

DATE PREPARED: 2008.12.10
 DATE REVISED: 2010.06.17

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND SUPPLIER IDENTIFICATION

PRODUCT NAME : HIGH FLAT ZJ-22
 PRODUCT CODE : 33182ER
 ARRANGEMENT CODE : 33182
 SUPPLIER INFORMATION
 NAME : GIFU SHELLAC MFG. CO., LTD.
 ADDRESS : 1-41, Higashiuzura, GIFU, 500-8618 Japan
 DEPT. IN CHARGE : Quality Assurance DEPT.
 NAME OF PREPARER : Junsuke Matsue
 PHONE NUMBER : +81-58-272-9256
 FAX NUMBER : +81-58-272-0704
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 E-MAIL : info@gifushellac.co.jp
 PRODUCT USE : Additives for ink and paint

2. HAZARD IDENTIFICATION

[GHS CLASSIFICATION]

FLAMMABLE LIQUIDS : Category 3
 ACUTE TOXICITY - INHALATION (STEAM) : Category 3
 ACUTE TOXICITY - INHALATION (DUST AND MIST) : Category 4
 SKIN CORROSION/IRRITATION : Category 3
 EYE DAMAGE/IRRITATION : Category 2
 SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY : Category 1 (nerve)
 (SINGLE EXPOSURE)
 HAZARDOUS TO THE AQUATIC ENVIRONMENT : Category 3
 ACUTE HAZARD

[GHS LABELLING ELEMENTS]

PICTOGRAMS OR HAZARD SYMBOLS



SIGNAL WORD Danger

HAZARD STATEMENTS

Flammable liquid and vapour
 Toxic if inhaled (steam)
 Harmful if inhaled (dust and mist)
 Causes mild skin irritation
 Causes serious eye irritation
 Causes damage to organs (nerve)
 Harmful to aquatic life

PRECAUTIONARY STATEMENTS

[Prevention]

Keep container tightly closed.
 Keep away from ignition sources such as heat/sparks/open flame- No smoking.
 Wear protective gloves and eye/face protection as specified by the manufacturer/supplier or the competent authority.
 Ground/Bond container and receiving equipment.
 Use explosion-proof electrical/ventilating/lighting/drying equipment.
 Take precautionary measures against static discharge.
 Use only non-sparking tools.
 Use only outdoors in a well-ventilated area.
 Avoid breathing,dust/fume/gas/mist/vapours/spray.
 Do not eat, drink or smoke when using this product.
 Wash hands/skin/eyes thoroughly after handling.
 Do not breathe dust/fume/gas/mist/vapours/spray.
 Avoid release to the environment.

[Response]

In case of fire, use appropriate media specified by the manufacturer/supplier or the competent authority for extinction.
 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
 Call a POISON CENTER or doctor./physician if you feel unwell.
 IF ON SKIN (or hair): remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation occurs, medical advice/attention.

Specific treatment(see..on this label) ..reference to Supplemental First Aid Instruction.if immediate administration of antidote is required.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists, get medical advice/attention.

Wash hands after handling.

IF exposed: Call a POISON CENTER or doctor/physician.

Specific treatment (see reference to supplemental first aid instruction on this MSDS).

[Storage]

Store in cool/well-ventilated place.

Store locked up.

Store container tightly closed in well ventilated place if product is as volatile as to generate hazardous atmosphere.

[Disposal]

Dispose of contents/container in accordance with local/regional/national/international regulation.

3. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL CHARACTERIZATION : Mixture

GENERIC NAME : Wax dispersion

INGREDIENTS and CONTENTS :

INGREDIENTS	Wt.%	CAS No.
Polyolefin	15	Registered
n-Butyl Acetate	85	123-86-4
Total	100	

4. FIRST AID MEASURES

IF INHALED:

Emergency Responses should use positive pressure air supplied respiratory protection when removing the affected victim from area.

Keep the victim at rest. Administer artificial respiration if breathing has stopped. Call for prompt 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 IN EYES:

Flush eyes with large amounts of water until irritation subsiding. If irritation persists, get medical attention.

IF INGESTED:

If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

5. FIRE-FIGHTING MEASURES

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.

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.

7. HANDLING AND STORAGE

KEEP AWAY FROM DIRECT SUNLIGHT.

Because the temperature rises by sunlight, lumps will appear.

A single crystal will grow bigger by slow cooling after melting, so please store indoors at 0 ~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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

INGREDIENTS	OSHA	ACGIH (TLV-TWA)
Polyolefin	Not listed	10mg/m ³
n-Butyl Acetate	150 ppm	150 ppm

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/HYGIENIC PRACTICES;

Do not eat or drink during work.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Milky white dispersion		
PHYSICAL STATE	Liquid		
ODOR	Sweet at low concentrations, irritating at high concentrations.		
PROPERTIES	PRODUCT	Polyolefin	n-Butyl Acetate
MELTING POINT(°C)	No data	120	-78
BOILING POINT(°C)	No data	No data	126
FLASH POINT (°C)	25 *	More than 200	22
FLAMMABLE LIMITS BY VOLUME % IN AIR (UPPER)	No data	No data	7.6
FLAMMABLE LIMITS BY VOLUME % IN AIR (LOWER)	No data	No data	1.2
VAPOR PRESSURE(kPa)	Not Determined	No data	1.2
VAPOR DENSITY(Air=1)	Not Determined	No data	4.0
GRAVITY (20°C)	0.89	0.97	0.88
SOLUBILITY IN WATER	Insoluble	Insoluble	0.7g/100ml
IN organic solvent	No data	No data	No data
Partition coefficient: n-octanol/water	No data	No data	1.82
AUTO IGNITION Temp. (°C)	No data	380-410	420
Degradation temp.(°C)	No data	No data	No data

FLASH POINT * : SETA CLOSED CUP METHOD

10. STABILITY AND REACTIVITY

STABILITY:

Stable.

CONDITION TO AVOID

Avoid open flames, welding arcs, or other high temperature sources which induce thermal decomposition.

INCOMPATIBILITY

Avoid oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS

Will not occur.

HAZARDOUS POLYMERIZATION

Will not occur.

11. TOXICOLOGICAL INFORMATION

This product is not made an experiment for safeness.

n-Butyl Acetate:

ACUTE TOXICITY DATA : TCLo(ihl, human): 200ppm(JIHTAB 25, 282, 1943)
 LD50(oral, rat): 10768mg/kg(ATDAEI 1, 196, 1992)
 LC50(ihl, rat): 390ppm/4H(INHTE5 9, 623, 1997)
 LD50(oral, mouse): 6gm/kg(GTPZAB 25(11), 57, 1981)

IRRITATION DATA : Skin; rabbit; 500mg/24H; Moderate(FCTXAV 17, 515, 1979)
 Eye; rabbit; 100mg; Moderate(ATDAEI 1, 196, 1992)
 Eye; human; 300mg(JIHTAB 25, 282, 1943)

MUTATION DATA : Not available

REPRODUCTIVE EFFECTS DATA : TCLo(ihl, rat): 1500ppm/7H(7-16 D preg); Effects on Embryo or Fetus - fetotoxicity(NTIS**PB83-258038)

TUMORIGENIC DATA : Not available

ADDITIONAL INFORMATION ;
 NTP : Not listed
 IARC : Not listed
 OSHA : Not listed
 ACGIH : Not Classifiable as a Carcinogen (A4)

12. ECOLOGICAL INFORMATION

n-Butyl Acetate:

BIODEGRADABILITY : Not available
 BIOACCUMULATION POTENTIAL : Not available
 AQUATIC TOXICITY : Not available
 OTHER INFORMATION : WGK; 1

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.)

14. TRANSPORT INFORMATION

	Marine transport	Air transport	Surface transport
Regulation:	IMDG Code	IATA-DGR/ICAO-TI	ADR/RID, DOT(49CFR)
UN No. :	1263		
Proper Shipping Name	PAINT		
Hazard Class:	3		
Packing Group:	III		
Marine Pollutant:	Detected but not restricted	—	

15. REGULATORY INFORMATION

TSCA (Toxic Substances Control Act) : All components are listed.
DSL (Canadian Domestic Substances) : All components are listed.
AICS(Australian inventory of Chemical Substances) : All components are listed.
ECL(Korean Existing Chemical List) : All components are listed.
IECSC(Inventory of Existing Chemical Substances in China) : All components are listed.

16. OTHER INFORMATION

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.

Specific Chemical Content Information Sheet

Corporate name	GIFU SHELLAC MFG. CO., LTD.
Address	1-41, HIGASHIUZURA, GIFU, 500-8618 JAPAN
Section name	Quality Assurance Dept.
Telephone number	+81-58-272-9256
Fax number	+81-58-272-9261
E-mail	info@gifushellac.co.jp
Management number	33182ER
The date	2009/5/22

Name of product **HIGH FLAT ZJ-22**

1.Environment-related substance content investigation in product

No.	Substance group name	Presence of intentional content	Density 1) (ppm)	Remarks 1)
1	Cadmium and its compounds	No		
2	Hexavalent chromium compounds	No		
3	Lead and its compounds	No		
4	Mercury and its compounds	No		
5	tributyltins (TBTs) triphenyltins(TPTs)	No		
6	Bis (tributyltin)= oxide(TBTO)	No		
7	Short-chain type chlorinated paraffin	No		
8	Polybrominated biphenyls (PBBs)	No		
9	Polybrominated diphenyl ethers(PBDEs)	No		
10	Polychlorinated biphenyls(PCBs)	No		
11	Polychlorinated naphthalene (The number of chlorine is 3 or more.)	No		
12	Asbestos	No		
13	Specific azo dye and pigments	No		
14	Ozone-depleting substances	No		
15	Radioactive substances	No		
16	Antimony and its compounds	No		
17	Arsenic and its compounds	No		
18	Beryllium and its compounds	No		
19	Bismath and its compounds	No		
20	Nickel	No		
21	Selenium and its compounds	No		
22	Bromine flame retardant (PBB and PBDE are excluded.)	No		
23	Polyvinyl chloride(PVC)	No		
24	Phthalate esters	No		

1)When mixing is confirmed non-intentionally and spontaneously, it describes to remarks so.

2.Reason to guarantee that there is continuously no mixing possibility of environment-related substance.

御中

年 月 日

株式会社 岐阜セラツク製造所

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MSDS送付に関し、その受領の確認を致したく存じます故、誠に恐縮ではございますが、

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尚、ご返送方法は FAXもしくは郵送にて本紙をこのままお送り頂きます様お願いします。

敬具

記

【送付先】

株式会社 岐阜セラツク製造所 品質保証部

TEL 058-272-9256(直通) FAX 058-272-9261(直通)

〒500-8618 岐阜市東鶉1丁目41番地

製品安全データシート(MSDS) 受領確認書

貴社名: _____

貴部署名: _____

御担当者名: _____

受領年月日: _____

受領印

下記製品のMSDSを受領いたしました。

製品名: HIGH FLAT ZJ-22

MSDS No.: 33182ER