Hazard category

MISUMI PARTS CLEANER MPCL840

SAFETY DATA SHEET(SDS)

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Misumi parts cleaner (MISUMI MPCL840)

MISUMI(THAILAND)CO., LTD. ADDRESS: 300/24 MOO1 EASTERN SEABOARD INDUSTRIAL ESTATE SOI 5, T. TASITH, APLUAKDAENG, RAYONG 21140 THAILAND Tel:(+66)038-959-200

Section 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Sterling : Mixtures : $\sqrt{}$

Product Name: Misumi parts cleaner (MISUMI MPCL840)

Chemical Composition:

Chemical Name	FORMULA	CAS No.	CONTENTS(WT%)
Iso-hextane	C6H14	107-83-5	60.54
absolute ethyl alcohol	C2H6O	64-17-5	15.13
propane	С3Н8	74-98-6	23.38
Carbon Dioxide	CO2	124-38-9	0.95

Section 3 - HAZARDS IDENTIFICATION



Risk Category: The 2.1 kind of flammable liquids.

Classification of the substance or mixture

Physical Hazard

: Flammable liquid and vapour

Health Hazard

: Skin corrosion / Irritation	Category 2
: Serious eyes damage / Eyes irritation	Category 2/2A
: Reproductive toxicity	Category 2
: Specific target organ systemic toxicity-Single exposure	Category 3
Environmental Hazards	
: Acute aquatic toxicity	Category 1
: Chronic aquatic toxicity	Category 2

Section 4 - FIRST AID MEASURES

Skin contact: Remove pollution of dress, with soap and water flushed skin.

Eye contact: Flush the eye continuously with running water, if need, Transport to hospital or doctor. Inhalation: Rapidly from the scene to fresh air. To keep respiratory tract unobstructed. If breathing is difficult, give oxygen. If respiratory arrest, immediately artificial respiration, medical treatment. Ingestion: Drink enough water, vomiting, and send to hospital or doctor.

Section 5 - FIRE FIGHTING MEASURES

Hazardous characteristics: Highly flammable, its vapor and air can form explosive mixture. Meet flame burning explosion heat easily. Contact with oxidant can occur strong reaction, and even cause combustion. In the fire, and heating vessel explosion. The steam heavy than air, it can speed to far away, if meet fire can leads burning.

Harmful combustion products: CO2, CO

EXTINGUISHING MEDIA: Foam, powder, carbon dioxide, sandy soil. Water fire invalid

Section 6 - ACCIDENTAL RELEASE MEASURES

Emergency Treatment: Quickly leak contaminated areas evacuated personnel to a safe area and isolation and strict restrictions on access. Cut off fire. Suggest emergency treatment personnel wear self-positive pressure respirator wear fire protective clothing. Cut off the leak source as possible. Prevent into the sewage ditch having restricted space. Small leakage: with sandy soil, activated carbon or other inert material absorption residual fluid. And also, can use the noncombustible made of dispersing agent emulsion scrub, lotion dilution in the waist water system.

Leak of a large amount of: Construct cofferdam or dig a whole asylum; Covered with foam, reduce steam disasters use explosion-proof pump transferred to the tank lorry or special collector inside, recovery or shipped to the wasted disposal site disposal.

Section 7 - HANDLING AND STORAGE

Operation Note: With closed operation, comprehensive ventilation.

The operator must have been trained and strictly comply with the operating rules. Suggest operating personnel to wear self-priming filter type gas master (half mask), Chemical safety goggles, antistatic work clothes and rubber oil resistant gloves.

Away from the fire source, and no smoking in working area.

Use explosion-proof type of ventilation system and equipment.

To prevent the steam leakage into the workplace air.

Avoid contact with oxidant.

When filling, should control flow rate, no more than 3m/s, and a grounding device to prevent electrostatic accumulation.

Moving light packing light when unloaded to prevent damage to packaging and containers.

Equipped with corresponding varieties and amount of fire fighting equipment and leakage emergency processing equipment.

Empty containers and no residual injuring.

Storage note: store in a cool, well-ventilated area.

Away from fire and heat sources.

Warehouse temperature should not be more than 30 degree.

Keep the container seal.

Separate with oxidant, edible chemical, and do not mixed store.

Use explosion-proof lighting ventilation facilities.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE CONTROLS

None assigned. Refer to individual constituents.

PERSONAL PROTECTION

Ventilation: Use local ventilation. Skin protection: Not necessary under normal use. Eye protection: Not necessary under normal use. Respiratory protection: Not necessary under normal use

ODOUR SAFETY FACTOR (OSF)

OSF=0.068 (CARBON DIOXIDE) Exposed individuals are NOT reasonably expected to be warned, by smell, that the Exposure Standard is being exceeded.

Odour Safety Factor (OSF) is determined to fall into either Class C, D or E.

The Odour Safety Factor (OSF) is defined as:

OSF= Exposure Standard (TWA) ppm/ Odour Threshold Value (OTV) ppm

Classification into classes follows:

	OSF	Description
Class		
А	550	Over 90% of exposed individuals are aware by smell that the Exposure Standard
		(TLV-TWA for example) is being reached, even when distracted by working activities
В	26-550	As "A" for 50-90% of persons being distracted
С	1-26	As "A" for less than 50% of persons being distracted
D	0.18-1	10-50% of persons aware of being tested perceive by smell that the Exposure Standard
		is being reached
Е	<0.18	As "D" for less than 10% of persons aware of being tested

EXPOSURE STANDARDS FOR MIXTURE

Composite Exposure Standard for Mixture (TWA) (mg/m3): mg/m3

INGREDIENT DATA

ISOHEXANES:

hexane, isomers (excluding n-hexane)

ES TWA: 500 ppm, 1760 mg/m3; STEL: 1000 ppm, 3500 mg/m3

TLV TWA: 500 ppm, 1760 mg/m3; STEL: 1000 ppm, 3500 mg/m3

MAK value: 200 ppm, 700 mg/m3

MAK Category II Peak Limitation: For substances with systemic effects and with a half-life in humans of less than two hours.

Allows excursions of 2 times the MAK value, for 30 minutes (on average), four times per shift.

MAK Group IIc: Substances with MAK Values but no pregnancy risk group

classification. These are substances which have been investigated but for which

no information regarding possible damage to the foetus/embryo was found. Mention calls attention to the absence of adequate data.

MAK values, and categories and groups are those recommended within the Federal Republic of Germany

IDLH Level : 5000 ppm

The TLV-TWA is thought to be protective against nausea, headache, upper respiratory tract irritation and CNS depression. The STEL is added to prevent objective depression of the CNS. The lower value ascribed to n-hexane is due to the neurotoxicity of its metabolites, principally 5-hydroxy-2-hexanone and 2,5-hexanedione. It is considered unlikely that other hexanes follow the same metabolic route. It should be noted however that the n-hexane TLV-TWA (50 ppm, 176 mg/m3) also applies to commercial hexane having a concentration of greater than 5% n-hexane.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance and properties	colorless liquid	
Smell	free from extraneous odor	
рН	5.0-6.0	
Relative density	0.665±0.010	
Viscosity (25°C)	11~13	
Flash point(℃)	$1^{\circ}C$ (closed cup EXP)	
Light point (°C)	N/A	
Volatility	Volatilize	

Section 10: CHEMICAL STABILITY AND REACTIVITY INFORMATION

Stability: Stable Prohibited items: strong oxidizer. Avoid contact conditions: flame high fever Polymerization hazard: can not occur.

Section 11: TOXICOLOGICAL INFORMATION

Acute oral toxicity: $LD50 > 2000 mg/kg_{\circ}$ Acute Dermal Toxicity: $LD50 > 2000 mg/kg_{\circ}$ Acute Inhalation Toxicity Test: $LC50 > 20 mg/L_{\circ}$ Skin corrosion/irritating: the rabbit skin irritation. Eye damage/irritating: the rabbit eyes with severe irritation. Acute toxicities to fish: LC50 > 100 mg/L.

Section 12: ECOLOGICAL INFORMATION

May cause long-term effects in the environment. Slightly hazardous to water.

Section 13: WASTE TREATMENT

Waste properties: hazardous wastes. Waste processing method. Inverted POTS, press down nozzle with old newspaper or the waste bin to remove residual gas can or should hand in local treatment of dangerous goods department to process. Wasted matter need attention: the empty can do not drop into fire after use

Section14: TRANSPORTATION INFORMATION

UN No: 1950 The correct name of the transportation: Aerosol Dangerous goods category: 2.1 Package label:II Packing style: paper carton, tinplate can Handing information: Dangerous cargo

Section 15: LAW INFOMATION

Hazardous chemical materials safety management regulations(State council order no. 344) The dangerous goods name table (GB12268-2012) The classification of dangerous goods and goods number (classified, under GB6944-2012) The dangerous chemical safety specifications written regulations (GB16483-2008) The commonly used the classification of dangerous chemicals and mark (GB13690-2009) Comply with local regulations

Section 16: OTHER INFORMATION

None in particular