

## MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification:

Product Name: METAL CLEAN MISUMI CODE No.: METACL420  
 Manufacturer: AUDEC CO., LTD.  
 No.7 Shimokawa Bldg., 19-10 Higashimagome  
 2-Chome, Ota-ku, Tokyo, Japan 143-0022  
 Emergency Phone: 03-3774-5259  
 Fax Phone: 03-3776-0881

## 2. Composition/Information on Ingredients(See Section 3 for exposure guidelines)

Character of Substitute: Mixture

Chemical Names : Blended with Hexane, Ethyl Alcohol, LPG, Methanol,  
 Isopropyl Alcohol.

Ingredient	Hexane	Ethyl Alcohol	LPG	Methanol	Isopropyl Alcohol
Content	49	9	39	2	1
Chemical Formula	$C_6H_{14}$	$C_2H_5OH$	....	$CH_3OH$	$(CH_3)_2CHOH$
Official Notice					
Reference No.	2-6	2-202	—	2-201	2-207
CAS No.	110-54-3	64-17-5	—	67-56-1	67-63-0
UN NO.	1208	1170	1075	1230	1219

## 3. Hazardous Identification

(Classification) Acute Toxicant Substance and Pressure Gas

(Dangerousness) Fire & Explosion Inducement;  
 The Hexane being used as raw material is flammable liquid. And the LPG being used for jet material, easily explodes. Since the LPG is heavier than air, it always stays at lower part of the place.

[Toxicity]

The vapor irritates the eyes, nose or throat and anesthetic effect. Acute poisoning may result if large amounts of the highly concentrated vapor is inhaled in a short time.

#### 4. First Aid Measures

**Eyes:** Flush eyes, including under the eyelids, with large amount of water. If irritation persist, seek medical Attention.

**Skin:** Wash thoroughly with mild soap and water.

**Ingestion:** Give copious amount of water or preferably milk and seek medical attention.

**Inhalation:** Remove to fresh air. Seek medical attention if symptoms persist.

#### 5. Fire Fighting Measures

Cut off combustion source to the fire and extinguish it using a fire extinguishing agent. Also, cool down nearby tanks, building, etc., using a water spray to prevent the fire from spreading.

Extinguishing the fire from windward and wear a respirator as necessary.

Extinguishing Media: Dry chemical or CO<sub>2</sub> or foam

Flash Point: -104~-73°C(LPG)

Auto-Ignition Temp.: 460~550°C(LPG)

Flammable Limits LFL: 1.8~9.5 (LPG)

#### Unusual Fire &

#### Explosive Hazards:

Vapors are heavier than air and can travel along the ground to remote ignition source.

**Fire Fighting Equipment:** Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals.

**Additional Notes:** N/A

## 6. Accidental Release Measures

In case of small amount of leakage, collect it in an empty container by absorbing with earth or sand and wash off the remains with a large amount of water. In case of large amount of leakage, prevent it from flowing with earth or sand, lead it to a safe place, cover the surface with form, etc. and, if possible, collect it in a container. Wash off the remains with large amounts of water. In this case, make sure that it should not be drained to a river, etc.

## 7. Handling and storage

**Handling:** Wear protective gear to avoid inhalation and prevent it from coming in contact with eyes, skin or clothing. Work from windward if possible. Keep it away from high temperature substances, spark or flame. Prevent it from coming in contact with strong acid chemicals. Take measures against static electricity and wear conductive work clothing and shoes. Use up all before disposing of it. Keep children away from the work site.

**Storage:** Avoid direct sunlight and store it where temperature does not rise over 40°C. Do not allow oxidizing or organic hyperacid substances nearby.

**Transportation:** Use a container which can prevent temperature from rising over 40°C.

## 8. Exposure Control/Personal Protection

Respiratory Protection: Organic Vapor type  
 Ventilation: Local exhaust, Mechanical type.  
 Protective Glove: Rubber or Plastic recommended.  
 Eye Protection: Chemical workers goggles.  
 Wear: Long sleeve clothing.

## 9. Physical and Chemical Properties

Appearance:	Transparent and Colorless	Odor:	Peculiar Smell
Physical State:	Liquid	pH:	N/A
Vapor Pressure:	N/A	Boiling Point:	59-61°C Hexane
Vapor density :	1.8-2.5(LPG)	Freezing Point:	-1.1°C
Solubility in Water:	Very small quantity	Specific Gravity:	0.658(15/4°C)
Evaporation Rate:	Not determined	Melting point:	Under -98°C

## 10. Stability and Reactivity

Stability: This product is stable under all normal conditions of storage.  
 Hazardous polymerization will not occur.

Incompatibility: Oxidizing material can cause a reaction.

Hazardous Decomposition Products: None

## 11. Disposal Considerations

Consult local, state and federal regulations for compliance.

**12. Other Information**

All reasonable care has been taken in the preparation of the information contained herein, the manufacturer extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.