Date of issue : 27-Mar-2019

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Name: MISUMI PARTS CLEANER SPRAY

Chemical Product Name:	AEROSOL TYPE　CLEANING FLUID
Name of Manufacture / Supplier:	MISUMI Corporation
Name of Section:	VONA MRO Division
Address:	Iidabashi First Bldg.,5-1, Koraku 2-chome,
	Bunkyo-ku, Tokyo,112-8583, JAPAN
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2. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE / MIXTURE: Mixture

INGREDIENTS AND COMPOSITION:

		Chemical formula	CAS No.	COMPOSITION Mass %
Isohexane		C6H14	107-83-5 , 96-14-0	55 ～ 65
Ethyl alchol		C2H5OH	64-17-5	10 ～ 20
Liquefied petroleum gas(Propellant)	Propane	C3H8	74-98-6	20 ～ 30
	Butane	C4H10	106-97-8 , 75-28-5	
Carbon dioxide (Propellant)		CO2	124-38-9	1 ～ 4

3. HAZARDS IDENTIFICATION

CLASS NAME OF HAZARDOUS CHEMICALS FOR SDS IN JAPAN : Flammable liquids, Gases

PHYSICAL AND CHEMICAL HAZARD	Extremely flammable gases are combined.
	Vapors may catch fire and explode.
ADVERSE HUMAN HEATH EFFECTS	Harmful by inhalation and in contact with skin.
ENVIRONMENTAL EFFECTS	No relevant information found

4. FIRST-AID MEASURES

EYE CONTACT	Gently rinse the affected eyes with clean water for at 15minutes. And refer for medical attention.
SKIN CONTACT	Remove all contamination with clothes and wash the affected area withwater and soap. If irritation persists, or abnormal conditions are found, arrange examination and treatment by a physician.
INHALATION	In case of large inhalation, remove the victim from the contamination tofresh air. Keep the victims warm and quiet. If breathing is weak, irregularor has stopped, administer artificial respiration. Arrange examination andtreatment by a physician as soon as possible. In case of vapor, gas,remove the victim from the contamination to fresh air and arrange examination and treatment by a physician as soon as possible.
INGESTION	Do not induce vomiting. Arrange examination and treatment by a physician as soon as possible.

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5. FIRE-FIGHTING MEASURES

1. In case of small fire, use dry chemical powder or carbon dioxide.
2. In case of large fire, form spray is effective to stop flow-in of air.
3. Water may be effective for cooling, but may not effect extinguishment.
4. Keep personnel removed from and upwind fire.
5. Firefighters should were proper protective equipment.
6. Evacuate personnel to safe area.
7. Use extreme caution, as aerosol containers may rupture.

SPATIAL HAZARDS WITH REGARDS TO FIRE-FIGHTING MEASURES:

Toxic gases (carbon monoxide) will foam upon combustion. Pay attention to burst of container due to heat.

EXTINGUISHING MEDIA:

Dry chemical powder, form of carbon dioxide.

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6. ACCIDENTAL RELEASE MEASURES

1. Shut off all sources of ignition.
2. In case of leakage from containers, treat from upwind. Leaked part shall be kept upward and treat after complete discharge of inside gas.
3. Prepare proper fire-extinguishing measures.

●For the case of large release:

Evacuate non essential personnel

Wear proper protective equipment

Prevent spreads by sand, etc. and lead spill to safe zone and take up and place in container as much as possible.

●For the case of small release:

Absorb spill with sand, clothes and then place in waste containers and completely removed contamination by clothes.

7. HANDLING & STORAGE

HANDLING：

1. Keep away from flame, fire, or other heat.
2. Avoid contact with personnel
3. Pay caution for ventilation and ignition.
4. When stored under high temperature, container may burst.
5. Wear proper protective equipment for prevention of skin, or eye contact.
6. Pay caution for ventilation and source of ignition, because evaporation is heavier than air and trends to contaminate.
7. Follow all regulation in your country.

STORAGE：

1. Store in cool, dry, well-ventilated location.
2. Keep away from heat and all possible source of ignition.
3. Keep away from reach of child.
4. Keep away from sunlight.
5. Keep at temperature below 40℃
6. Follow all regulation in your country.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

CONTROL PARAMETER:

COMPOSITION		Isohexane	Ethyl alcohol
ACGIH	TLV-TWA	500ppm	---
	TLV-STERL	1,000ppm	1,000ppm

ENGINEERING MEASURES:

1. For prolong works inside, provide ventilation equipment or close the source of ignition.
2. For use of large quantity outside, electric equipment shall be of explore-proof and earthed
3. Make available in work area emergency shower, hand wash, eye wash and clearly indicate the location thereof.

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION	For prolonged works or use of large quantity, wear chemical cartridge respirator (with an organic vapor cartridge)
EYE PROTECTION	Wear safety glasses.
PROTECTIVE WEAR	Wear long-sleeve working wear.
OTHERS	Wear electric-conductibility boots

9. PHYSICAL & CHEMICAL PROPERTIES

Stock solution（Mixture）:

APPEARANCE:	Transparent
PHYSICAL STATE, FORM:	Liquid
COLOR:	Colorless
DENSITY:	0.67 g/cm3
FLASH POINT:	<-30℃
SOLUBILITY IN ORGANIC SOLVENT:	Miscible
SOLUBILITY IN WATER:	Slightly soluble

10. PHYSICAL HAZARDS (STABILITY & REACTIVITY)

Stock solution（Mixture）:

AUTO IGNITION TEMPERATURE:	Over 227℃
UPPER AND LOWER EXPLOSION LIMIT:	UPPER:19 - LOWER:1.2 vol%
FLAMMABILITY:	Flammable liquid
SPONTANEOUS COMBUSTIBILITY:	Will not occur
REACTIVITY WITH WATER:	Stable
OXIDIZIBILITY:	Will not occur
SELF-REACTIVITY:	Will not occur
STABILITY & REACTIVITY:	This material is stable. Hazardous decomposition and polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

CORROSIVELY AND IRRITANT PROPERTIES No relevant information found.

ALLERGENIC AND SENSITIZING EFFECTS: No relevant information found.

ACUTE TOXICITY:

LD 50	Isohexane	20～30g/kg
	Ethyl alcohol	7,060mg/kg

CHRONIC TOXICITY: No relevant information found.

CARCINOGENIC EFFECTS: No relevant information found.

MUTAGENIC EFFECTS: No relevant information found.

EFFECTS ON THE REPRODUCTIVE SYSTEM: No relevant information found.

TERATOGENIC EFFECTS: No relevant information found.

12. ECOLOGICAL INFORMATION

BIODEGRADABILITY: No relevant information found.

BIOACCUMULATION: No relevant information found.

FISH TOXICITY: No relevant information found.

13. DISPOSAL CONSIDERATION

1. Do not throw the container into fire, as the container contains flammable gases, organics solvent of extremely high flammability.
2. Do not dump into sewers , on the ground or into any body of water.
3. Disposal shall be in accordance with the concerned rules and regulation.
4. Follow all regulation in your country.

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14. TRANSPORT INFORMATION

UN Class:	Class2.1	(Compressed gas)
UN No.:	1950	(AEROSOLS / maximum 1 liter)

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15. REGULATORY INFORMATION

Follow all regulation in your country.

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16. OTHER INFORMATION

All materials may present unknown hazard and should be used in caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.
