

## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

**COMPANY NAME** : HAKKO CORPORATION  
**ADDRESS** : 4-5, Shiokusa 2-chome, Naniwa-ku, Osaka 556-0024 Japan  
**SECTION IN CHARGE** : Research & Development Division  
**PERSON IN CHARGE** : Makoto Onda  
**EMERGENCY TELEPHONE NUMBER** : 81-6-6561-3225  
**PERSON IN CHARGE** : Sales Division

**PRODUCT NAME:** Sleeve (for Model FM-2021)

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Single ingredient product or mixture: Mixture

Ingredient	PVC compound			
Chemical Name	PVC	Bis (2-ethylhexyl) phthalate (2-ethylhexyl) phthalate	Calcium carbonate	Nepheline syenite
Content	40 – 50%	43%	5 – 15%	0.5 – 0.75%
CAS No.	9002-86-2	117-81-7	471-34-1	-
PRTR No.	-	272	-	-

### 3. HAZARDS IDENTIFICATION (on PVC Compound)

**CLASSIFICATION CATEGORY** : N/A  
**DANGEROUSNESS** : Ingestion, or inhalation in large quantity might cause headache, dizziness, nausea, diarrhea, or other might result.  
 Contact with eyes or skin might cause inflammation.

### 4. FIRST-AID MEASURES

<b>IF IN EYES</b>	:	In the case of contact with eyes, rinse immediately with clean water. If discomfort is still felt, obtain medical attention.
<b>IF ON SKIN</b>	:	If skin irritation is felt, wash off with soap and water.
<b>IF INGESTED</b>	:	Vomit as much as possible. If discomfort is still felt, obtain medical care.
<b>IF INHALED</b>	:	If much vapor, or gas generated from decomposition or combustion is inhaled during operation and subjective symptoms such as headache and nausea occur, move to a fresh-air location to get reset, and immediately obtain medical care.

## 5. FIRE FIGHTING MEASURES

<b>EXTINGUISHING MEDIA</b>	:	Extinguishing powder, carbon dioxide gas, or fire foam
<b>EXTINGUISHING PROCEDURES</b>	:	For a fire in the initial stage, use extinguishing powder, carbon dioxide gas, dry sand, or the like. For a large-scaled fire, shut off air using fire foam. Move the movable containers, if any, to a safe location as soon as possible. The use of water might enlarge the fire, causing a dangerous situation.

## 6. ACCIDENTAL RELEASE MEASURES

No release occurs since the product is solid.

## 7. HANDLING AND STORAGE

<b>HANDLING</b>	:	Handle so as not to give any physical damage.
<b>STORAGE</b>	:	The normal storage method is acceptable, but take care not to give physical damage.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>ALLOWABLE CONCENTRATION</b>	:	Data not available.
<b>FACILITIES CONTROL MEASURES</b>	:	Use local exhaust.
<b>PROTECTIVE GEAR</b>	:	Use a mask, protective goggles, and protective gloves as appropriate.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>APPEARANCE</b>	:	Solid, molded product
<b>SPECIFIC GRAVITY</b>	:	1.15 to 1.25 (23 °C)
<b>REACTIVITY</b>	:	Stable
<b>SOLUBILITY</b>	:	Insoluble in water; soluble in toluene, ethyl acetate, acetone, or the like.

## 10. STABILITY AND REACTIVITY

Stable under the normal handling conditions.

## 11. TOXICOLOGICAL INFORMATION (on PVC Compound)

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<b>ACUTE TOXICITY</b>	: LD50 was 1.5g/kg (as DOP) for mice to which PVC compound was given orally. LD50 was 30 g/kg (as DOP) for rats to which PVC compound was given orally.
<b>IRRITATION</b>	: Contact with eyes or skin might cause irritation. Skin irritation in rabbits occurred at 500mg/24 hours (as DOP) and was mild. Eye irritation in rabbits occurred at 500mg/24 hours (as DOP) and was mild.
<b>SENSITIZATION</b>	: No information is available.
<b>MUTAGENICITY</b>	: No information is available.

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## 12. ECOLOGICAL INFORMATION

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<b>DEGRADABILITY</b>	: Data not available.
<b>CUMMULATIVE EFFECTS</b>	: Data not available.
<b>FISH TOXICITY</b>	: Data not available.

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## 13. DISPOSAL CONSIDERATIONS

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Dispose of at a suitable incineration plant in compliance with related regulations or entrust an industrial waste disposal company with this disposal.

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## 14. TRANSPORTATION INFORMATION

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Comply with the general precautionary requirements.

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## 15. REGULATORY INFORMATION

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<b>PRTR LAW</b>	: Applicable for Bis phthalate.
<b>INDUSTRIAL SAFETY AND HEALTH ACT</b>	: "Substance subject to notification" in Article 57-2 is contained; No. 479

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## 16. OTHER INFORMATION

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MSDS from the manufacturer.

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This document has been prepared based on the information and data that are available as of this data. Therefore, it may be revised when new information or data has been obtained.

The information and data contained herein are subject to the normal use. The evaluation of dangerousness and toxicity is, therefore, not always applicable. For this reason, the safety precautions suitable for your purpose and method must be taken prior to the use.