

AUDIO VIDEO HEAD CLEANER

407C-LIQUID

# Safety Data Sheet

## Section 1: Product and Company Identification

### Product Identifier and Other Means of Identification

**Product Name:** Audio Video Head Cleaner**SDS Code:** 407C-Liquid**Related Part #** 407C-250ML, 407C-1L

### Recommended Use and Restriction on Use

**Use:** Magnetic tape head cleaner**Uses Advised Against:** Not available

### Details of Manufacturer or Importer

**Manufacturer**MG Chemicals  
1210 Corporate Drive  
Burlington, Ontario L7L 5R6  
CANADAMG Chemicals (Head Office)  
9347-193 Street  
Surrey, British Columbia V4N 4E7  
CANADA**☎** +1-800-340-0772**☎** +1-905-331-1396**FAX** +1-800-340-0773**FAX** +1-905-331-2682**E-MAIL** [support@mgchemicals.com](mailto:support@mgchemicals.com)**E-MAIL** [info@mgchemicals.com](mailto:info@mgchemicals.com)**WEB** [www.mgchemicals.com](http://www.mgchemicals.com)**E-MAIL** (Competent Person): [sds@mgchemicals.com](mailto:sds@mgchemicals.com)

### Emergency Phone Number

**For hazardous material incidents ONLY**—leaks, spills, fires, exposures or accidents  
USA or CANADA: Call CHEMTREC ☎: **+1-800-424-9300****For emergencies involving dangerous goods;** Collect 24/7CANADA: Call CANUTEC ☎: **+1-613-996-6666** or **\*666** on cellular phones

**AUDIO VIDEO HEAD CLEANER**

**407C-LIQUID**

**Section 2: Hazards Identification**

**Classification of Hazardous Chemical**

**GHS Categories**

Criteria	Category	Signal Word	Pictograms
Flammable liquid	2	Danger	Flame
Aspiration Hazard	1	Danger	Health
Reproductive Toxicity	2	Warning	Health
Eye Irritation	2	Warning	Exclamation
Skin Irritation	2	Warning	Exclamation
Specific target organ toxicity    Single exposure	3	Warning	Exclamation
Environmental Hazard                    Chronic Aqua. Tox.	3	<i>none</i>	No Symbol mandated

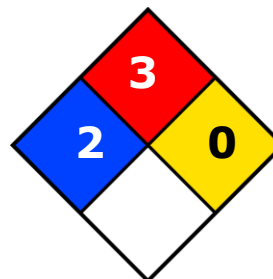
*Note:* The degree of severity is ranked within each hazard class from 1 (Highest Severity) to up to 5 (Lowest Severity). Severity categories do not allow comparisons between classes.

**Other Classifications**

**HMIS® RATING**

<b>HEALTH:</b>	<b>* 2</b>
<b>FLAMMABILITY:</b>	<b>3</b>
<b>PHYSICAL HAZARD:</b>	<b>0</b>
<b>PERSONAL PROTECTION:</b>	

**NFPA® 704 CODES**



*Approximate HMIS and NFPA Risk Ratings Legend:*




0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

*Section continued on the next page*

**AUDIO VIDEO HEAD CLEANER**

**407C-LIQUID**

**Label Elements**

<b>Signal Word</b>	<b>DANGER</b>
<b>Pictograms</b>	<b>Hazard Statements</b>
	H225: Highly flammable liquid and vapor
	H304: May be fatal if swallowed and enters airways H361: Suspected of damaging fertility or the unborn child
	H319: Causes serious eye irritation H315: Cause skin irritation H336: May cause dizziness or drowsiness
<i>No Symbol Mandated</i>	H412: Harmful to aquatic life with long lasting effects
<b>Prevention</b>	<b>Precautionary Statements</b>
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P201 + P202	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
P233	Keep container tightly closed.
P260 + P271	Do not breathe mist/vapors/spray/fumes. Use only outdoors or in well ventilated area.
243	Take action to prevent static discharges.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/eye protection/face protection.
P273	Avoid release to the environment.

*Section continued on the next page*

**AUDIO VIDEO HEAD CLEANER**

**407C-LIQUID**

Continued...

<b>Response</b>	<b>Precautionary Statements</b>
P370 + P378	In case of fire: Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish.
P301 + P310, P331	IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.
P303 + P361 + P364 + P352	IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash it before reuse. Wash with plenty of water/shower.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE/doctor if you feel unwell.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical attention.
<b>Storage</b>	<b>Precautionary Statements</b>
P403 + P235	Store in well ventilated place. Keep cool.
P405	Store locked up.
<b>Disposal</b>	<b>Precautionary Statements</b>
P501	Dispose of contents/container in accordance to local/regional/international regulations.

**Other Hazards**

<b>Other Criteria</b>	<b>Hazard Statements/Precautionary Statement</b>	<b>Signal Word</b>	<b>Pictograms</b>
Defats skin	Repeated exposure may cause skin dryness or cracking.	None	None

**AUDIO VIDEO HEAD CLEANER**

**407C-LIQUID**

**Section 3: Hazardous Ingredients**

CAS #	Chemical Name	%(weight)
67-63-0	propan-2-ol <sup>a)</sup>	50%
107-83-5	methyl-2-pentane	15-25%
96-14-0	methyl-3-pentane	5-10%
79-29-8	dimethyl-2,3-butane	5-10%
75-83-2	dimethyl-2,2-butane	3-7%
110-54-3	n-hexane	1-2%

a) Commonly known as isopropyl alcohol (IPA)

**Section 4: First-Aid Measures**

<i>Exposure Condition</i>	<i>GHS Code/Symptoms/Precautionary Statements</i>
<b>IF SWALLOWED</b>	P301 + P330 + P331, P312, 308 +P313
<b>Immediate Symptoms</b>	<i>abdominal pain, nausea, headaches, dizziness, drowsiness, vomiting</i>
<b>Response</b>	Immediately call a POISON CENTRE/doctor. Rinse mouth. Do NOT induce vomiting. If exposed or concerned: Get medical advice.
<b>IF ON SKIN (or hair)</b>	P303 + P361 + P364 + P352, P332 + P313
<b>Immediate Symptoms</b>	<i>irritation, dry skin, redness</i>
<b>Response</b>	IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash it before reuse. Wash with plenty of water/shower. If skin irritation occurs: Get medical advice/attention.
<b>IF INHALED</b>	P304 + P340, P312, P308 + P313
<b>Immediate Symptoms</b>	<i>cough, shortness of breath, dizziness, drowsiness, headaches</i>
<b>Response</b>	Remove person to fresh air (out of the contaminated zone) and keep comfortable for breathing. If feeling unwell: Call a POISON CENTRE/doctor. If exposed or concerned: Get medical advice.

*Section continued on the next page*

**AUDIO VIDEO HEAD CLEANER****407C-LIQUID***Continued...*

<b>IF IN EYES</b>	P305 + P351 + P338, P336 + P313
<b>Immediate Symptoms</b>	<i>irritation, redness, pain</i>
<b>Response</b>	Rinse cautiously with water for 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  If eye irritation persists: Get medical attention.

**Section 5: Fire-Fighting Measures**

<b>Extinguishing Media</b>	In case of fire: Use dry chemical, carbon dioxide, or chemical foam to extinguish. Use water spray to cool containers.
<b>Specific Hazards</b>	Vapors are heavier than air, and may travel to sources of ignition near the ground.
<b>Combustion Products</b>	Produces carbon oxides (CO, CO <sub>2</sub> ).
<b>Fire-Fighter</b>	Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

**Section 6: Accidental Release Measures**

<b>Personal Protection</b>	See personal protection recommendations in Section 8.
<b>Precautions for Response</b>	Remove all sources of ignition. Avoid breathing the mist/spray/vapors.
<b>Environmental Precautions</b>	Prevent spill from entering drains and waterways.
<b>Containment</b>	Contain with inert absorbent (such as soil, sand, vermiculite).
<b>Cleaning</b>	Collect liquid in a sealable, solvent-resistant container. Sprinkle inert absorbent compound onto spill, then sweep into the container. Wash spill area with soap and water to remove the last traces of residue.  <b>RECOMMENDATION:</b> Use a grounded stainless steel or carbon steel container or a solvent resistant plastic container.
<b>Disposal</b>	Dispose of spill waste according to Section 13.

**AUDIO VIDEO HEAD CLEANER**

**407C-LIQUID**

**Section 7: Handling and Storage**

- Prevention**      Keep out of reach of children.
- Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
- Take precautionary measures against static discharge.
- Keep away from heat/sparks/open flames/hot surfaces. No smoking. Do not spray on an open flame or other ignition source.
- Do not breathe vapors/mist/spray. Use only outdoors or in a well-ventilated area.
- Handling**      Wear protective gloves/clothing/eye protection.
- Wash hands thoroughly after handling.
- Storage**      Keep container tightly closed. Store in a well-ventilated area. Keep cool.
- Store locked up.

**Section 8: Exposure Controls/Personal Protection**

**Routes of Entry**

Eyes, ingestion, inhalation, and skin

**Substances with Occupational Exposure Limit Values**

Chemical Name	Country	Long Term Exposure Limits (PEL)	Short Term Exposure Limits (STEL)
propan-2-ol	ACGIH	200 ppm (TWA)	400 ppm
	U.S.A. OSHA PEL	400 ppm	—
	Canada AB	200 ppm	400 ppm
	Canada BC	200 ppm	400 ppm
	Canada ON	200 ppm	400 ppm
	Canada QC	400 ppm	500 ppm
methyl-2-pentane	ACGIH	500	Not established
	U.S.A. OSHA PEL	500 ppm	Not established
	Canada AB	500 ppm	1 000
	Canada BC	200 ppm	Not established
	Canada ON	500 ppm	1 000
	Canada QC	500 ppm	1 000

*Section continued on the next page*

**AUDIO VIDEO HEAD CLEANER**
**407C-LIQUID**
*Continued...*

<b>Chemical Name</b>	<b>Country</b>	<b>Long Term Exposure Limits (PEL)</b>	<b>Short Term Exposure Limits (STEL)</b>
methyl-3-pentane	ACGIH	500 ppm	Not established
	U.S.A. OSHA PEL	500 ppm	Not established
	Canada AB	500 ppm	1 000 ppm
	Canada BC	200 ppm	Not established
	Canada ON	500 ppm	1 000 ppm
	Canada QC	500 ppm	1 000 ppm
dimethyl-2,3-pentane	ACGIH	500 ppm	Not established
	U.S.A. OSHA PEL	500 ppm	Not established
	Canada AB	500 ppm	1 000 ppm
	Canada BC	200 ppm	Not established
	Canada ON	500 ppm	1 000 ppm
	Canada QC	500 ppm	1 000 ppm
dimethyl-2,2-pentane	ACGIH	500 ppm	Not established
	U.S.A. OSHA PEL	500 ppm	Not established
	Canada AB	500 ppm	1 000 ppm
	Canada BC	200 ppm	Not established
	Canada ON	500 ppm	1 000 ppm
	Canada QC	500 ppm	1 000 ppm
n-hexane	ACGIH	50 ppm	Not established
	U.S.A. OSHA PEL	50 ppm	Not established
	Canada AB	50 ppm	Not established
	Canada BC	20 ppm	Not established
	Canada ON	50 ppm	Not established
	Canada QC	50 ppm	Not established

*Note:* Ingredients are listed in descending weight contribution order (from greatest to least). The ACGIH<sup>1</sup>, OSHA, and Canadian provinces exposure limits were consulted. Limits from by RTECS database<sup>2</sup> of the Canadian Centre for Occupational Health and Safety (CCOHS) a data from suppliers' SDS were also consulted. Short term exposure limits (STEL) are for 15 min and long term permissible exposure limits (PEL) for 8 h.

*Section continued on the next page*



**AUDIO VIDEO HEAD CLEANER****407C-LIQUID****Engineering Controls**

**Ventilation** Keep airborne concentrations below exposure limits.

**Personal Protective Equipment**

**Eye protection** Wear appropriate protective eyeglasses or chemical safety goggles.

**Skin Protection** Use of protective gloves chemically resistant gloves.  
For incidental exposure, you may use nitrile gloves.  
For prolonged exposure, use polyvinyl alcohol (PVA) or Viton gloves and aprons.

**Respiratory Protection** If exposed to vapors or mist above the exposure limit, wear respirator such as a half-mask respirator with organic vapor cartridge.

**RECOMMENDATION:** Consult your local safety supply store to ensure your respirator has filter cartridges appropriate for the ingredients listed in section 3 of this MSDS, and that the respirator is fitted to the employee by a professional. Ensure vapor cartridges are stored in sealed plastic bags when not being used.

**General Hygiene Considerations**

Wash hands thoroughly with water and soap after handling.

**AUDIO VIDEO HEAD CLEANER**
**407C-LIQUID**
**Section 9: Physical and Chemical Properties**

<b>Physical State</b>	Liquid	<b>Lower Flammability Limit</b> <sup>a)</sup>	1%
<b>Appearance</b>	Colorless	<b>Upper Flammability Limit</b> <sup>a)</sup>	8%
<b>Odor</b>	Alcohol, mild hydrocarbon	<b>Vapor Pressure</b> <sup>a)</sup> <b>@20 °C</b>	13.6 kPa [102 mmHg]
<b>Odor Threshold</b>	Not available	<b>Vapor Density</b>	>2.1 (Air = 1)
<b>pH</b>	Not available	<b>Specific Gravity</b> <b>@25 °C</b>	1.79
<b>Freezing/Melting Point</b>	Not available	<b>Solubility in Water</b>	Partially soluble
<b>Boiling Point</b> <sup>b)</sup>	≥49 °C [≥121 °F]	<b>Partition Coefficient</b>	Not established
<b>Flash Point</b> <sup>b)</sup>	-29 °C [-20 °F]	<b>Auto-ignition Temperature</b> <sup>c)</sup>	≥234 °C [453 °F]
<b>Evaporation Rate</b>	>0.8 (ButAc = 1)	<b>Decomposition Temperature</b>	Not available
<b>Flammability (solid, gas)</b>	Not applicable	<b>Viscosity</b> <b>@40 °C</b>	<1 mm <sup>2</sup> /s

a) Values calculated using Raoult's Law and Le Chatelier principle for solvent components.

b) The values for the boiling point and closed cup flash point are based on the isohexane mixture components.

c) The auto-ignition value is based on n-hexane, which is the component with the lowest value.

**AUDIO VIDEO HEAD CLEANER****407C-LIQUID****Section 10: Stability and Reactivity**

<b>Reactivity</b>	Not available
<b>Chemical Stability</b>	Chemically stable at normal temperatures and pressures.
<b>Conditions to Avoid</b>	Flames, sparks, and other ignition sources; Extreme temperatures and direct sunlight
<b>Incompatibilities</b>	Strong oxidizing agents, strong acids, strong bases, powdered aluminum at $\geq 49$ °C [ $\geq 120$ °F]
<b>Polymerization</b>	Will not occur
<b>Decomposition</b>	Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5

**Section 11: Toxicological Information****Routes of Exposure**

Eye contact, Ingestion, Inhalation, and Skin contact

**Symptoms Summary**

<b>Eyes</b>	Causes serious eye irritation, tearing, redness or pain.
<b>Skin</b>	Causes skin irritation.
<b>Inhalation</b>	May cause nose, throat and lung irritation. Overexposure may lead to visual impairment and central nervous system effects such as dizziness, drowsiness, or weakness.
<b>Ingestion</b>	Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. See inhalation symptoms.
<b>Chronic</b>	Prolonged or repeated exposure may defat skin and cause skin dryness and cracking, and local redness and discomfort.  Ingestion or inhalation of material, mist, or vapor during pregnancy increases the chances fetal death and developmental defects.

*Section continued on the next page*

**AUDIO VIDEO HEAD CLEANER**

**407C-LIQUID**

**Acute Toxicity (Lethal Exposure Concentrations)**

<b>Chemical Name</b>	<b>LD50 oral</b>	<b>LD50 dermal</b>	<b>LC50 inhalation</b>
isopropyl alcohol	3 600 mg/kg Rat	12 800 mg/kg Rabbit	16 000 ppm 8 h Rat
methyl-2-pentane	Not available	Not available	3 125 ppm 4 h Rat <sup>a)</sup>
methyl-3-pentane	Not available	Not available	Not available
dimethyl-2,3-butane	Not available	Not available	Not available
dimethyl-2,2-butane	Not available	Not available	Not available
n-hexane	15 480 mg/kg Rat	>1.3 g/kg Rabbit <sup>a)</sup>	627 000 ppm 3 min Rat

Note: Representative toxicity data from by RTECS database of the Canadian Centre for Occupational Health and Safety (CCOHS)<sup>1</sup> data from supplier MSDS were also consulted.

a) Supplier MSDS

**Other Toxicological Effects**

<b>Skin corrosion/irritation</b>	Skin irritant
<b>Serious eye damage/irritation</b>	Serious eye irritant
<b>Sensitization</b> (allergic reactions)	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b> (risk of cancer)	Not classified or listed as a carcinogen by IARC, NTP, ACGIH, or CA Prop 65
<b>Mutagenicity</b> (risk of heritable genetic effects)	Based on available data, the classification criteria are not met.

*Section continued on the next page*

**AUDIO VIDEO HEAD CLEANER****407C-LIQUID**

<b>Reproductive Toxicity</b> (risk to sex functions)	Based on available data, the classification criteria are not met.
<b>Teratogenicity</b> (risk of fetus malformation)	N-hexane is found to be harmful fetus found in some animal studies.
<b>STOT-single exposure</b>	Inhalation of hexane isomers and propan-2-ol may affect the central nervous system causing drowsiness or dizziness
<b>STOT-repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Mixture is a class 1 aspiration hazard. It contain over 50% class 1 aspiration hazard components and has a mixture viscosity of <20.5 mm <sup>2</sup> /s at 40 °C.

**Section 12: Ecological Information**

The ecotoxicity of the mixture was estimated by the calculation method using the summation of classified ingredients. The IMDG Code criteria and the raw-material MSDS along with supporting data for the classification of registered substances from the European Chemical Agency database (<http://echa.europa.eu>) were used.

Isoalkanes are chronic category 2 aquatic toxicant based on similar mixtures of isoalkanes C6-C7 with <5% n-hexane that have a LC50 96 h of 11.4 mg/L for rainbow trout (*Oncorhynchus mykiss*), and an EL50 48 h of 3.0 mg/L water flea (*Daphnia magna*).

Based on available data, propan-2-ol does not meet the environmental toxicant classification with LC50 and EC50 >100 mg/L.

- Propan-2-ol has a minimal LC50 96 h of 9 640 mg/L for *Pimephales promelas* (fathead minnow); an EC50 24 h of 5 102 mg/L *Daphnia magna* (water flea); and an EC50 72 h of 2 000 mg/L *Desmodesmus subspicatus* (green algae).

**Acute Ecotoxicity**

Category 3

*GHS Code: Hazard Statement*

H402: Harmful to aquatic life

P273: Avoid release to the environment

P391: Collect spillage

*Section continued on the next page*

**AUDIO VIDEO HEAD CLEANER****407C-LIQUID****Chronic Ecotoxicity**

Mixtures of isoalkanes C6-C7 with <5% n-hexane suggest an EC50 >2 mg/L for fish using a QSAR model. For water flea (*Daphnia magna*) a NOELR 21 days of 1 mg/L and an EL50 of 1.6 mg/L.

Category 3

*GHS Code: Hazard Statement*

H412: Harmful to aquatic life with long lasting effects

**Biodegradability**

Not available

**Other Effects**

VOC (Regulated Volatile Organic Content) = 100% [720 g/L]

**Section 13: Disposal Information**

Dispose of contents in accordance with all local, regional, national, and international regulations.

**Section 14: Transport Information****Ground**

**Refer to TDG regulations** (Canadian Transportation of Dangerous Goods regulations); **USA DOT 49 CFR** (Parts 100 to 185) **Regulations.**

Sizes 1 liter and under

**Limited Quantity**



Sizes greater than 1 liter

**UN number:** UN1993

**Shipping Name:** Flammable Liquid, N.O.S. (Isopropanol, Hexanes)

**Class:** 3

**Packing Group:** II

**Marine Pollutant:** No



*Section continued on the next page*

**AUDIO VIDEO HEAD CLEANER****407C-LIQUID****Air****Refer to ICAO-IATA Dangerous Goods Regulations.**

Sizes 0.5 liter and under

**Limited Quantity**

Sizes greater than 0.5 liter

**UN number:** UN1993**Shipping Name:** Flammable  
Liquid, N.O.S. (Isopropanol,  
Hexanes)**Class:** 3**Packing Group:** II**Marine Pollutant:** No**Sea****Refer to IMDG regulations.**

Sizes 1 liter and under

**Limited Quantity**

Sizes greater than 1 liter

**UN number:** UN1993**Shipping Name:** Flammable  
Liquid, N.O.S. (Isopropanol,  
Hexanes)**Class:** 3**Packing Group:** II**Marine Pollutant:** No

**Note: Shipper must be appropriately trained and certified before involvement with the transport of dangerous goods.**

**AUDIO VIDEO HEAD CLEANER****407C-LIQUID****Section 15: Regulatory Information****Canada****WHMIS 1988 Classification**

B2 – Flammable Liquid;

D2A – Very Toxic Material (Teratogenicity/Embryotoxicity);

D2B – Toxic Material (Skin/Eye Irritation)

**Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)**

All hazardous ingredients are listed on the DSL/NDSL.

**Industry and Science Canada**

MG Labels products intended for the workplace to conform to WHMIS labeling regulations. Product identification, net quantity declaration, minimum printing type size heights, and packaging of this product are in compliance.

**Health Canada**

Products produced by MG Chemicals intended for retail display conform to the Canadian Consumer Labeling Regulations.

**USA****CAA** (Clean Air Act, USA)

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product contains between  $\leq 2\%$  of hexane (CAS# 110-54-3), which is listed as hazardous air pollutants.

**EPCRA** (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45)

This product contains  $\leq 50\%$  propan-2-ol (CAS # 67-63-0) and  $\leq 2.25\%$  n-hexane (CAS# 110-54-3; reportable quantity = 5000 lb), which are subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372

**TSCA** (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

**California Proposition 65** (Chemicals known to cause cancer or reproductive toxicity, Sept 2, 2011 revision, USA).

This product does not contain any of the listed substances.



**AUDIO VIDEO HEAD CLEANER****407C-LIQUID****Europe****RoHS**

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, or PBDE's, and complies with European RoHS regulations.

**WEEE**

This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.

**Section 16: Other Information**

**SDS Prepared by** Michel Hachey

**Date of Creation** 05 June 2015

**Supersedes** 22 May 2014

**Reason for Changes:** Correction to transport section and minor changes in conformity with HCS 2012 and WHMIS 2015.

**References**

- 1) ACGIH 2013 TLVs and BEIs: Based on the documentation of the threshold limit values for chemical substances and physical agents & biological exposure indices, American Conference of Governmental of Industrial Hygienist Cincinnati, OH (2013).
- 2) All toxicological data were checked against the RTECS (Registry of Toxic Effects of Chemical Substances®)

**Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists (USA)
EC50	Half maximal effective concentration
EL50	Half maximal effective loading
NOELR	No observable effect loading ratio
GHS	Globally Harmonized System of Classification of Labeling of Chemicals
LC50	Lethal Concentration 50%
LCLo	Lowest published lethal concentration
LD50	Lethal Dose 50%
PEL	Permissible Exposure Limit
STEL	Short-Term Exposure Limit
TCLo	Lowest published toxic concentration
TWA	Time Weighted Average
VOC	Volatile Organic Content

*Section continued on the next page*

**AUDIO VIDEO HEAD CLEANER****407C-LIQUID**

**Technical Queries** Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at [www.mgchemicals.com](http://www.mgchemicals.com).

Email: [support@mgchemicals.com](mailto:support@mgchemicals.com)

**Mailing Addresses** *Manufacturing & Support*  
1210 Corporate Drive  
Burlington, Ontario, Canada  
L7L 5R6

*Head Office*  
9347-193rd Street  
Surrey, British Columbia, Canada  
V4N 4E7

**Disclaimer** This material safety data sheet is provided as an information resource only. *M.G. Chemicals, Ltd.* believes the information contained herein is accurate and compiled from reliable sources. It is the responsibility of the user to query and verify any information seeming suspect where doubt on the validity may exist. The buyer assumes all responsibility of using and handling the product in accordance with local, regional, national, and international regulations.