

ITEM LIST ( MK-ADHESIVES, SOLVENT TYPE )				
NO	DIVISION	ITEM	MAIN COMPONENT	APPLICATION
1	Primer for CR System Adhesive	MK-305	CR Graft	PVC Leather, Synthetic Leather
		MK-120L		PVC Leather, Synthetic Leather, Nylon Textile
		MK-22M		Cured Rubber, Rubber Sponge
		MK-880E	Rubber Derivative	EVA Sponge,
2	Primer for PU System Adhesives	MK-23S	PU Derivative	PVC,PU Leather, Synthetic Leather & Sole, PU coated Leather
		MK-112H(F)		Primer for specially waterbased PU adhesive (Higher viscosity than MK-23S)
		MK-119H(F)		Primer for specially waterbased PU adhesive (Higher viscosity than MK-112)
		MK-18N *MK-18S		Nylon Textile *Nylon Sole
		MK-0070	Special Chlorine Thinner	Cured Rubber, RB, TR
		MK-2070	Synthetic Resin	Less Yellowing Type of MK-0070
		MK-0080 *MK-0090	Rubber Derivative	EVA Sponge, *Improvement of PU Adhesive property
		MK-222	Special Chlorine	Oil Leather primer
3	Primer for NR System Adhesives (for Hot-air Vulcanizing shoe-making)	MK-100S	NR Graft	PU, PVC Leather, Soft Leather(No Buffing)
		SPR-130		Polyester, Action Leather, PU,PVC Leather
		MK-506CN		Oil Leather
		PAZ-30S	Thermosetting Resin	Catalyst for NR, CR System Adhesives
4	CR system Adhesive	MK-192C(W)	CR Graft	Adhesive for upper material (Less yellowing than #220C(W))
	CR system	MK-220C(W)		Adhesive for Sole material

	Adhesive	MK-700	CR	Construction(Interior decoration) General use(Resin Addition)
		MK-901		A Time coating specially leather shoe making
		MK-825C(W)	CR + Phenol	For Sewing Dept.
		MK-3000	CR Derivative	For Cup-insole making
5	PU System Adhesive	MK-5010	PU Denaturant	PU adhesive (Clear looking)
		MK-5040		PU adhesive (Milky white looking)
		MK-5050		PU adhesive

6	NR System Adhesive (for Hot-air Vulcanizing shoe-making)	MK-100MH(W)	NR Graft	PVC Leather
		SVH(W)		For molded Sole (No Buffing)
	CR System Adhesive (for Hot-air Vulcanizing shoe-making)	MK-60C(W)	CR Graft	PVC Leather
7	The Others (Adhesives)	EAZ-40	Synthetic Resin	Stiffener of heel counter
		MK-8400SH	Special Synthetic Resin	Heat-resistnat adhesive for attaching rubber and Phylon in Phylon
8	No Buffing Primer of Rubber, EVA Sponge	K-7	Vinyl denaturant	Phylon UV Primer
9	Waterbased PU Adhesive	A-11 A-4	Poly Urethane Emulsion	Waterbased PU adhesive
10	Waterbased PU Primer	MWP-01		Waterbased PU Primer for Leather, Fabric, Canvas
		MWP-02		
		MWP-03		
11	Waterbased Hardner	MDA-300		Waterbased Hardener
12	Waterbased Sticker- making adhesinve	MKW-6700T	Waterbased Sticker-making adhesive	

13	Waterbased combining adhesive	MKW-681GS		Waterbased Combining adhesive
14	Waterbased CR adhesive	CMK-3000CR	CR Emulsion	Waterbased CR adhesive for Cup-Insole making

**15. MRF** - A cross linking agent for two component adhesives.



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## MK-305 (CR SYSTEM PRIMER)

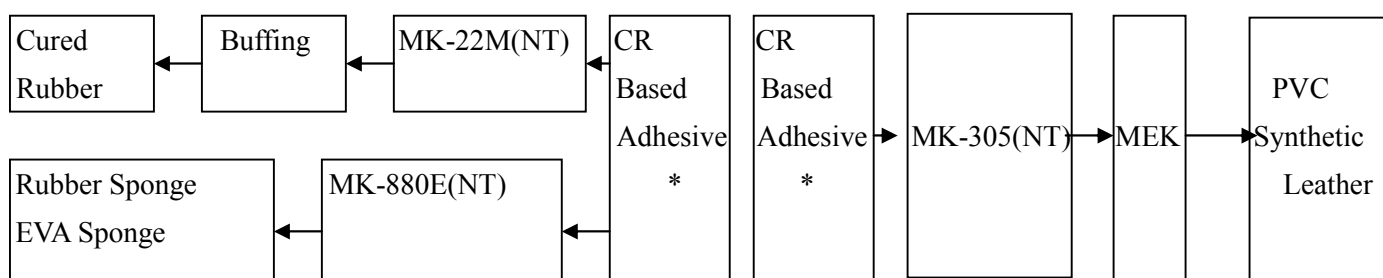
MK-305 is a primer for poly-urethane coated fabric to improve the adhesion properties of poly-chloroprene based adhesives when bonding to sole materials.

### PROPERTIES

- Appearance ..... Light yellowish liquid
- Main component ..... Grafted chloroprene
- Specific Gravity .....  $0.860 \pm 0.005$
- Drying time ..... about 10 min. at room temperature

### DIRECTION

- Apply a sufficient quantity of MK-305 to poly-urethane coated fabric to wet completely the surface. When bonding nylon fabric to sponge, MK-305 containing hardener such as Desmodur R or RF can be used as a primer of Nylon fabric. But for Nylon fabric of high strength materials such as rubber, best result can be obtained by heat curing process as described in the data sheet of MK-120L.
- Mix by weight 100 parts of chloroprene rubber based adhesive with 3 to 5 parts of curing agent and apply evenly to the prepared upper materials.
- Let dry for 20 to 40 min. at room temperature of about 10 min. at 50°C to 60°C.



\* : Adding Hardener    NT: Toluene Free

### CAUTION

- Keep adhesive away from open flame.
- Use only in well ventilated areas.
- Keep container tightly capped when not in use.

## MK-120L (CR SYSTEM PRIMER)

MK-120L is a primer for PVC coated fabric to improve the adhesion properties of poly-chloroprene based adhesives when bonding to sole materials.

MK-120L mixed with poly-isocyanate such as Desmodur R or RF can be used as a primer of Nylon fabric when used with chloroprene rubber based adhesives.

### PROPERTIES

- Appearance ..... Light yellowish liquid
- Main Component ..... Grafted chloroprene
- Specific Gravity .....  $0.834 \pm 0.005$

### DIRECTION

#### - Priming

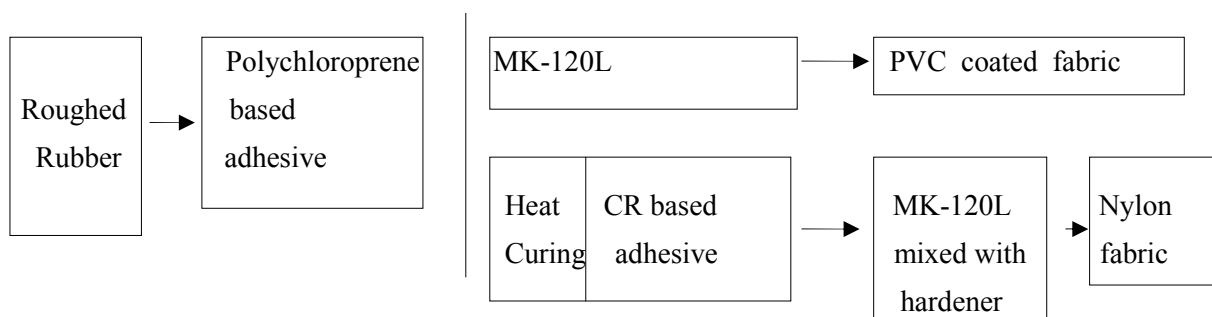
- PVC coated fabric : Should be primed with MK-120L, however, solvent wiping with MEK prior to priming may enhance the adhesion.
- Nylon fabric : Apply MK-120L mixed with curing agent (by weight 100 parts of MK-120L with 3 to 5 parts of Desmodur R or RF) to the Nylon fabric.
- Remark : To bond Nylon fabric to sponge, follow the above instruction, but when bonding Nylon fabric to high strength materials such as rubber or thermo-plastic rubber, following instructions are recommended.

#### - Heat curing process (Nylon fabric to high strength materials)

- Apply MK#120L mixed with curing agent to the Nylon fabric.
  - Mix by weight 100parts of chloroprene rubber based adhesive with 3 to 5parts of Desmodur R or RF and apply evenly to the primed Nylon fabric.
- cure it in the heat setting chamber for 10 to 30 minutes at 90°C to 100°C

#### - Adhesion

- Mix by weight 100parts if oily-chloroprene based adhesive with 3 to 5 parts of Desmodur R of RF and apply evenly to the above prepared upper materials and prepared sole materials.
- Let dry 10minutes at about 50°C to 60°C or 20 to 40min uses at room temperature.



**CAUTION**

- Keep adhesive away from open flame.
- Use only in well ventilated areas.
- Keep container tightly capped when not in use.

## **MK-22M (CR SYSTEM PRIMER)**

MK-22M had been developed as a primer to be used with chloroprene rubber based adhesives and permits the roughing process to be omitted by direct application to the surfaces of vulcanized rubber.

But if it is used as a substitute for roughing tests under factory condition should be carried out to test its suitability.

### **PROPERTIES**

- Appearance ..... Light yellowish transparent liquid
- Main Component ..... Grafted CR
- Specific Gravity .....  $0.850 \pm 0.005$

### **DIRECTION**

(Representative example ; To bond leather to rubber)

- Rough the surface of leather and rubber , then remove the dust.
- Apply MK-22M evenly to the roughened surfaces of leather and rubber.
- Let dry completely.

Minimum drying time : 20minutes at room temperature or 10minutes at 50°C.

- Apply chloroprene rubber based adhesives evenly to the primed surfaces.
- Let dry for 10minutes at 50°C to 60°C.
- Assemble and bond them by compression.

※ Remarks : For unroughened rubber, wipe off impurities on the surface with solvent such as toluene prior to applying MK-22M.

### **CAUTION**

- Keep MK-22M away from open flame.
- Do not permit direct contact of MK-22M with the skin.
- Use only in well ventilated areas.
- Keep container tightly capped when not in use.
- Do not use metallic container for MK-22M.

## MK-880E (CR SYSTEM PRIMER)

### PROPERTIES

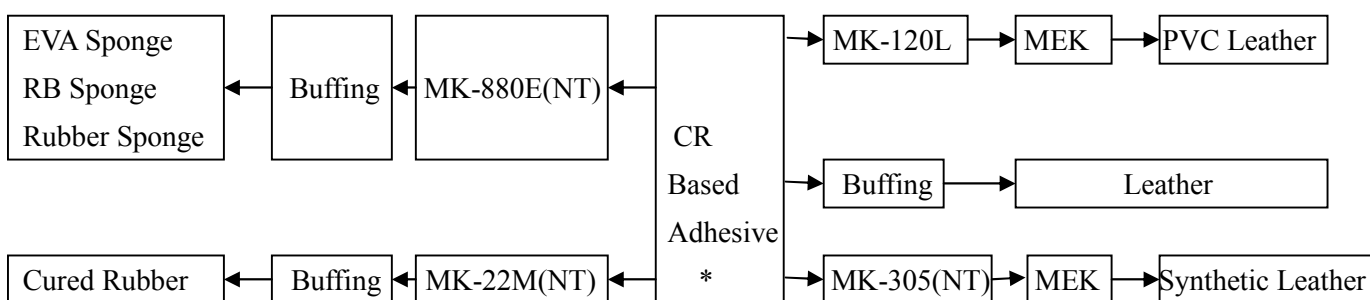
- Appearance ..... Citrine-transparent liquid
- Main Component ..... CR Graft
- Specific Gravity (20°C) ..... 0.835 - 0.005
- Viscosity(25°C, cps) ..... Below 50

### APPLICATION & CHARACTERISTIC

- Generally, CR system adhesive can be used in EVA sponge, rubber sponge and RB sponge without primer, but MK-880E is suitable in the bad foam shape and high degree of hardness.

### HOW TO USE

- Coat MK-880E on the surface of substance.
- Coat the CR system adhesive (contained 3-5g Hardener) on the coated surface of substance.
- Keep drying (20-40minutes at 25°C, 10minutes at 50°C)
- Adhesion
- MK-880E is usually used in with no Hardener, but when adding the hardener(D-RF, D-R) in, bonding power would be improved.



\* : Adding Hardener 3~5%

NT: Toluene Free

### CAUTION

- Be cautious (solvent).
- Close up after using it.

## **MK-23S (PU SYSTEM PRIMER)**

### **PROPERTIES**

- Appearance ..... Transparent viscous liquid
- Main Component ..... PU Derivative
- Specific Gravity .....  $0.855 \pm 0.005$
- Main Solvent ..... MEK, Toluene

### **CHARACTERISTIC**

- MK-23S gives boundary bonding power solid when coating adhesive(PU Resin) and has a characteristic suppressed secretion of plastic for primer of PVC, PU and Leather.

### **APPLICATION**

- Primer when coating PVC to PVC Leather, PU to PU.

### **CAUTION**

- Close up always after using because of volatile solvent.
- Take care fire because of inflammables and keep in dry and cool place.

## MK-112H(F) (PRIMER FOR PU ADHESIVE)

### PHYSICAL PROPERTIES

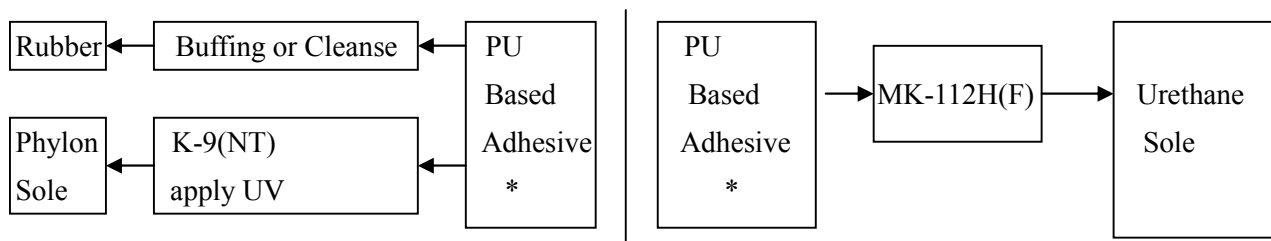
- Appearance ..... Colorless transparent liquid( fluorescent )
- Main component ..... Denatured urethane resin
- Viscosity ( 25°C ) ..... 700 ~ 800 cps
- Storage stability ..... 6 months

### CHARACTERISTIC

MK-112H(F), a primer for PU adhesive, applies to regular PU sole as well as high hardness PU soles. When used with Hardener, it offers excellent bonding strength to adherends.

### USING INSTRUCTION

- Prime MK-112H(F) with 3.75% of hardener on PU sole, and dry it for 5minutes at temperature of 65°C.
- Cement PU adhesive on the primed PU sole, and dry it for 5minutes × 65°C.
- Bond to compress completely.



\*: Adding Hardener

### CAUTION

- Avoid direct sunlight and flame.
- Cap tightly when not in use.
- Store it at temperature 5°C or above.

### PACKING

15 kg/Tin can

## MK-119H(F) (MULTI-PRIMER FOR PU ADHESIVE)

### PROPERTIES

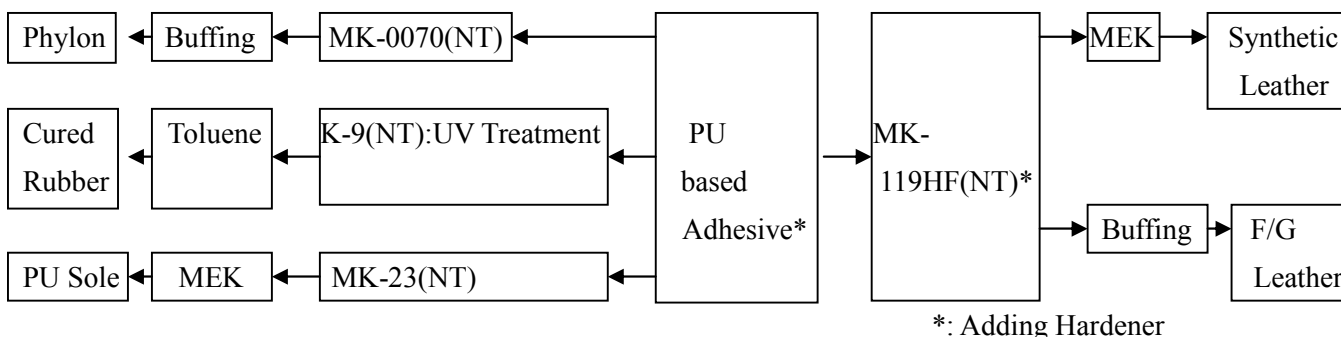
- Appearance ..... Colorless transparent liquid( Fluorescent )
- Main component ..... Denatured urethane resin
- Viscosity (30℃) ..... 2,200 ± 200 cps
- Storage stability ..... 6 months

### APPLICATION AND CHARACTERISTIC

- MK-119H(F) is a primer, providing a good workability and simplification of adhesion process. As well as it also satisfies both the role of "Cement" and "Primer" together at the same time.

### HOW TO USE

- Apply and dry MK-119H(F) on the uppers, treated previously. And then adhere at the above uppers with PU system Cement.



### CAUTION

- Avoid direct sunlight and flame.
- Cap tightly when not in use.
- Store it at temperature 5℃ or above.

### PACKING

15 kg/Tin can

## MK-18N (PU SYSTEM PRIMER)

MK-18S is a primer for use on Nylon sole and MK-18N is a primer for use on Nylon fabric to improve the adhesion properties of poly-urethane based adhesives.

And they permit the roughing process to be omitted by direct application to the surface of Nylon soles and Nylon fabric respectively.

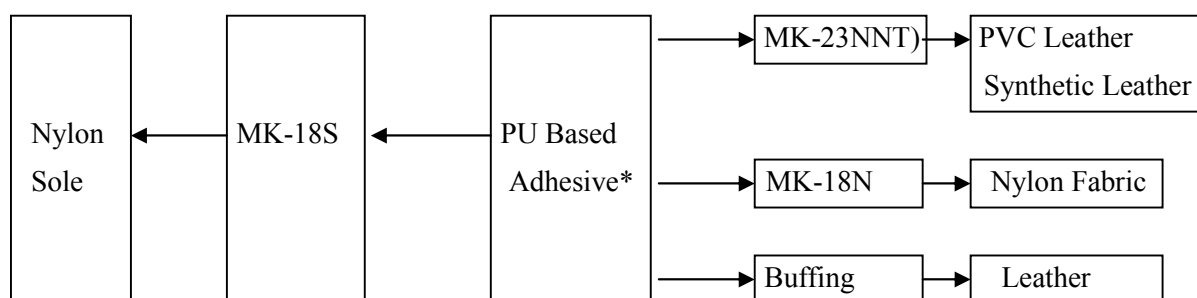
### PROPERTIES

Division	MK-18N
Specific Gravity	1.080 ± 0.005
Main Component	PU derivative
Appearance	Light yellow, transparent liquid

### DIRECTION

- Apply MK-18S to the cleaned surfaces of the Nylon soles, MK-18N to the Nylon fabric.

Let dry for over 10 minutes at room temperature. Mix by weight 100 parts of poly-urethane based adhesive with 3 to 5 parts of hardener such as Desmodur R or RF and apply evenly to the primed up per materials. Let dry for about 10 minutes at 50°C. Bond together by compression.



### CAUTION

- Do not permit direct contact of MK-18S and MK-18N with the skin.
- Do not use metallic containers for MK-18S and MK-18N.
- Keep adhesive away from open flame.
- Use only in well ventilated areas.
- Keep container tightly capped when not in use.

## **MK-0070 (PU SYSTEM PRIMER)**

MK-0070 is designed to replace mechanical scouring of rubbers and can be used successfully on the original moulded or stale surfaces of most rubber when using poly-urethane adhesives such as MK-5010 and MK-5040.

### **PROPERTIES**

- Appearance ..... Light yellow power.
- Active period of mixed primer ..... Minimum before applying adhesive is 5 minutes, before applying adhesive is 1 week.
- Mixed Life ..... 2 days in a translucent polythene or glass container.
- Storage ..... Should be kept dry and apart from oxidizable materials.

### **MIXING**

- MK-0070 is two parts primer  
MK-0070 should be added to MK-0070 thinner in the ratio of 1 gram per 50grams of MK-0070 thinner at customer's factory either in a polythene or glass container, not in a tin

### **APPLICATION**

- Remove surface contamination by scrubbing the primer into the rubber surface using a cloth fixed to handle, or brush with no metallic parts. If necessary, clean surface impurities with solvent prior to priming. For thermo-plastic rubber soles, the primer should be applied by soft brush and allowed to dry completely. Change the cloth frequently to avoid contamination. The operation must be carried out in a well ventilated areas. Adhesion should be carried out between 5 minutes and 1 month after priming.

### **CAUTION**

- MK-0070 should not come into contact with readily oxidizable materials.
- Do not permit direct contact with the skin. Operatives should wear glove and protective overalls.  
In the event of contact with the skin, wash the affected areas with water. In the event of eye contamination, bath the eye thoroughly with water and get medical attention.
- The product contains a powerful oxidizing agent which may cause a fire.  
In case of fire, use CO2 extinguisher. In case of small quantity of the product, drench with water and provide adequate ventilation as the powder give off harmful fumes.

## MK-0080 (PU SYSTEM PRIMER)

MK-0080 is a primer for EVA sponge to improve the adhesion properties of poly urethane based adhesives such as MK-5010 and MK-5040.

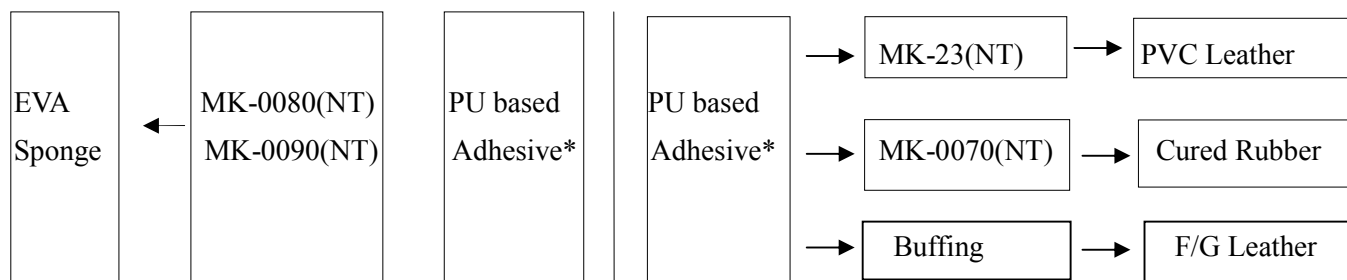
### PROPERTIES

- Specific Gravity ..... 0.880 ± 0.005
- Main Component ..... Rubber Derivative
- Appearance ..... Colorless, Transparent liquid

### RECOMMENDATION

- Apply sufficient quantity of MK-0080 to the surfaces of EVA sponge to be bonded.

Let dry over 10 minutes at room temperature. Mix by weight 100 parts of poly urethane based adhesive with 5 parts of hardener such as Desmodur R and RF and apply evenly to the primed EVA and pretreat opposite materials to be bonded. Let dry for about 10 minutes at 50°C or heat reactivate with flash activator after complete air drying. And then bond together by compression.



\*: Adding Hardener

NT: Toluene Free

### CAUTION

- Keep adhesive away from open flame.
- Use only in well ventilated areas.
- Keep container tightly capped when not in use.

## MK-222 (PU SYSTEM PRIMER)

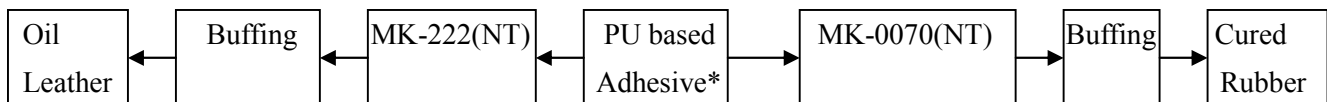
### PROPERTIES

- Appearance ..... Transparent solvent type
- Main Component ..... Special chlorine
- Specific Gravity ..... 0.793 - 0.005
- Main Solvent ..... Mixed solvent

### APPLICATION

- Applies for primer of surface of Oil Leather.

### HOW TO USE



### CAUTION

- Close up always after using because of volatile solvent
- Take care fire because of inflammables, and keep cool place.

## MK-100S (NR SYSTEM PRIMER)

MK-100S is a primer for PVC coated fabric and MK-100S mixed with hardener such as Desmodur R or R F can be used on Nylon fabric to improve the adhesion properties of natural rubber based adhesives when bonding to un-vulcanized rubber.

### PROPERTIES

- Main Component ..... Grafted NR
- Specific Gravity ..... 0.875 - 0.005
- Appearance ..... Greenish transparent liquid
- Drying Time ..... More than 5 min. at room temperature

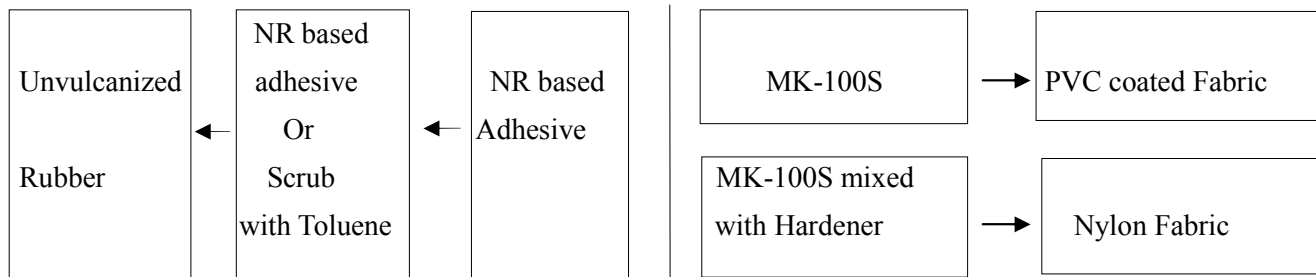
### DIRECTION

- Priming : Apply a sufficient quantity of MK-100S to PVC coated fabric, mixture of 100 grams MK-100S and 3 to 5gramas of hardner to Nylon to wet completely the surfaces.

※ Remarks

; for the PVC coated fabric, best result can be obtained by solvent wiping with MEK prior to priming.

- Apply natural rubber based adhesive to the above primed materials.  
Apply natural based adhesive to the un-vulcanized rubber or scrub the surface of it with Toluene.



### CAUTION

- Keep adhesive away from open flame
- Use only in well ventilated area.
- Keep container tightly capped when not in use.

## **SPR-130(NR SYSTEM PRIMER), PAZ-30S(TACKIFIER)**

SPR-130, PAZ-30S is an organic compound.

As SPR-130 is a polymer which penetration is strong and tunic formation is excellent, SPR-130 has a characteristic derived properties of short fiber which burst of fiber, leather and vinyl is weak to properties effect of long fiber.

PAZ-30S is a thermosetting complex polymerized resin and has characteristic improved initial cohesion, heat-resistance and bonding power.

### **PROPERTIES**

Properties \ Item	SPR-130	PAZ-30S
Appearance	Greenish liquid	Citrine viscous liquid
Main Component	Organic compound	Thermosetting compound polymer resin
Solid Contents(%)	10-12	40-45
Specific Gravity	1.10	1.15
Main Solvent	MEK, mixed solvent	Toluene
Storage	Avoid a direct ray of light and heat	

### **APPLICATION**

**- SPR-130**

: uses for reinforcing agent of hardener and bonding power of fibroid material for primer of buffing parts(adhesion parts) of leather at adhering split, smooth, action leather and general rubber. (Vulcanizing, un-vulcanizing type)

**- PAZ-30S**

: uses for a kind of catalyst reinforced bonding power at adhering general rubber and fiber, leather for an additive of NR,CR adhesive.

(addition 5-10PHR to weight of NR,CR adhesive)

: uses in resin adhesive(EVA,RB,TPR) and synthetic, natural rubber adhesive.

## USES

- Canvas(Exxon leather upper) + Rubber Tape(heating conveyer system)

Division	Leather	Rubber(un-vulcanized)	Remarks
A	Buffing	Treatment shoemaking adhesive in un-vulcanized rubber tape	Heating conveyor system
B	SPR-130 + 3% RF coating (dry at 2'C-5'C)		
C	- NR,CR adhesive + 5% PAZ-30S D-RF (55'C-60'C × 6'-8') 5% PAZ-30S (55'C-60'C×6'-8')		
D	Adhering		
E	Compression		
F	Inspection		
G	Heating treatment 125'C × 55'-60' × 2.5kg/Cm2		

※ must treat parts of fibroid material at buffed leather.

- How to use at normal temperature drying work(J/C)

; The same usage and must control drying time.

- drying 2'-3' after coating SPR-130+3% RF
- bases heating dry(30°C-35°C ×10') in case of J/C after coating the first NR, CR adhesive + 5% PAZ-30S + 5% D-RF
- bases heating dry(30°C-35°C ×10') after coating the second NR, CR adhesive + 5% PAZ-30S

## ATTENTION AT WORKING

- must treat up to parts of fibroid material at buffed leather.
- must be dried sufficiently after coating primer SPR-130.
- do not add PAZ-30S separately in workshop owing to adding PAZ-30S at making adhesive (NR,CR type) and can get mixing effect uniformly owing to being convenient pre-working.
- treat powder(Zn-St) throughout on the surface of un-vulcanized rubber tape.
- uniform coating, drying, compression of adhesive can get best effect of bonding power.

## MK-192C(W) (CR SYSTEM ADHESIVE)

MK-192C(W) are grafted chloroprene rubber based adhesives which have little tendency to discolor, provide highly improved bond strength and can replace MK-220C(W) to get higher bonding strength.

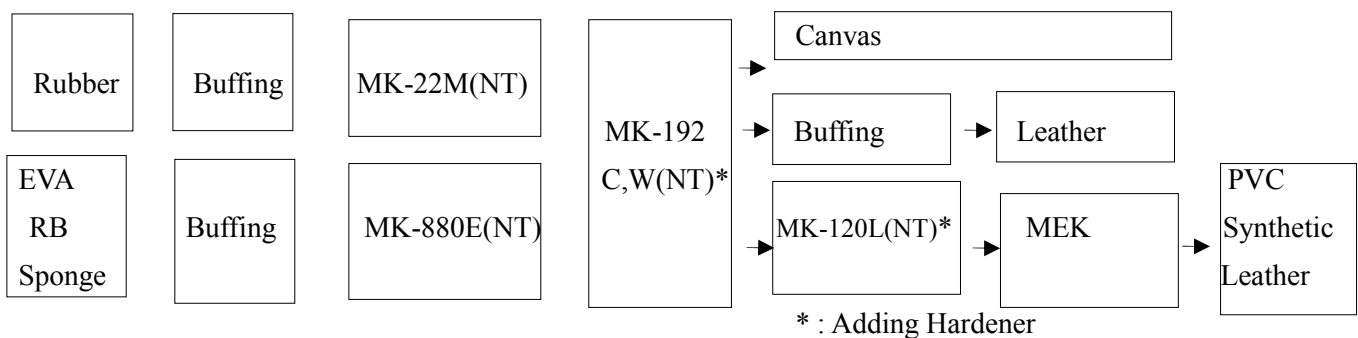
It is suitable for porous materials such as leather, canvas and synthetic fabrics as well as for non porous materials in spite of its lower viscosity than other adhesives for the same use.

### PROPERTIES

Division	MK-192C	MK-192W
Main Component	Grafted poly-chloroprene Viscous liquid	
Viscosity(25°C, cps)	5,000 - 5,500	5,000 - 5,500
Appearance	Light yellow transparent	White opaque

### DIRECTION

- Mix by weight 100 parts of MK-192 with 3to5 parts of Desmodur RF and apply evenly to the pretreated surfaces of the materials to be bonded. Let dry for about 10minutes at 50°C to 60°C and bond together by compression.



- ※ Remarks :
- Double coats are recommended to the leather, canvas and nylon.
  - For bonding nylon, refer to the technical bulletin of MK-120L.

### CAUTION

- Keep adhesive away from open flame.
- Use only in well ventilated areas.
- Keep container tightly capped when not in use.

## MK-220C(W) (CR SYSTEM ADHESIVE)

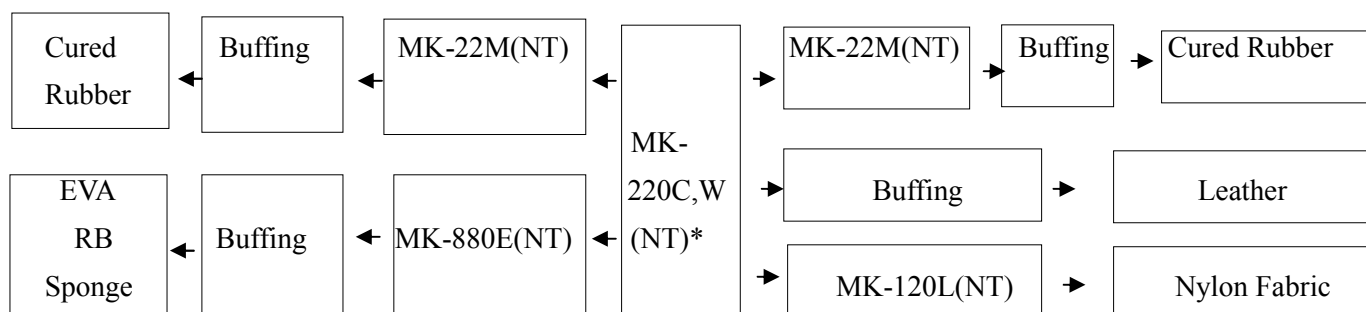
MK-220C(W) is a grafted chloroprene rubber based adhesive, has light color and good color retention.

### PROPERTIES

Division	MK-220C	MK-220W
Appearance	Light yellowish translucent viscous liquid	White viscous liquid
Viscosity (25°C,cps)	5,000 - 5,500	5,000 - 5,500
Main Component	Grafted chloroprene	

### DIRECTION

- Mix by weight 100 parts of MK-220C with 5 part of Desmodur RF and apply evenly to the primed surfaces of the materials to be bonded by compression.



\*: Adding Hardener

### CAUTION

- Keep adhesive away from open flame.
- Use only in well ventilated areas.
- Keep container tightly capped when not in use.

## **MK-700C(W) (CR SYSTEM ADHESIVE)**

MK-700C(W) can be used for bonding leather, vulcanized rubber, canvas, wood and other materials.

It dries rapidly and particularly excels in initial adhesion strength.

MK-700C(W) does not require Desmodur or other kinds of curing agent since it adheres firmly to the above mentioned by itself.

### **PROPERTIES**

- Appearance ..... Light yellowish viscous liquid
- Viscosity (25°C,cps) ..... 8,000 - 8,500
- Main Component ..... Chloroprene rubber

### **DIRECTION** (Representative example : To bond leather to leather or to rubber)

- Rough both surface, then brush off dust on the surfaces.
- Apply MK-700 evenly to both surfaces.
- Let dry for 5 to 15 minutes at room temperature.
- Assemble and bond together by compression.

### **CAUTION**

- Keep adhesive away from open flame.
- Use only in well ventilated areas.
- Keep container tightly capped when not in use.

## **MK-825C(W) (CR SYSTEM ADHESIVE)**

### **PROPERTIES**

- Appearance ..... Citrine viscous liquid
- Main Component ..... CR and Phenol resin
- Viscosity (25°C,cps) ..... 8,000 - 8,500
- Solid Content(%) ..... 24 ± 1

### **APPLICATION & CHARACTERISTIC**

- Adhesive for parts of leather, back of vinyl, urethane sponge and etc.
- Good non-discoloration
- Long tacky time
- Excellent work

### **DIRECTION**

- Generally, adhere after drying at 20-25°C and heat drying(55°C×8min) is more effective.

### **CAUTION**

- Keep adhesive away from open flame.
- Use only in well ventilated areas.
- Keep container tightly capped when not in use.

## MK-5010 (NT) ... PU SYSTEM ADHESIVE

### PROPERTIES

- Appearance	Colorless semi-translucent viscous liquid
-Main Component	Urethane denaturant Resin
-Viscosity(25°C)	4,500 ~ 5,000
-Solid Content	19±1
-Storage	6 months

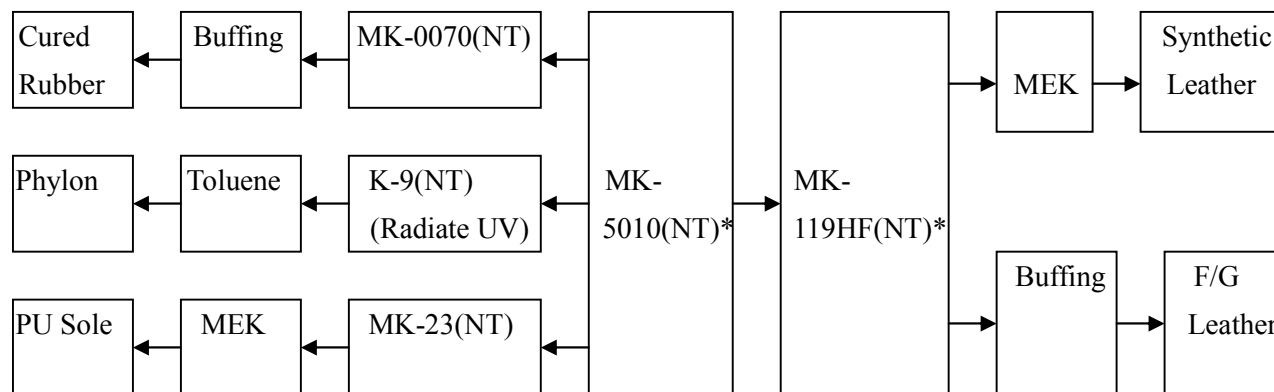
### APPLICATION & CHARACTERISTICS

-MK-5010(NT) is one of the most usual PU based adhesive which is remarkably effective to various kinds of materials such as PVC, PU, Synthetic leather, Natural leather, Canvas and etc.

### HOW TO USE

-Apply MK-5010(NT) being mixed a hardener at 3~5% by weigh to the pretreated material

-Dry(60°C × 8' above) and bond.



\*: Adding Hardener

NT: Toluene Free

### CAUTION

- Be caution about fire and ventilation
- Close up after using it.

## MK-5040 (NT) ... PU SYSTEM ADHESIVE

### PROPERTIES

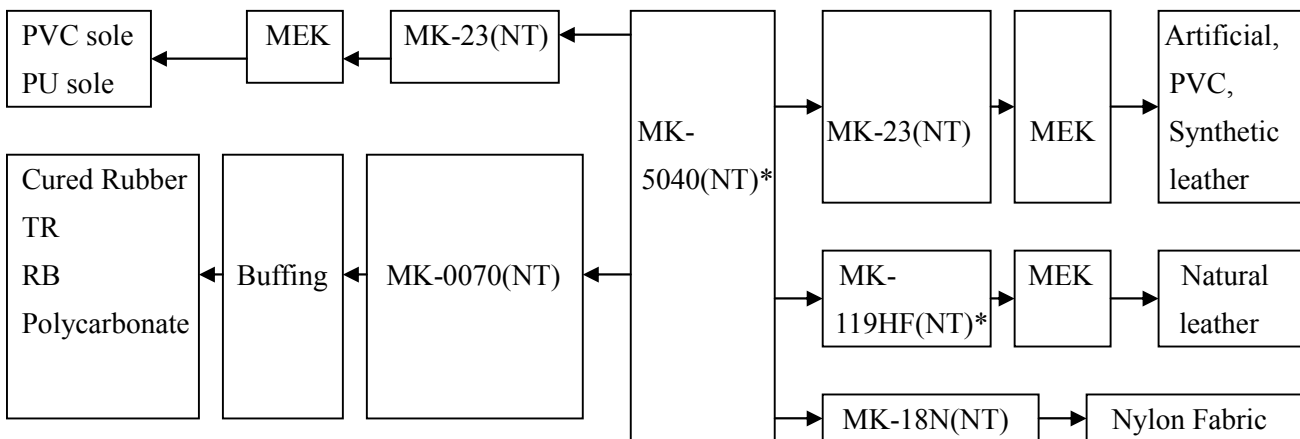
- Appearance	.....	Milky white viscous liquid
-Main Component	.....	Urethane denaturant Resin
-Viscosity(25℃)	.....	4,500 ~ 5,000
-Solid Content	.....	19±1
-Storage	.....	6 months

### APPLICATION & CHARACTERISTICS

- PVC sole, urethane sole, PVC leather, synthetic leather
- Artificial leather(corduroy, patrorra), natural leather, canvas.
- Cured rubber, TR(kraton AR), RB, Polycarbonate

### HOW TO USE

-Apply PU based adhesive being mixed with a hardener at 3~5% by weight to pretreated material and bond them after dry at 65℃ × 5~7min



\*: Adding Hardener

NT: Toluene Free

### CAUTION

- Be caution about fire and ventilation
- Close up after using it.

**CMK-3000CR****(WATER-BASED CR ADHESIVE FOR EVA CUP-INSOLE)**

CMK-3000CR is waterbased Chloroprene Adhesive for specially making EVA sponge Cup-Insole. It offers a good working conditions neither harmful in physical body, bad smell nor flammability. It also gives excellent heat and water resistance.

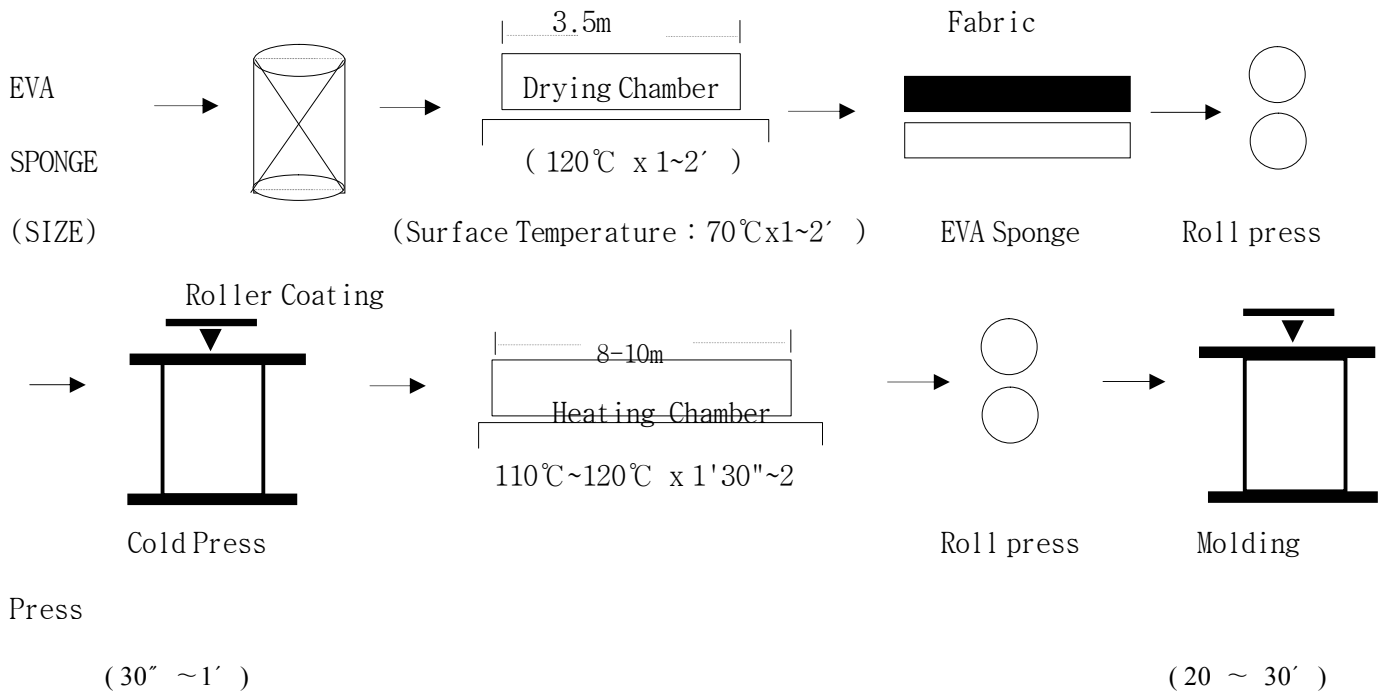
**PHYSICAL PROPERTIES**

- Appearance ..... Milky Emulsion
- Main components ..... Chloroprene Emulsion and Copolymer that has hydrophilic property  
in synthetic resins
- PH ..... 7~7.5
- Viscosity(25°C ,CPS) ..... 5000~6000
- Solid Content (%) ..... 50±1%
- Storage : 1) Keep them in 5°C to 40°C to prevent from freezing of them in subzero temperature.  
(There is no problem to store them together with Water-based PU and Acryl adhesives.)  
2) After using them, please close the cap of PE can tightly.  
(When you find top harden films of CMK-3000CR, you can use them after removing the films.)

**USE & WORK METHOD**

- The process of adhesion method is as follows;

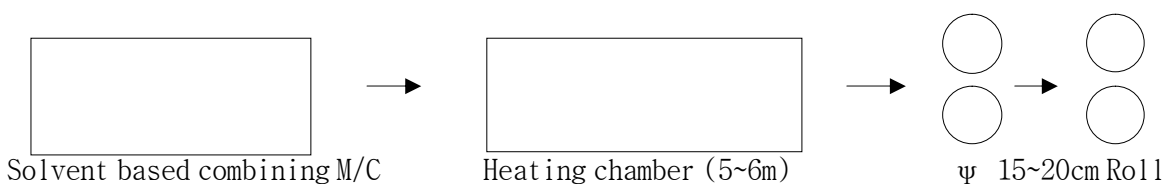
## 1. EVA Cup-insole work process.



- ① CMK-3000CR ( Milky Emulsion) : Mixing Time - More than 10 min.
- ② Combine Thickness : 0.3 mm
- ③ Dry Time : surface temperature - 70°C x 1min
- ④ Press Time : 20'
- ⑤ Heating Chamber : 120°C x 1'30"~2'
- ⑥ Adhesion & Peel Test : After 5 days at least.

## 2. General EVA Sheet combining with fabric work process

After modifying solvent based combining M/C, installing around 5~6m heating chamber and diameter 15~20cm double roll press as following diagram, CMK-3000CR can be combined EVA sheet and fabric which can't be made with waterbased Acrylic adhesive.



※ CMK-3000CR can also combine high density hardness PU foam, Non woven fabric, Mesh, SQR mat, Cotton woven fabric, Flat EVA sponge, etc. which can't be made with waterbased acrylic combining

adhesives.

**S.T.R.O.N.G**

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## MDA-300( HARDENER )

### CHARACTERISTICS

-MDA-300 is a hardener for water based urethane adhesive as self emulsified type, it protects NCO of water based resin it can be mixed well by electric-motor so it can maximize the adhesive strength, also it is available to general solvent such as ACETONE, MEK, DMF, EA.

### HOW TO USE

- Mix the hardener in a mixer machine good enough.
- Partake it little by little when use it.
- It is more effective to mix if you blend it with solvent (MEK, EA, DMF).

### STORAGE & HANDLING

- Store it at temperature 5-30°C
- Close cap of the can tightly when not in use.
- Take care of freezing.

### CAUTION

- It is very harmful if you inhale or contact on skin, so keep closing up after using it at cool place.
- Wash it immediately when it is contacted on skin or eyes.

# MRF

## TECHNICAL DATA SHEET

### Application

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A cross linking agent for two component adhesives.

MRF is an polyfunctional isocyanate in solvent (ethylacetate) deriving from reaction between a mixture of polyols and polyfunctional isocyanates.

The result obtained from the reaction between adhesives and MRF is a product with a higher adhesive, a better initial tack and resistance against high temperatures and plasticizers.

MRF is a excellent non-yellowing type hardener comparative to others.

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### Technical data

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Chemical composition	: Solution of polyisocyanate in ethylacetate
Color	: Colorless liquid
Density at 25 °C	: Approx. 0.97g/ml
NCO-content	: 2.65 +/- 0.2%
Solid-content	: 20.0 +/- 1%
Flash point	: Approx. 1 °C
Storage life	: Approx. 12months
Strong condition	: Well close and dry
Front sensitive	: No
Sensitive to moisture	: Yes

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### Instruction for use

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1. Depending on the type of adhesive and requirements, 3 ~ 5% MRF should be added and mixing well.
  2. The pot life, the time period the mixed adhesive should be use depends on the type of the adhesives.
  3. By adding MRF to adhesives a better bonding to PU, nylon and natural and synthetic fibers is achieved.
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### Remarks

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If preserved in its original, well-closed packing and stocked in a dry place.

The container must be tightly closed after use.

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**Caution**

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MRF contains flammable solvents and polyisocyanate.

Highly flammable in use, may form flammable/explosive vapour air mixture. Keep away from sources of ignition - No smoking.

Do not breathe vapour.

Do not empty into drains.

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