

## MATERIAL SAFETY DATA SHEET

**PRODUCT NAME :** HIGH FLAT XC-25

### SECTION 1: MANUFACTURER IDENTIFICATION

**MANUFACTURER'S NAME** : GIFU SHELLAC MFG. CO., LTD.  
**ADDRESS** : 1-27, Nishimaru-cho, Kano, Gifu 500-8618 Japan  
**PHONE NUMBER** : 81-58-272-0831 **DATE REVISED** :  
**FAX NUMBER** : 81-58-272-0704 **NAME OF PREPARER** : JUNSUKE MATSUE

### SECTION 2: COMPOSITION / INFORMATION

COMPONENTS	Wt.%	CAS No.	ACGIH	OSHA
Ethene homopolymer, oxidized	13	68441-17-8	Not listed	Not listed
Toluene	87	108-88-3	50 ppm	50 ppm

### SECTION 3: HAZARD IDENTIFICATION

#### SIGN AND SYMPTOMS OF EXPOSURE

**EYE** : May cause pain and slight irritation. Vapors may irritate eyes.

**SKIN CONTACT** : Prolonged or repeated exposure may cause skin irritation.  
 May cause severe response if confined or skin is abraded.  
 Repeated contact may cause drying or flaking of skin.

**SKIN ABSORPTION** : A single prolonged skin exposure is not likely to result in absorption of harmful amounts.

**INGESTION** : Material is slightly toxic.  
 If aspirated (liquid enters the lung), may be rapidly absorbed through the lungs and result in injury to other body systems.

**INHALATION** : Excessive vapor concentrations are attainable and could be hazardous on single exposure.  
 Signs and symptoms of excessive exposure may be central nervous system effects such as sleepiness and unconsciousness.

**CHRONIC** : Did not cause cancer in longer-term animal studies.  
 Exposure during 8 hours per day above 200 ppm may cause headache, giddy, irritation of eyes.

### SECTION 4: FIRST AID MEASURES

**IF IN EYES** : Flush eyes with large amounts of water until irritation subsiding. If irritation persists, get medical attention.

**IF ON SKIN** : Flush with large amounts of water. Use soap if available.  
 Remove severely contaminated clothing(including shoes) and launder before reuse. If irritation persists, seek medical attention.

**IF INGESTED** : If swallowed, DO NOT induce vomiting. Keep at rest.  
 Get prompt medical attention.

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## SECTION 5: FIRE FIGHTING MEASURES

**FLAMMABLE PROPERTIES**

	PRODUCT	Xylene
FLASH POINT *	6.5 °C	4.4. °C
AUTO IGNITION	Not Determined	536 °C

FLASH POINT \* : SETA CLOSED CUP METHOD

**FLAMMABLE LIMITS BY VOLUME % IN AIR**

	PRODUCT	Toluene
LOWER	: Not Determined	1.3 %
UPPER	: Not Determined	7.1 %

**EXTINGUISHING MEDIA :**

FOAM, DRY CHEMICAL

**FIRE FIGHTING INSTRUCTION :**

Either allow fire to burn out under conditions or extinguish with foam or dry chemical. Try to cover liquid spills with foam. Use water spray to cool fire exposed surfaces. Avoid spraying water directly into storage containers due to danger of boil over. Shut off fuel to fire if possible to do so without hazard. If a spill has not ignited, use water spray to disperse the vapors.

**FIRE FIGHTING EQUIPMENT :**

Respiratory and eye protection required for fire fighting personnel. Full protective equipment (Bunker Gear) and a self-contained breathing apparatus(SCBA) should be used for all indoor fires and any significant outdoor fires.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

**GENERAL** : Consult an expert on the disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately. Take all additional action necessary to prevent and remedy the adverse effects of the spill.

**LAND SPILL** : Eliminate source of ignition. Keep public away. Prevent additional discharge of material, if possible to do so without hazard. Prevent spills from entering sewers, watercourses or low areas. Contain spilled liquid with sand or earth. Do not use combustible materials such as sawdust. Recover by pumping (use an explosion proof motor or hand pump), or by using a suitable absorbent.

**WATER SPILL** : Remove from surface by skimming or with suitable absorbent. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in unconfined waters.

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## SECTION 7: HANDLING AND STRAGE

### KEEP DIRECT SUNLIGHT AWAY FROM 'HIGH FLAT' .

Because the temperature rises by sunlight, lumps will appear.

A single crystal will grow bigger by slow cooling after melting, so they should store indoors at 0 °C ~35 °C.

STORAGE TEMPERATURE: 0 °C ~35 °C , STORAGE PRESSURE: Atmospheric

### GENERAL :

Keep container closed. Handle and open containers with care.

Store indoors at 0 °C ~35 °C, well ventilated place away from incompatible materials.

DO NOT handle or store near an open flame, sources of heat, or source of ignition.

Protect material from direct sunlight.

Material will accumulate static charges which may cause an electrical spark (ignition source).

Use proper grounding procedures. To prevent injury, use non sparking tools, explosion proof equipment.

### EMPTY CONTAINERS :

DO NOT pressurize, cut, or weld empty containers.

Empty product containers may contain product residue.

DO NOT reuse empty containers without commercial cleaning or reconditioning.

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## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

### ENGINEERING CONTROLS :

Control airborne concentrations below the exposure guidelines.

Use only with adequate ventilation.

Local exhaust ventilation may be necessary for some operations.

Deadly concentrations may exist in areas with poor ventilation.

### Personal protection equipment :

**Respiratory protection** : Atmospheric levels should be maintained below the exposure guideline.

When respiratory protection is required for certain operations, use an approved air-purifying respirator.

For emergency and other conditions where the exposure guideline may be greatly exceeded, use an approved positive pressure self-contained breathing apparatus.

In confined or poorly ventilated areas, use an approved positive pressure self-contained breathing apparatus.

**Eye protection** : Use safety glasses.

Where contact with this material is likely, chemical goggles are recommended because eye contact may cause discomfort even though it is unlikely to cause injury.

If vapor exposure causes eye discomfort, use a full-face respirator.

**Skin protection** : For brief contact, no precautions other than clean body-covering clothing should be needed. When prolonged or frequently repeated contact could occur, use protective clothing such as butyl rubber, impervious to this material. Selection of specific items such as gloves, boots, apron or full-body suit will depend on operation.

**WORK/** : Do not eat or drink during work.

### HYGIENIC PRACTICES

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE</b>	:	Milky white dispersion
<b>PHYSICAL STATE</b>	:	Liquid
<b>ODOR</b>	:	Sweet at low concentrations, irritating at high concentrations.
<b>VAPOR PRESSURE</b>	:	PRODUCT Toluene Not Determined 22 mmHg
<b>VAPOR DENSITY</b>	:	PRODUCT Toluene Not Determined 3.2 (AIR=1)
<b>BOILING POINT</b>	:	PRODUCT Toluene Not Determined 110.6 °C
<b>MELTING POINT</b>	:	PRODUCT Ethene homopolymer, oxidized Not Determined 120.0 °C
<b>GRAVITY (20°C)</b>	:	0.88
<b>SOLUBILITY IN WATER</b>	:	Insoluble
<b>% VOLATILES</b>	:	87 %

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**SECTION 10: STABILITY AND REACTIVITY**

<b>STABILITY</b>	:	Stable
<b>CONDITION TO AVOID</b>	:	Avoid open flames, welding arcs, or other high temperature sources which induce thermal decomposition.
<b>INCOMPATIBILITY</b>	:	Avoid oxidizing materials.
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b>	:	Will not occur
<b>HAZARDOUS POLYMERIZATION</b>	:	Will not occur

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**SECTION 11: TOXICOLOGICAL INFORMATION**

**IMMEDIATE EFFECTS:** No data developed.

**DELAYED EFFECTS:** No data developed.

**OTHER DATA:** No other data developed.

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**SECTION 12: ECOLOGICAL INFORMATION**

This substance may be hazardous to environment.

It is strongly advised not to let the chemical enter into the environment.

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**SECTION 13: DISPOSAL CONSIDERATIONS**

Incinerate or place in a suitable container for disposal by a licensed contractor. Incinerate or place in a suitable container for disposal according to the corresponding law.  
(Follow all Federal, State and local regulation of your Country.)

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**SECTION 14: TRANSPORT INFORMATION**

DOT (CFR No.49) ; Classification : Flammable liquid ; Packing group : 2  
DOT No. UN: 1263 (PAINT), Label: Flammable liquid, IMDG CODE: 3.3  
Type of container for supply : Steel can, Steel drum

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**SECTION 15: REGULATORY INFORMATION**

**TSCA** : Listed ( TSCA : Toxic Substances Control Act )  
**DSL** : Listed ( DSL : Canadian Domestic Substances )  
**AICS** : Listed ( AICS : Australian inventory of Chemical Substances )  
**ECL** : Listed ( ECL : Korean Existing Chemical List )  
**SEPA** : Listed ( SEPA : Inventory of Existing Chemical Substances in China )

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**SECTION 16: DISCLAIMER**

Since the use of this information and these opinions and the conditions of the product are not within the control of GIFU SHELLAC MFG.CO.,LTD.

It is the user's obligation to determine the conditions of safe use of the product.

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**GIFU SHELLAC MFG. CO., LTD.**

DATE PREPARED: January 23, 2007

DATE REVISED:

REASON FOR REVISED: