



GHS-0067E

## SAFETY DATA SHEET

PRODUCT NAME KEM AQUA Solvent FAT

Data of issue 06/26/2012

Date of revision 11/08/2012

## 1 Identification of the substance or mixture and the supplier

Product name: KEM AQUA Solvent FAT  
 Name of supplier: Kyoto Electronics Manufacturing Co., Ltd.  
 Address: 68 Ninodan-cho, Shinden, Kisshoin, Minami-ku, Kyoto, Japan  
 Division: Quality Assurance Department  
 Phone: +81-75-691-4121  
 Fax: +81-75-691-4127  
 Emergency phone No.: +81-75-691-4125  
 MSDS No. GHS-0067E

## 2 Hazard identification

## GHS hazard class and category

Physical hazards;	Flammable liquids:	Category 3
	Pyrophoric liquids:	Not classified
Health hazards;	Acute toxicity (oral):	Category 4
	Skin corrosion/irritation:	Category 1A
	Eye damage/irritation:	Category 1
	Germ cell mutagenicity:	Category 2 or more
	Carcinogenicity:	Category 2 or more
	Toxic to reproduction:	Category 1
	Specific target organ systemic toxicity (single exposure):	Category 1 (Central nervous system, Visual organ, Systemic toxicity, Liver, Kidney)
Environmental hazards;	Specific target organ systemic toxicity (repeated exposure):	Category 3 (Narcotic)
	hazardous to the aquatic environment -Acute hazard:	Category 1 (Central nervous system, Visual organ, Liver, Kidney, Respiratory tracts)
	hazardous to the aquatic environment -Cronic hazard	Category 2 or more

Other hazard identification are not shown above because of the reasons below;  
 Not applicable / Classification not possible

Label elements

Pictogram



Signal word:

Danger

Hazard statements:

Flammable liquid and vapour  
 Toxic swallowed  
 Causes severe skin burns and eye damage  
 Suspected of causing genetic defects  
 Suspected of causing cancer  
 May damage fertility or the unborn child  
 Cause damage to organs (Central nervous system, Visual organ, Systemic toxicity, Liver, Kidney)  
 May cause respiratory irritation; or May cause drowsiness and dizziness  
 Cause damage to organs (Central nervous system, Visual organ, Liver, Kidney, Respiratory tracts) through prolonged or repeated exposure  
 Toxic to aquatic life  
 Toxic to aquatic life with long lasting effects

Precautionary statements:

Prevention

Keep container tightly closed. Keep away from ignition sources such as heat/sparks/open flame. –No smoking. Wear protective gloves/clothing/eye/face protection. Ground/bond container and receiving equipment. Use explosion–proof. Take precautionary measures against static discharge. Use only non–sparking tools.  
 Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.  
 Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.  
 Do not breathing dust/fume/gas/mist/vapours/spray.  
 Use only outdoors or in a well–ventilated area.  
 Avoid release to the environment.

Response	<p>In case of fire, use for extinction appropriate media.</p> <p>IF SWALLOWED: Immediately call POISON CENTRE or doctor/physician. Rinse mouth. Do NOT induce vomiting.</p> <p>IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.</p> <p>IF IN EYE: Rinse cautiously with water for several minutes. Remove contact lenses. If present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor/physician.</p> <p>IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTRE or doctor/physician.</p> <p>If exposed or concerned: Get medical attention/ advice.</p> <p>Get medical attention/advice if you feel unwell.</p> <p>Collect spillage.</p>
Storage	<p>Store locked up.</p> <p>Store in cool/well-ventilated place.</p>
Disposal	<p>Dispose of contents and container in accordance with regulation.</p>

### 3 Composition/Information on ingredients

Substance/Mixture: Mixture

Ingredient name	Composition (%)	Chemical formula	CAS No.
Chloroform	80-90	CHCl <sub>3</sub>	67-66-3
Methanol	10-20	CH <sub>3</sub> OH	67-56-1
2-(Methylamino)pyridine	1-5	C <sub>6</sub> H <sub>8</sub> N	4597-87-9
Sulfur dioxide	<1	SO <sub>2</sub>	7446-09-5

### 4 First-aid measures

Inhalation:	Move victim to fresh air. If irritation persists, transport to a hospital immediately.
Skin contact:	Wash affected area with soap and water. Get medical attention if irritation occurs.
Eye contact:	In case of contact with eyes, irrigate with water for 15 minutes, carefully separating the eyelids to ensure that water reaches all parts. Seek medical advice, especially if irritation occurs or symptoms persist.
Ingestion:	Rinse mouth, give plenty of water to dilute the substance. Transport to a hospital immediately.
Most important symptoms:	No specific remarks.
Protections for first-aid persons:	In case of first-aid, rescuer should wear proper protections according to situations.

### 5 Fire-fighting measures

Extinguishing media: Carbon dioxide, dry chemical powder, alcohol resistant foam, water

Incompatible extinguishing media: Pressurized water

Specific hazards arising from the chemical (and with regard to fire-fighting measures): When burned, product forms smoke and toxic fumes, gases or vapours.

Specific fire-fighting measures: Fight the fire from a windward direction.

Special protective equipment and precautions for fire-fighters: Fire fighters should wear an approved self-contained breathing apparatus and full protective clothing.

**6 Accidental release measures**

Personal precautions, protective equipment and emergency procedures: Wear proper protective equipment. If indoors, keep the area ventilated in use. If outdoors, must be used at windward side. Let the person evacuate from downwind side.

Environmental precautions: Attention should be given not to cause damage to the environment by flowing of spillage to rivers.

Measures and materials for containment and clean up: In case of leakage, collect in an airtight container and dispose of it properly as industrial waste.

**7 Handling and storage**

Precautions for safe handling:

Countermeasure technique(s): Use only in well-closed facilities or local exhaust area. Remove sources of sparks and ignition. Take precautionary measures against static discharges.

Preventive measures: The working area must be ventilated well in use. Emitted vapour or dust must not be breathed.

Safety measures/ incompatibility: Do not shock, overturn, drop, or drag containers.

Conditions for safe storage, including any incompatibilities:

Recommendation for storage: Keep away from direct sunlight. Must be stored indoors. The room must be kept well-ventilated. Must be stored under room temperature. In case of storage, air tightened container must be used.

Recommendation on container and packaging materials: Glass

**8 Exposure controls/Personal protection**

Appropriate engineering controls: Keep source tightly closed or install local exhaust ventilation. Provide shower and vanity unit nearby and make clear the location of these.

	Chloroform	Methanol	Sulfur dioxide
Control value	3ppm	200ppm	Not established.
Adopted value ACGIH	TWA : 10ppm (2005)	TWA : 200ppm STEL : 250ppm(2004)	TWA : 2ppm STEL : 5ppm(2004)

Individual protection measures, such as personal protective equipment (PPE):

Respiratory protector:	Wear positive pressure self-contained breathing apparatus (SCBA). Respirator for organic vapour.
Hand protection:	Wear impervious glove made from chloroprene, as appropriate.
Eye/face protection:	Wear protective eyeglasses or chemical safety goggles.
Skin and body protector:	To prevent any contact, wear impervious clothing such as apron, boots, or whole-body suits made from chloroprene, as appropriate.

## 9 Physical and chemical properties

Appearance, color:	Colorless and Clear liquid
Odor:	Chloroform odor
pH	No data available
Melting point/freezing point	No data available
Boiling point	No data available
Flash point	51.8C (C.O.C) Non-flammable
Auto-ignition temperature:	No data available
Upper/lower flammability or explosive limits:	No data available
Vapour pressure:	No data available
Vapour density (Air = 1):	No data available
Specific gravity (Density):	1.277 (20C)
Solubility	No data available
Octanol/water partition coefficient (log Pow)	No data available
Decomposition temperature:	No data available
Viscosity:	0.51cst (20C)

## 10 Stability and reactivity

Chemical stability:	Stable under normal storage conditions.
Possibility of hazardous reactions:	When heated strongly, may product toxic gases.
Conditions to avoid:	Not specified
Incompatible materials:	No data available
Hazardous decomposition products:	No data available

## 11 Toxicological information

No data for this product. For reference, the information of each ingredient is as follows.

	Chloroform	Methanol	Sulfur dioxide
Acute toxicity -oral LD50(mg/kg)	(rat) 635	(human) 1400	-
-skin	-	(rat) 7939	-
-inhalation LC50(ppm)	-	(rabbit) 15800	-
Skin corrosion/irritation	Category1A-1C	Classification not possible	Classification not possible
Eye damage/irritation	Category1	Category2A-2B (rabbit)	Category2A (human)
Respiratory or Skin Sensitization	Classification not possible	Classification not possible	Classification not possible
Germ cell mutagenicity	Category2	Not classified	Classification not possible
Carcinogenicity	G2(IARC)	Classification not possible	A4(ACGIH)
Toxic to reproduction	Category2	Category1B	Classification not possible
STOT- single exposure	Category1,Category3	Category1,Category3	Category1
STOT- repeated exposure	Category1	Category1	Category1
Aspiration toxicity	Classification not possible	Classification not possible	Classification not possible

## 12 Ecological information

No data for this product. For reference, the information of each ingredient is as follows.

	Chloroform	Methanol	Sulfur dioxide
Acute toxicity -oral LD50(mg/kg)	(rat) 635	(human) 1400	-
-skin	-	(rat) 7939	-
-inhalation LC50(ppm)	-	(rabbit) 15800	-
Skin corrosion/irritation	Category1A-1C	Classification not possible	Classification not possible
Eye damage/irritation	Category1	Category2A-2B (rabbit)	Category2A (human)
Respiratory or Skin Sensitization	Classification not possible	Classification not possible	Classification not possible
Germ cell mutagenicity	Category2	Not classified	Classification not possible
Carcinogenicity	G2(IARC)	Classification not possible	A4(ACGIH)
Toxic to reproduction	Category2	Category1B	Classification not possible
STOT- single exposure	Category1,Category3	Category1,Category3	Category1
STOT- repeated exposure	Category1	Category1	Category1
Aspiration toxicity	Classification not possible	Classification not possible	Classification not possible

## 13 Disposal considerations

Contact a licensed professional waste disposal service to dispose of this material. Comply with all country, national and local regulations. Do not dump this product into sewers, on the ground or into any body of water.

## 14 Transport information

Basic classification information for the transporting/shipment:

UN Number:	2929
UN Proper shipping name:	Toxic liquid, flammable, organic, n.o.s.
Class or Division:	6.1/3
Packing group:	II

Special precautions which a user needs to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises:

- Protection from direct sun light in transportation, and confirm the container does not leak.
- Carefully load it onto a transporter without dropping, overturning or damaging so that it will stably stays on the transporter.

## 15 Regulatory information

Follow all laws and regulations in your country.

## 16 Other information

Bibliography:  
NITE GHS-DB

## Disclaimer

For R&D use only. Not for drug, household or other uses.



11/08/2012

#### Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.