





Issuing Date 12-Jan-2016

Revision Date 12-Jan-2016

Revision Number 0

# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

GHS product identifier			
Product Name	Electro Contact Cleaner		
Other means of identification			
Product Code(s)	EC-11		
UN-Number	UN1950		
Synonyms	Electro Contact Cleaner		
Recommended use of the chemical	and restrictions on use		
Recommended Use	An instant solvent and cleaner. Electro Contact Cleaner quickly removes grease, dust, oxidation and other contaminants from precision electronic instruments. Restores and maintains the original efficiency of all electronic instruments, eliminating noise caused by dust and dirt. Suggested Application: Alternators, distributors, regulators, relays, switches, contacts, timers, and buss bars.		
Uses advised against	No information available		
Supplier's details Supplier Address AGS Company P.O. Box 729 Muskegon, MI 49443 TEL: 800-253-0403			
Emergency telephone number			
Emergency Telephone Number	800-255-3924		
2. HAZARDS IDENTIFICATION			
Classification			
This product is considered hazardous by the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).			

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Germ Cell Mutagenicity	Category 1B
Reproductive Toxicity	Category 2
Specific Target Organ Systemic Toxicity (Single Exposure)	Category 3

Aspiration Toxicity	Category 1
Flammable aerosols	Category 1
Gases under pressure	Compressed gas

GHS Label elements, including precautionary statements

### **Emergency Overview**

Signal Word	Danger	
Hazard Statements		
Causes skin irritation		
<ul> <li>Causes serious eye irr</li> </ul>		
May cause genetic def		
	g fertility or the unborn child	
<ul> <li>May cause drowsiness</li> <li>May be fatal if swallow</li> </ul>		
	ed and enters allways	
• Extremely flammable a	aerosol	
	essure; may explode if heated	
Appearance Colorless	. Physical State Aerosol.	Odor Alcohol.

# Prevention

- · Wash face, hands and any exposed skin thoroughly after handling.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Use personal protective equipment as required.
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Use only outdoors or in a well-ventilated area.
- Keep away from heat/sparks/open flames/hot surfaces No smoking.
- Do not spray on an open flame or other ignition source
- · Pressurized container: Do not pierce or burn, even after use.
- Wear protective gloves/protective clothing/eye protection/face protection.

#### **General Advice**

- · Specific treatment (see supplemental instructions on the administration of antidotes on this label)
- If exposed or concerned: Get medical attention/advice

### Eyes

• IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

• If eye irritation persists: Get medical advice/attention.

#### Skin

- IF ON SKIN: Wash with plenty of soap and water.
- If skin irritation occurs: Get medical advice/attention.
- Take off contaminated clothing and wash before reuse.

# Inhalation

• IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

#### Ingestion

- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- Do NOT induce vomiting.

#### Storage

- · Store locked up.
- Store in a well-ventilated place. Keep container tightly closed.
- Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
- Protect from sunlight

#### Disposal

• Dispose of contents/container to an approved waste disposal plant.

#### Hazard Not Otherwise Classified (HNOC)

Not applicable.

# Other information

Toxic to aquatic life with long lasting effects.

## **3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### Synonyms

#### Electro Contact Cleaner

Chemical Name	CAS-No	Weight %	Trade secret
Naphtha	8030-30-6	40-70	*
2-Methylpentane	107-83-5	30-60	*
Propane	74-98-6	10-30	*
Isopropyl alcohol	67-63-0	10-30	*
Butane	106-97-8	7-13	*
Hexane	110-54-3	1-5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

#### Description of necessary first-aid measures

Eye ContactIF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if<br/>present and easy to do. Continue rinsing. Keep eye wide open while rinsing. If symptoms<br/>persist, call a physician.Skin ContactWash off with warm water and soap. If symptoms persist, call a physician. Wash

	contaminated clothing before reuse.
Inhalation	Move to fresh air.

Ingestion Call a physician or Poison Control Center immediately. Do NOT induce vomiting. Rinse mouth.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects No information available.

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

Notes to Physician Treat symptomatically.

# **5. FIRE-FIGHTING MEASURES**

#### Suitable Extinguishing Media

Use: Carbon dioxide (CO<sub>2</sub>). Dry chemical. Foam.

Unsuitable Extinguishing Media CAUTION: Use of water spray when fighting fire may be inefficient.

#### Specific Hazards Arising from the Chemical

Flammable. Pressurized container: Do not pierce or burn, even after use. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

Explosion Data	
Sensitivity to Mechanical Impact	Yes.
Sensitivity to Static Discharge	Yes.

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Personal precautions, protective equipment and emergency procedures
---------------------------------------------------------------------

**Personal Precautions** ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Contents under pressure. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded.

Environmental Precautions

**Environmental Precautions** Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for Containment A vapor suppressing foam may be used to reduce vapors.

Methods for Cleaning Up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Non-sparking tools should be used. Sweep up and shovel into suitable containers for disposal.

## 7. HANDLING AND STORAGE

Precautions for safe handling

Handling

Use only in an area containing flame proof equipment. Use only in area provided with appropriate exhaust ventilation. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Contents under pressure. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid breathing vapors. Remove and wash contaminated clothing before re-use.

Conditions for safe storage, including any incompatibilities

StorageKeep away from open flames, hot surfaces and sources of ignition. Keep container tightly<br/>closed in a dry and well-ventilated place. Contents of a container may be under pressure<br/>and may release dangerous aerosol vapors when opened.

Incompatible Products Strong acids. Strong bases. Strong oxidizing agents.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

# **Control parameters**

### **Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Naphtha 8030-30-6	-	TWA: 100 ppm TWA: 400 mg/m³ (vacated) TWA: 100 ppm	IDLH: 1000 ppm TWA: 100 ppm TWA: 400 mg/m <sup>3</sup>
2-Methylpentane 107-83-5	STEL: 1000 ppm other than n-Hexane TWA: 500 ppm other than n-Hexane	(vacated) TWA: 400 mg/m <sup>3</sup> (vacated) TWA: 500 ppm (vacated) TWA: 1800 mg/m <sup>3</sup> (vacated) STEL: 1000 ppm (vacated) STEL: 3600 mg/m <sup>3</sup>	Ceiling: 510 ppm 15 min Ceiling: 1800 mg/m <sup>3</sup> 15 min TWA: 100 ppm other than n-Hexane TWA: 350 mg/m <sup>3</sup> other than
Propane 74-98-6	TWA: 1000 ppm	TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup>	n-Hexane IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup>
Isopropyl alcohol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m <sup>3</sup> (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m <sup>3</sup> (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m <sup>3</sup>	IDLH: 2000 ppm 10% LEL TWA: 980 mg/m <sup>3</sup> TWA: 400 ppm STEL: 500 ppm STEL: 1225 mg/m <sup>3</sup>
Butane 106-97-8	TWA: 1000 ppm	(vacated) TWA: 800 ppm (vacated) TWA: 1900 mg/m <sup>3</sup>	TWA: 800 ppm TWA: 1900 mg/m <sup>3</sup>
Hexane 110-54-3	TWA: 50 ppm S*	TWA: 500 ppm TWA: 1800 mg/m <sup>3</sup> (vacated) TWA: 50 ppm (vacated) TWA: 180 mg/m <sup>3</sup> (vacated) STEL: 1000 ppm (vacated) STEL: 3600 mg/m <sup>3</sup>	IDLH: 1100 ppm TWA: 50 ppm TWA: 180 mg/m³

### Appropriate engineering controls

### **Engineering Measures**

Showers Eyewash stations Ventilation systems

### Individual protection measures, such as personal protective equipment

Eye/Face Protection Skin and Body Protection Respiratory Protection	Safety glasses with side-shields. Wear protective gloves/clothing. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical State	Aerosol.	Appearance	Colorless.
Odor	Alcohol.	Odor Threshold	No information available.
Property	<u>Values</u>	<u>Remarks/ - Meth</u>	<u>nod</u>
pH	No data available	None known	
Melting Point/Range	No data available	None known	
Boiling Point/Boiling Range	No data available	None known	
Flash Point	No data available	None known	
Evaporation rate	No data available	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limits in Air upper flammability limit	No data available		

lower flammability limit	No data available	
Vapor Pressure	No data available	None known
Vapor Density	No data available	None known
Specific Gravity	0.62-0.78	None known
Water Solubility	15%	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/wate	erNo data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	No data available	None known
Flammable Properties	Extremely flammable aerosol.	
Explosive Properties	No data available	
Oxidizing Properties	No data available	
Other information		
VOC Content (%)	100	

# **10. STABILITY AND REACTIVITY**

### **Reactivity**

No data available.

### **Chemical stability**

Fire Hazard Heating may cause an explosion Keep away from heat and sources of ignition.

### Possibility of hazardous reactions

None under normal processing.

#### **Hazardous Polymerization**

Hazardous polymerization does not occur.

### **Conditions to avoid**

Keep away from open flames, hot surfaces and sources of ignition.

#### **Incompatible materials**

Strong acids. Strong bases. Strong oxidizing agents.

### Hazardous decomposition products

None known based on information supplied.

# **11. TOXICOLOGICAL INFORMATION**

### Information on likely routes of exposure

Product Information Inhalation	There is no data available for this product Aerosol expected to be irritating based on components May cause drowsiness and dizziness based on components. Avoid breathing vapors or mists.
Eye Contact	Expected to be an irritant based on components
Skin Contact	Expected to be an irritant based on components
Ingestion	Potential for aspiration if swallowed.

#### Symptoms related to the physical, chemical and toxicological characteristics

#### Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization	No information available.
Mutagenic Effects	May cause genetic defects.
Carcinogenicity	Contains no ingredients above reportable quantities listed as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropyl alcohol		Group 3		

### Legend:

# IARC: (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to its Carcinogenicity to Humans

Reproductive Toxicity	Suspected of damaging fertility or the unborn child	
STOT - single exposure	May cause drowsiness or dizziness	
STOT - repeated exposure	No information available.	
Aspiration Hazard	No information available.	

### Numerical measures of toxicity - Product

Acute Toxicity	
The following values are calculated	based on chapter 3.1 of the GHS document:
LD50 Oral	6443 mg/kg; Acute toxicity estimate
LD50 Dermal	46043 mg/kg; Acute toxicity estimate
Inhalation	
gas	1099665
Vapor	5638.9 mg/L; Acute toxicity estimate

### **12. ECOLOGICAL INFORMATION**

#### **Ecotoxicity**

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Naphtha 8030-30-6	EC50 72 h: = 4700 mg/L (Pseudokirchneriella subcapitata)	LC50 96 h: = 9.2 mg/L static (Lepomis macrochirus)		
Naphtha, petroleum, hydrotreated light 64742-49-0				LC50 96 h: = 2.6 mg/L (Chaetogammarus marinus)
Isopropyl alcohol 67-63-0	EC50 96 h: > 1000 mg/L (Desmodesmus subspicatus) EC50 72 h: > 1000 mg/L (Desmodesmus subspicatus)	LC50 96 h: = 11130 mg/L static (Pimephales promelas) LC50 96 h: = 9640 mg/L flow-through (Pimephales promelas) LC50 96 h: > 1400000 µg/L (Lepomis macrochirus)		EC50 48 h: = 13299 mg/L (Daphnia magna)
Hexane 110-54-3		LC50 96 h: 2.1 - 2.98 mg/L flow-through (Pimephales promelas)		EC50 24 h: > 1000 mg/L (Daphnia magna)

### Persistence and Degradability No information available.

**Bioaccumulation** 

Chemical Name	Log Pow

Propane		2.3	
Isopropyl alcohol		0.05	
Butane			
Other Adverse Effects No information available.			
	13. DISPOSAL CO	ONSIDERATIONS	
Waste Disposal Methods	Dispose of contents/container in accordance with local regulation This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).		
Contaminated Packaging	Do not re-use empty containers.		
	14. TRANSPORT	INFORMATION	
DOT UN-Number Proper shipping name Hazard Class Description Emergency Response Guide Number	UN1950 AEROSOLS, FLAMMABLI 2.1 UN1950, Aerosols, flamma 126	E able, (each not exceeding 1 L capacity), 2.1, Marine Pollutant	
ICAO UN-Number Proper shipping name Hazard Class Description	UN1950 Aerosols 2.1 UN1950, Aerosols, 2.1		
IATA_ UN-Number Proper Shipping Name Hazard Class ERG Code Description	UN1950 Aerosols, flammable 2.1 10L UN1950, Aerosols, flamma	able, 2.1	
IMDG/IMO UN-Number Proper Shipping Name Hazard Class Subsidiary Class EmS No. Description	UN1950 Aerosols 2 See SP63 F-D, S-U UN1950, Aerosols, 2.1 (Se	ee SP63), (12°C c.c.), Marine Pollutant	

# **15. REGULATORY INFORMATION**

International Inventories TSCA DSL

Complies Complies

## Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

# U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Hexane	110-54-3	3	1.0

### SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	Yes
Reactive Hazard	No

#### Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Hexane	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

## U.S. State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals.

## U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Naphtha	Х	X	Х		
2-Methylpentane	Х	X	Х		
Propane	Х	Х	Х	-	Х
Isopropyl alcohol	Х	Х	Х		Х
Butane	Х	Х	Х		Х
Hexane	Х	Х	Х	Х	Х

### U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION								
NFPA_	Health Hazard 2	Flammability 4	Instability 2	Physical and Chemical Hazards -				
<u>HMIS</u>	Health Hazard 2	Flammability 4	Physical Hazard 2	Personal Protection X				
Prepared By	Product \$ 23 British Latham, 1-800-57							
Issuing Date								
Revision Date Revision Note	12-Jan-2 Initial Re							

#### General Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet