

1 Identification

GHS Product Identifier

Product form: Mixture
 Trade name: Max Pro Contact Cleaner
 Product code: 2015, 2053

Recommended use of the chemical and restriction on use

Use of the substance/mixture: Electronic Cleaner

Supplier's details

Max Pro
 P.O. Box 9962
 Ft Lauderdale FL USA 33310

Tel.: 954-972-3338

Emergency phone number

CHEMTREC 24 Hour Emergency Response
 USA & Canada 800-424-9300

2 Hazard(s) identification

Classification of the substance or mixture

Flammable Aerosol: Category 1
 Gasses under pressure: Compressed gas
 Skin corrosion/irritation: Category 2
 Serious eye damage/eye irritation: Category 2A
 Reproductive toxicity: Category 2
 Specific target organ toxicity,
 single exposure: Category 3, narcotic effects
 Aspiration hazard: Category 1
 Hazardous to the aquatic
 environment, acute hazard: Category 2
 Hazardous to the aquatic
 environment, long-term hazard: Category 2

GHS label elements

Danger



Extremely flammable aerosol

Contains gas under pressure; may explode if heated

May be fatal if swallowed and enters airways

Causes skin irritation

Causes serious eye irritation

May cause drowsiness or dizziness

Suspected of damaging fertility. Suspected of damaging the unborn child.

Toxic to aquatic life

Toxic to aquatic life with long lasting effects

Obtain special instructions before use.

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

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

Do not spray on an open flame or other ignition source.

Do not pierce or burn, even after use.

IF SWALLOWED: Immediately call a POISON CENTER/doctor/DELETE

IF ON SKIN: Wash with plenty of water/DELETE

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/DELETE

Do NOT induce vomiting.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

Collect spillage.

Store in a well-ventilated place.

Store locked up.

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

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

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. call a POISON CENTRE/doctor if you feel unwell

Other hazards which do not result in classification

N/A

Note: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements above. The labeling above applies to industrial/professional products.

3 Composition/information on ingredients

Description	CAS Number	EINECS Number	%	Note
n-hexane	110-54-3		66.88	
SD Alcohol 40-B (Alcohol Denat.)(Lemon Flavor Extract, Pure)	64-17-5		5.67	
2-Propanol	67-63-0		0.22	
Cyclohexane	110-82-7		1.18	

Propane	74-98-6	6.75
n-Butane	106-97-8	19.3

4 First-aid measures

Description of necessary first-aid measures

First-aid measures general:	Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention. Call a POISON CENTER or doctor/physician.
First-aid measures after inhalation:	Cough. Remove to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact:	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact:	Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. Direct contact with the eyes is likely to be irritating. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion:	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Most important symptoms/effects, acute and delayed

Symptoms/injuries:	Suspected of damaging fertility or the unborn child. May cause genetic defects. May cause cancer. Causes damage to organs.
Symptoms/injuries after inhalation:	Shortness of breath.

Indication of immediate medical attention and special treatment needed, if necessary

No additional information available

5 Fire-fighting measures

Suitable extinguishing media

Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Specific hazards arising from the chemical

Fire hazard:	Extremely flammable gas. Extremely flammable aerosol.
Explosion hazard:	Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

Special protective actions for fire-fighters

Leaking gas fire:	Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. DO NOT fight fire when fire reaches explosives. Evacuate area.
Protection during firefighting:	Do not enter fire area without proper protective equipment, including respiratory protection.
Other information:	Aerosol level 3.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

General measures: Eliminate every possible source of ignition. No naked lights. No smoking. Isolate from fire, if possible, without unnecessary risk. Remove ignition sources. Use special care to avoid static electric charges.

6.1.1. For non-emergency personnel

Protective equipment: Gloves. Safety glasses.

Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection. Avoid breathing dust,fume,gas,mist, vapor spray.

Emergency procedures: Ventilate area.

Environmental precautions

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

Methods and materials for containment and cleaning up

For containment: Dam up the liquid spill.

Methods for cleaning up: Store away from other materials.

7 Handling and storage

Precautions for safe handling

Additional hazards when processed: Flammable gas. Hazardous waste due to potential risk of explosion. Pressurized container: Do not pierce or burn, even after use.

Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not spray on an open flame or other ignition source. Obtain special instructions . Do not handle until all safety precautions have been read and understood. Eliminate all ignition sources if safe to do so. Avoid breathing dust,fume,gas,mist,vapor spray. Do not breathe dust,fumes,gas,mist,vapor spray.

Hygiene measures: Wash affected areas thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Technical measures: Proper grounding procedures to avoid static electricity should be followed.

Storage conditions: Keep only in the original container in a cool, well ventilated place away from children.Keep container closed when not in use. Do not expose to temperatures exceeding 50 °C/ 122 °F. Keep in fireproof place.

Incompatible products: Strong bases. Strong acids.

Incompatible materials: Sources of ignition. Direct sunlight. Heat sources.

Storage area: Store in a well-ventilated place.

8 Exposure controls/personal protection

Control parameters

Exposure Limits

Component	ACIGH 2014 TLV (TWA)	ACIGH 2014 TLV (STEL)	OSHA PEL (TWA)	OTHER PEL
Cyclohexane	100 ppm 1050 mg/m ³ 180 mg/m ³ 50 ppm			1050 mg/m ³
Hexane	50 ppm 300 ppm 180mg/m ³ 50 ppm		1800 mg/m ³ 500 ppm	300 ppm 1800 mng/m ³ 500 ppm
2-Propanol		400 ppm 980 mg/m ³	980 mg/m ³ 1225 mg/m ³ 500 ppm	
Ethanol	200 ppm	1000 ppm 1900 mg/m ³	400 ppm 1900 mg/m ³ 1000 ppm	
Propane	Simple Asphyxiant	Simple Asphyxiant	1000 ppm	
Butane		1000 ppm		

Biological Limits

ACGIH BIOLOGICAL EXPOSURE INDICES

Component	Value	Determinant	Specimen	Sampling Time
2-Propanol	40 mg/l	Acetone	Urine	*
Hexane	0.4 mg/l	2,5-Hexanedion, without hyrolysis	Urine	*

Appropriate engineering controls

Appropriate engineering controls: Local exhaust venilation, vent hoods.

Personal protective equipment: Gloves. Safety glasses. Avoid all unnecessary exposure.



Hand protection: Wear protective gloves.

Eye protection: Chemical goggles or safety glasses.

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

Other information:

Do not eat, drink or smoke during use.

9 Physical and chemical properties

Physical and chemical properties

Physical state:	liquid
Appearance:	Clear, colorless liquid.
Color:	Colorless.
Odor:	Characteristic.
Odor threshold:	No data available
pH:	No data available
Relative evaporation rate (butyl acetate=1):	No data available
Melting point:	-62 °C Lowest Component
Freezing point:	No data available
Boiling point:	37 °C Lowest Component
Flash point:	< -18 °C Lowest Component
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Flammability (solid, gas):	No data available
Vapor pressure:	No data available
Relative vapor density at 20 °C:	No data available
Relative density	0.69
Solubility:	Insoluble in water.
Log Pow:	No data available
Log Kow:	No data available
Viscosity, kinematic:	0.83 cSt
Viscosity, dynamic:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available
Explosive limits:	No data available
VOC content:	40% (estimated)

10 Stability and reactivity

Reactivity

No additional information available

Chemical stability

Flammable gas. Flammable aerosol. Contains gas under pressure; may explode if heated. Extreme risk of explosion by shock, friction, fire or other sources of ignition.

Possibility of hazardous reactions

Not established

Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Open flame. Overheating.

Incompatible materials

Strong acids. Strong bases.

Hazardous decomposition products

Toxic fume. Carbon monoxide. Carbon dioxide.

11 Toxicological information

Toxicological (health) effects

Acute toxicity	May be fatal if swallowed and enters airways.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1 % are mutagenic or genotoxic
Carcinogenicity	Not classifiable as to carcinogenicity to humans.
Reproductive toxicity	Suspected of damaging fertility or the unborn child.
Specific target organ toxicity -single exposure	May cause drowsiness and dizziness.
Specific target organ toxicity -repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	May be fatal if swallowed and enters airways.
Chronic effects	Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.
<u>Propane</u>	
<i>Target Organs:</i>	No systemic or neurotoxic effects were noted in rats exposed to concentrations of propane as high as 12,000 ppm for 28 days.
<i>Reproductive Toxicity:</i>	No adverse reproductive or developmental effects were observed in rats exposed to propane; no observed adverse effect level = 12,000 ppm.
<u>n-Butane</u>	
<i>Target Organs:</i>	No systemic or neurotoxic effects were noted in rats exposed to concentrations of butane as high as 9,000 ppm for 28 days.
<i>Reproductive Toxicity:</i>	No adverse reproductive or developmental effects were observed in rats exposed to butane; no observed adverse effect level = 12,000 ppm.

Information on the likely routes of exposure

Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting
Skin Contact	Causes skin irritation
Eye Contact	Causes serious eye irritation
Ingestion	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Other information

Symptoms related to the physical, chemical and toxicological characteristics:

Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

12 Ecological information

Toxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Petroleum gases will readily evaporate from the surface and would not be expected to have significant adverse effects in the aquatic environment. Classification: No classified hazards.

Components		Species	Test Results
Cyclohexane (CAS 110-82-7)			
Aquatic			
Fish	LC50	Fathead minnow(Pimephales promelas)	23.03-42.07 mg/l, 96 hours
Hexane (CAS 110-54-3)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	2.101 - 2.981 mg/l, 96 hours
2-Propanol (CAS 67-63-0)			
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	>1400 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 mmg/l, 96 hours

Persistence and degradability

Cleaner

Persistence and degradability Not established.

n-hexane (110-54-3)

Persistence and degradability May cause long-term adverse effects in the environment.

2-propanol (67-63-0)

Persistence and degradability Not established.

The hydrocarbons in this material are expected to be inherently biodegradable. In practice, hydrocarbon gases are not likely to remain in solution long enough for biodegradation to be a significant loss process.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

2-PROPANOL	0.05
ETHANOL	-0.31
HEXANE	3.9
CYCLOHEXANE	3.44

Mobility in soil

Due to the extreme volatility of petroleum gases, air is the only environmental compartment in which they will be found. In air, these hydrocarbons undergo photodegradation by reaction with hydroxyl radicals with half-lives ranging from 3.2 days for n-butane to 7 days for propane.

Other adverse effects

Other information: Avoid release to the environment.

13 Disposal considerations

Disposal methods

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Container under pressure. Do not drill or burn even after use. Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

Additional information: Flammable vapors may accumulate in the container.

Ecology - waste materials: Avoid release to the environment.

14 Transport information

UN Number

US DOT (ground): UN1950, Aerosols, 2.1, Limited Quantity

ICAO/IATA (air): UN1950, Aerosols, 2.1, Limited Quantity

IMO/IMDG (water): UN1950, Aerosols, 2.1, Limited Quantity

UN Proper Shipping Name

Aerosols flammable, (each not exceeding 1 L capacity)

Transport hazard class(es)

2.1

15 Regulatory information

Safety, health and environmental regulations specific for the product in question

15.1. US Federal regulations

CLEANER

SARA Section 311/312 Hazard Classes Delayed (chronic) health hazard

Fire hazard
Immediate (acute) health hazard

15.2. International regulations

CANADA

CLEANER

WHMIS Classification

Class B Division 5 - Flammable Aerosol
Class B Division 2 - Flammable Liquid
Class D Division 2 Subdivision B - Toxic material causing other toxic effects

EU

No additional information available.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

No additional information available.

Classification according to Directive 67/548/EEC or 1999/45/EC

Carc. Cat. 2; R45
Muta. Cat. 2; R46
Repr. Cat. 3; R62
F+; R12
Xn; R20/21/22
Xn; R68/20/21/22

National regulations

No additional information available.

California Proposition 65: WARNING: This product can expose you to chemicals including Hexane which is known to the state of California to cause reproductive harm in males. For more information go to www.P65Warnings.ca.gov

16 Other information

Other information

Disclaimer: The information and recommendations contained herein are based upon tests believed to be reliable. However, the manufacturer/distributor of this product does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. The manufacturer/distributor assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.