to cool containers or protect personnel. Use with caution. Water runoff can cause environmental damage. Dike and collect water used to fight fire.

EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam, Water Fog

SECTION 6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wear appropriate personal protective equipment. (See Exposure Controls / Personal Protection Section.) Eliminate all ignition sources. Prevent additional discharge of material if able to do so safely. Do not touch or walk through spilled material. Avoid runoff into storm sewers and ditches which lead to waterways. Ventilate spill area. Stay upwind of spill. A vapor suppressing foam may be used to reduce vapors. Collect spilled materials for disposal. Use only non-combustible material for clean-up. Use clean, non-sparking tools to collect absorbed materials. Remove from surface by skimming or with suitable absorbents. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.



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SECTION 7. HANDLING AND STORAGE



HANDLING: Use only in a well ventilated area. Avoid breathing vapor, fumes or mist. Avoid contact with eyes, skin, and clothing. Potential peroxide former. If peroxide formation is suspected, do not open or move container. Take precautionary measures against static discharge. When transferring, follow proper grounding procedures. Use spark-resistant tools. Do not load into compartments adjacent to heated cargo. Use explosion proof equipment. Always open containers slowly to allow any excess pressure to vent. Follow all MSDS/label precautions even after containers are emptied because they may retain product residues.

STORAGE: Keep away from heat, sparks, and flame. Store containers in a cool, well ventilated place. Keep container closed when not in use. Protect from direct sunlight.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with Occupational Exposure Limits

<u>Chemical Name</u>	<u>ACGIH TLV-TWA</u>	<u>ACGIH-TLV STEL</u>	<u>OSHA PEL-TWA</u>	<u>OSHA PEL-CEILING</u>
Ethyl alcohol	N.D.	1000.0 ppm	1000.0 ppm	N.D.
Ethyl acetate	400 ppm	N.D.	400 ppm	N.D.
Methanol	200 ppm	250 ppm	200 ppm	N.D.
4-methyl-2-pentanone	20 ppm	75 ppm	100 ppm	N.D.

Personal Protection



RESPIRATORY PROTECTION: Wear a MSHA/NIOSH approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.



SKIN PROTECTION: Wear impervious gloves to prevent contact with the skin. Wear protective gear as needed - apron, suit, boots.



EYE PROTECTION: Wear safety glasses with side shields (or goggles) and a face shield.



OTHER PROTECTIVE EQUIPMENT: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.



HYGIENIC PRACTICES: Do not eat, drink, or smoke in areas where this material is used. Avoid breathing vapors. Remove contaminated clothing and wash before reuse. Wash thoroughly after handling. Wash hands before eating.



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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, transparent liquid	Physical State:	Liquid
Odor:	TYPICAL	Odor Threshold:	N.D.
Density, g/cm³:	0.829	pH:	N.D.
Freeze Point, °F:	N.D.	Viscosity:	N.D.
Solubility in Water:	Partial	Explosive Limits, vol%:	1.4 - 36.0
Boiling Range, °F:	147 - 241	Flash Point, °F:	55
Evaporation Rate:	N.D.	Auto-ignition Temp., °F:	N.D.
Vapor Density:	N.D.	Vapor Pressure:	N.D.

(See "Other information" Section for abbreviation legend)

SECTION 10. STABILITY AND REACTIVITY

STABILITY: No Information

CONDITIONS TO AVOID: Avoid impact, friction, heat, sparks, flame and source of ignition.

INCOMPATIBILITY: Prevent contact with combustible materials. Keep separate from alkalies. Avoid contact with hydrogen peroxide, chromic anhydride, nitric acid, mixed nitric/sulfuric acid, nitrosyl perchlorate, permonosulfuric acids, potassium tert-butoxide, sodium hypobromite, chlorinated melamine. Prevent contact with halogens. Prevent contact with strong oxidizing agents. Keep away from acids.

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic gases/fumes are given off during burning or thermal decomposition. During combustion carbon monoxide may be formed. During combustion carbon dioxide may be formed. May form peroxides of unknown stability. Combustion can lead to the formation of formaldehyde. Combustion can lead to formation of formic acid.

HAZARDOUS POLYMERIZATION: No Information

SECTION 11. TOXICOLOGICAL INFORMATION



Information on Toxicological Effects

EFFECTS OF OVEREXPOSURE - INHALATION: Vapors can cause irritation of the respiratory tract. High concentrations can cause headache, nausea, weakness, lightheadedness, and stupor (CNS depression). May cause dizziness and drowsiness.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Causes skin irritation. Skin absorption may add significantly to the overall toxic effect. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).



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SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Moderately irritating to the eyes causing transient corneal injury. Symptoms may include stinging, tearing, redness and swelling.

EFFECTS OF OVEREXPOSURE - INGESTION: May be fatal or cause blindness if swallowed. Harmful or fatal if liquid is aspirated into lungs. Ingestion may cause gastrointestinal tract irritation. Ingestion may cause liver and kidney damage. Ingestion may result in nausea, vomiting, diarrhea and restlessness. May cause central nervous system depression. May cause headache. May cause dizziness and drowsiness and/or stupor.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Material is slowly eliminated from the body, therefore it can have cumulative toxicity effects with repeated exposures. Ethanol possesses properties that indicate a carcinogen hazard for human health but these are manifest only at doses associated with consumption of alcoholic beverages. In the context of an industrial chemical, these hazards do not warrant concern as these are not likely to result from the manufacture and use of ethanol and ethanol containing products as intended. Ethanol possesses properties that indicate a lactation hazard for human health but these are manifest only at doses associated with consumption of alcoholic beverages. In the context of an industrial chemical, these hazards do not warrant concern as these are not likely to result from the manufacture and use of ethanol and ethanol containing products as intended. Ethanol possesses properties that indicate a developmental hazard for human health but these are manifest only at doses associated with consumption of alcoholic beverages. In the context of an industrial chemical, these hazards do not warrant concern as these are not likely to result from the manufacture and use of ethanol and ethanol containing products as intended. Overexposure may cause kidney damage. Significant exposure to this chemical may adversely affect people with chronic disease of the respiratory system, central nervous system, kidney, liver, skin, and/or eyes.

Primary Route(s) of Entry: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Name according to EEC</u>	<u>Oral LD50, mg/kg</u>	<u>Dermal LD50, mg/kg</u>	<u>Vapor LC50, mg/</u>
64-17-5	Ethyl alcohol	>7,060	>1,440	>19,977.18
141-78-6	Ethyl acetate	>4934	>20000	>22.5
67-56-1	Methanol	5.628	15,800	20.0
108-10-1	4-methyl-2-pentanone	>2,080	>2,000	16.4

SECTION 12. Ecological Information

ECOLOGICAL INFORMATION: No Information



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MSDS Number: 324
 Revision Date: 06/24/2015
 Supersedes Date: 01/28/2013

SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Name: MAGNETIC HEAD CLEANER

SECTION 13. DISPOSAL CONSIDERATIONS



Always dispose of any waste in accordance with all local, state, and federal regulations.

DISPOSAL METHOD: Dispose of waste in accordance with all local, state and federal regulations.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wear appropriate personal protective equipment. (See Exposure Controls / Personal Protection Section.) Eliminate all ignition sources. Prevent additional discharge of material if able to do so safely. Do not touch or walk through spilled material. Avoid runoff into storm sewers and ditches which lead to waterways. Ventilate spill area. Stay upwind of spill. A vapor suppressing foam may be used to reduce vapors. Collect spilled materials for disposal. Use only non-combustible material for clean-up. Use clean, non-sparking tools to collect absorbed materials. Remove from surface by skimming or with suitable absorbents. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

SECTION 14. TRANSPORT INFORMATION

DOT Proper Shipping Name:	Ethanol solutions	Packing Group:	II
DOT Hazard Class:	3	Hazard SubClass:	No Information
DOT UN/NA Number:	UN1170	Resp. Guide Page:	127

SECTION 15. REGULATORY INFORMATION

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>
Methanol	67-56-1
4-methyl-2-pentanone	108-10-1



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SECTION 15. REGULATORY INFORMATION (CONTINUED)

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA components exist in this product.

U.S. State Regulations:

NEW JERSEY RIGHT-TO-KNOW:

The following materials are non-hazardous, but are among the top five components in this product.

<u>Chemical Name</u>	<u>CAS-No.</u>
Water	7732-18-5

PENNSYLVANIA RIGHT-TO-KNOW

The following non-hazardous ingredients are present in the product are at or greater than 3%.

<u>Chemical Name</u>	<u>CAS-No.</u>
Water	7732-18-5

CALIFORNIA PROPOSITION 65 CARCINOGENS

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

<u>Chemical Name</u>	<u>CAS-No.</u>
4-methyl-2-pentanone	108-10-1

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

<u>Chemical Name</u>	<u>CAS-No.</u>
Methanol	67-56-1

International Regulations: As follows -

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

WHMIS Class: No Information

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SECTION 16. OTHER INFORMATION

Revision Date: 10/2/2014 Supersedes Date: 8/28/2014

Datasheet produced by: EH&S - Regulatory Department

HMIS Ratings:

Health:	1	Flammability:	3	Reactivity:	0 - No Hazard	Personal Protection:	X
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Volatile Organic Compounds, gr/ltr: 742

DISCLAIMER: THE VOLATILE ORGANIC COMPOUND (VOC) CONTENT REPORTED HEREIN, IF ANY, IS BASED ON A MATERIAL VOC CALCULATION. NOTE THAT SEVERAL METHODS ARE USED FOR CALCULATING VOC CONTENT AND THAT STANDARDS/ REQUIREMENTS REGARDING VOC CONTENT VARY BY LOCATION/JURISDICTION. ACCORDINGLY, GC ELECTRONICS MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, REGARDING THIS MATERIAL'S COMPLIANCE WITH VOC STANDARDS/REQUIREMENTS APPLICABLE IN LOCATIONS/JURISDICTIONS WHERE THIS MATERIAL MAY BE SOLD OR USED.

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

- H225 Highly flammable liquid and vapor.
- H300 Fatal if swallowed.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H320 Causes eye irritation
- H331 Toxic if inhaled.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H370 Causes damage to organs.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

GHS02		GHS07	
GHS06		GHS08	

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined, N.I. - No Information



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SECTION 16. OTHER INFORMATION (CONTINUED)

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