

# MATERIAL SAFETY DATA SHEET

Date : Dec.18, 2009

Revised Date of the Latest Version : Sep. 7, 2011

## 1. Product and Company Identification

### «Material Identification»

Product Name : Chukoh Flo<sup>®</sup> Adhesive Tapes  
Applicable Product Number : API-114 series

### «Company Identification»

Company Name : CHUKOH CHEMICAL INDUSTRIES, Ltd.  
Headquarters' Address : ATT New Tower 10F, 2-11-7, Akasaka, Minato-ku, Tokyo, JAPAN  
Phone: 81-3-6230-4417 (Export Development Dept.)  
Fax: 81-3-6230-4446 (Export Development Dept.)

## 2. Abstract of Hazardousness

«Classification of the Product» : Not applicable  
«Dangerousness» : None  
«Hazardousness» : None  
«Environmental Impact» : See Article of Ecological Information

## 3. Composition/ Information on Ingredients

Substance or Preparation : Preparation  
Main composition and contents. :

Component		Polyimide	Adhesive Material of silicone group
Content		44 ~ 80%	20 ~ 56%
Reference No. in gazetted list in Japan (CSCL Act & ISH Act)		7-748	——
CAS No.		Nondisclosure	——
Chemical Formula		——	——
Notifiable Substance	Industry Safety & Health Act	Not applicable	Not applicable
	PRTR Act	Not applicable	Not applicable

We attach paper, PVC, PET as releasing paper to our adhesive tapes in some case.

## 4. First Aid Measures

Eye Contact : Not occur in normal handling. In case of eye contact with its dust, flush eyes immediately with plenty of water. If he/she has an inflamed eye or an itch eye, seek medical attention.

Skin contact : No adverse effects expected. However, if he/she feels irritation, please wash attached portion with soap and water. If he/she gets inflamed, seek medical attention.

Inhalation : Not occur in normal handling. If the worker inhales gases produced by heating or burning the resin, move him/her to the place where there is a fresh air. After that, seek medical attention, if necessary.

Accidental Ingestion : Not occur in normal handling. In case swallowed, wash out mouth.

Protection of emergency measures : If necessary, wear protective equipment such as gloves and goggles.

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## 5. Fire Fighting Measures

This product is self-firefighting capability, as such, under normal conditions does not ignite or catch fire danger.

«Extinguishing Media»

Water, Foam, Chemical powder, Carbon dioxide fire extinguishers, may be used accordingly.

«Specific fire fighting methods»

When a fire breaks out, cut the combustibles off immediately and extinguish the fire with appropriate Extinguishing media shown below.

«Protection of fire-fighting operation»

If necessary, wear proper protective equipment (gloves, glasses, masks, etc.).

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## 6. Accidental Release Measures

In normal conditions, there is no possibility of leakage. However, it will be possible to cover the floor piece of film.

«Personal precautions»

Note that you do not like the eyes and skin.

«Environmental precautions»

Treated as industrial waste.

«Removal method»

Gathered together into a collection sweep.

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## 7. Handling and Storage

«Handling»

- Pay attention to the film edge in order not to be cut the skin.
- Products during transport, attention to physical damage due to falling.
- In order to generate static electricity when handling, take measures to prevent static electricity accident.
- During high temperature processing, it is desirable to wear a protective mask for organic solvent.
- If necessary, wear protective equipment such as gloves and goggles.

«Storage»

- Direct sunlight, away from heat and moisture, store in cool dark place. And combustible materials must be stored separately.
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## 8. Exposure Controls/ Personal Protection

«Engineering Controls»

No necessary.

«Limitation of dust density»

No limit

«Special Attention to the equipment»

Because it may cause toxic gases at high temperature processing, it provided facilities such as local exhaust ventilation.

«Protective equipment»

Protective equipment of eye : Goggles should be worn.

Protective equipment of skin and body : Wear long-sleeved work clothes and should wear protective gloves.

Protective equipment of respiratory : During high temperature processing, it is desirable to wear a protective mask for organic solvent.

Other : If you carry heavy loads, it is desirable to wear safety shoes.

## 9. Physical/ Chemical Properties

«Physical Data»

Appearance	: light brown color
Boiling Point	: None
Melting Point	: None
Vapor Pressure	: None
Specific Gravity at 20°C	: 1.4g/cm <sup>3</sup>
Volatile	: There are less than 1 percent volatile.
Flash point	:None
Ignition point	:None
Explosion limit	:None

«Chemical Data»

Solubility	: Insoluble in water
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## 10. Stability and Reactivity

Stability	: Stable in room temperature
Reactivity	:No Self-reactivity, Explosivity
Explosion Limits	: None
Conditions to be avoided	: High temperature, acid and alkali degradation.
Hazardous decomposition products	: The decomposition at temperatures higher than 400°C, CO,CO <sub>2</sub> , NO <sub>x</sub> could occur.
Dust explosibility	:None
Other	: A self-extinguishing.

## 11. Toxicological Information

Acute Toxicity	:NO Data
Local effect	:NO Data
Stimulativity	:The gas is generated during high temperature processing may irritate the eyes and skin.
Causing sensitivity	:NO Data
Sub acute Toxicity	:NO Data
Chronic Toxicity · Prolonged Toxicity	:NO Data
Carcinogenicity	:NO Data

Mutagenicity	:NO Data
Teratogenity	:NO Data
Reproductive Toxicity	:NO Data

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## 12. Ecological Information

Persistent/ Degradability	: NO Data
Biological accumulation	: NO Data
Biotoxicity	: NO Data

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## 13. Disposal Considerations

The waste product and the packing material stuck the resin must be isolated from other kind wastes with some exclusive can or container. Preferred options for disposal are

- 1) Dispose in a landfill, which is permitted, licensed or registered by a government to manage industrial incombustible waste.
- 2) Incinerate only if incinerator is capable of scrubbing out hydrogen fluoride and other acidic combustion products.

These disposals must be committed in accordance with applicable federal, state/provincial, and local regulations.

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## 14. Transport Information

Take care not to treat a product container violently, such as, impingement, falling, tumbles, and also, take care not to impinge, fall, or tumble the packing on loading.

UN. Number of Transportation : Not applicable

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## 15. Regulatory Information

No applicable

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## 16. Others

### 《MSDS Status》

This English MSDS is revised conforming to International Standard ISO11014-1: Material Safety Data Sheet for Chemical Product.

### 《Caution》

The product described here is neither the product for implant nor the equipment, which is contact with the body fluid or living organizations. Therefore, it is strictly recommended that you should consult to us in advance, if it is expected to use or to install the product in some medical field.

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## References

MSDSs made by other material manufacturers.

Chukoh Chemical Industries, Ltd. believes that the information contained herein is accurate as of the date hereof. However, it is not described all of the information about the chemical product, and it will be revised by new discovery or information without notice.

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End of MSDS