

Product name: **KIBISAN® SAN**

Version 1

Revision Date: June 1,2015  
Print Date: November 30, 2015

**Section 1. Identification of the substance/ mixture and of the company/ undertaking**

**1.1 Product identifier**

Product name: **KIBISAN®**

This safety data sheet pertains to the following products:

PN-106 L150, PN-107 L125,PN-107 L125 FG, PN-117 L100,PN-117 L200,  
PN-117C,PN-127 L100,PN-127 L150,PN-127 L200, PN-127H,PN-137H and PN-137H L200.

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses: Mixture used for the production of molded plastic articles

**1.3 Details of the supplier of the Safety Data Sheet**

Supplier: Chi Mei Corporation  
Address: 59-1, San Chia, Jen Te Village  
Tainan County  
Taiwan R.O.C.  
Telephone: +886 6 2663000 Ext.1347  
Email: service@mail.chimei.com.tw

**1.4 Emergency telephone number**

Emergency telephone : +886 6 2663000 Ext. 2501

**Section 2. Hazards identification**

**2.1 Classification of the substance or mixture**

Classification according to Directive 67/548/EEC or 1999/45/EC: Not classified as hazardous (polymeric state)

Classification according to Regulation (EC) N° 1272/2008 (CLP): Not classified as hazardous (polymeric state)

**2.2 Label elements**

Not labelled as hazardous

**2.3 Other hazards**

vPvB/PBT assessment: not available

**Section 3. Composition/information on ingredients**

**3.1 Composition of the substance/ preparation**

Substance or Preparation      Substance  
Content

| CAS       | Name                            | content |
|-----------|---------------------------------|---------|
| 9003-54-7 | Acrylonitrile-Styrene Copolymer | >99 %   |
| -         | Additives                       | ≤ 1 %   |

Impurities Contributing to Hazard      None

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**3.2 Additional information:**

Reach Info:

|               | Registration No.      |
|---------------|-----------------------|
| Acrylonitrile | 01-2119474195-34-0045 |
| Styrene       | 01-2119457861-32-0006 |
|               | 01-2119457861-32-0007 |
|               | 01-2119457861-32-0057 |
|               | 01-2119457861-32-0065 |
|               | 01-2119457861-32-0081 |

**3.3 For full text of R- and H-phrases:** see section 16

**Section 4. First-aid measures**

**4.1 Description of first aid measures**

General notes: Remove affected persons from the danger area, at the same time ensuring your own safety. Remove all contaminated clothing immediately

Following inhalation: In case of gases evolving from melted resin, move subject to fresh air. Treat symptomatically

Following skin contact: In case of pellets or powder, wash with water. In case of smelt, wash affected skin area and clothing with plenty of (soap and) water. Seek medical advice

Following eye contact: In case of pellets or powder, flush with plenty of water for at least 15 minutes. Seek medical advice if any dust particles still remain.

In case of gases evolving from melted resin of high temperature, flush with plenty of water for at least 15 minutes. Seek medical advice if necessary

Following ingestion: Induce vomiting. Rinse mouth with water. Seek medical advice if necessary

Self-protection of the first aider: -

**4.2 Most important symptoms & effects both acute & delayed**

Dust: Skin irritation, eye irritations and redness

**4.3 Indication of any immediate medical attention and special treatment needed: -**

**Section 5. Fire-fighting measures**

**5.1 Extinguishing media**

Suitable extinguishing agents: Water, foam, dry chemical powder

For safety reasons unsuitable extinguishing agents: -

**5.2 Special hazards arising from the substance or mixture: -**

**5.3 Advice for firefighters**

Protective equipment: Self-contained breathing apparatus

Further measures: -

**5.4 Additional information: -**

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## Section 6. Accidental release measures

### 6.1 Personal precautions, protective equipment & emergency procedures

Pellets or powder remained on ground may cause slipping

Wear protective equipment

Ensure adequate ventilation

Keep away from ignition sources

Keep unprotected persons away

### 6.2 Environmental precautions

Gather pellets and powder thoroughly to avoid birds or fishes taking from draining water.

Do not allow product to reach sewage system or water bodies. Inform respective authorities in case product reaches water, sewage system or soil

### 6.3 Methods and material for containment and cleaning up

Recovery if not contaminated or disposal

### 6.4 Reference to other sections

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment.

## Section 7. Handling and storage

### 7.1 Precautions for safe handling

Protective measures: -

Measures to prevent fire: Prevent from fire around handling area

Measures to prevent aerosol and dust generation: maintain good housekeeping standards to prevent accumulation of dust. To avoid dust explosion resulting from the existence of powder, electrostatics eliminators and grounding should be fixed to such equipment as air transferring pipes, bag filters and hoppers. Use electrically conductive filters for bag filters.

Measures to protect the environment: -

Advice on general occupational hygiene: -

### 7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions: Keep the material at a cool dry place. Protect from direct sunlight, rain and violent temperature fluctuation. Fire is inhibited around storage area.

Requirements for storage rooms and vessels: -

Suitable materials and coating: -

Unsuitable materials or coatings: -

Further information on storage conditions: -

### 7.3 Specific end use(s)

Recommendations: -

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## Section 8. Exposure controls/personal protection

### 8.1 Control parameters

Exposure limits : None established

### 8.2 Exposure control

Appropriate engineering controls: Install eyes washer and shower in the place of operation. Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits

Personal protection:

- Respiratory protection: Wear masks for cleaning molding machines
- Hand protection: Heat-insulating gloves when handling molten form
- Eye protection: Wear safety glasses for general purpose. Wear chemical goggles for cleaning molding machines
- Skin and body protection: Gloves necessary for handling melted resin
- Hygiene measures: Wash hands after handling

### 8.3 Environmental exposure controls

Product related measures to prevent exposure: None specific

Instruction measures to prevent exposure: None specific

Organizational measures to prevent exposure: None specific

Technical measures to prevent exposure: None specific

Environmental exposure controls: Do not allow product to reach sewage system or water bodies

## Section 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|                                              |                                                                          |
|----------------------------------------------|--------------------------------------------------------------------------|
| Appearance                                   | Pellet                                                                   |
| Odour                                        | Very slight sweet aromatic                                               |
| Colour                                       | Transparent                                                              |
| Odour threshold                              | Not Established                                                          |
| pH                                           | Not applicable                                                           |
| Melting point / freezing point               | 93 ~ 110°C (200 ~ 230°F)                                                 |
| Initial boiling point and boiling range      | Not applicable                                                           |
| Flash point                                  | >400 °C                                                                  |
| Evaporation rate                             | Not applicable (Butyl acetate = 1)                                       |
| Flammability (solid, gas)                    | Not available                                                            |
| Upper/lower flammability or explosive limits | Not applicable                                                           |
| Vapour pressure                              | Not applicable                                                           |
| Vapour density                               | Not applicable                                                           |
| Specific gravity                             | Approx. 1.06 kg/m3                                                       |
| Bulk density                                 | Approx. 300-450 kg/m3                                                    |
| Solubility in water                          | Insoluble                                                                |
| Solubility (non aqueous)                     | Benzene, Acetone, Methyl Ethyl Ketone(MEK), and Dimethyl formamide (DMF) |
| Auto-ignition temperature                    | No self-igniting                                                         |
| Decomposition temperature                    | > 300 °C                                                                 |
| Viscosity                                    | Not applicable                                                           |
| Explosive properties                         | Not explosive                                                            |
| Oxidizing properties                         | Not oxidizing                                                            |

### 9.2 Other safety information: -

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#### Section 10. Stability and reactivity

- 10.1 Reactivity:** Non-reactive under normal handling and storage conditions
- 10.2 Chemical stability:** Stable under normal handling and storage conditions
- 10.3 Possible hazardous reaction:** -
- 10.4 Conditions to avoid:** Avoid excessive heat, flames and all sources of ignition
- 10.5 Incompatible materials:** not applicable
- 10.6 Hazardous decomposition products:** not applicable

#### Section 11. Toxicological information

##### 11.1 Information on toxicological effects

###### Toxicological effects:

- Acute toxicity (oral): Lack of data.
- Acute toxicity (dermal): Lack of data.
- Acute toxicity (inhalative): Lack of data.
- Skin corrosion/irritation: Lack of data. May cause irritations.
- Eye damage/irritation: Lack of data. May cause irritations.
- Sensitisation to the respiratory tract: Lack of data. Not to be expected
- Skin sensitisation: Lack of data. Not to be expected
- Germ cell mutagenicity/Genotoxicity: Lack of data. Not to be expected
- Carcinogenicity: Lack of data. Not to be expected
- Reproductive toxicity: Lack of data. Not to be expected
- Effects on or via lactation: Lack of data.
- Specific target organ toxicity (single exposure): Lack of data.
- Dusts: Irritating to eyes, respiratory system and skin.
- Specific target organ toxicity (repeated exposure): Lack of data.

###### Other information

###### Styrene:

- Harmful if inhaled. Causes damage to organs through prolonged or repeated exposure.
- lung damages
- May be fatal if swallowed and enters airways.
- Causes serious eye irritation. Causes skin irritation.

###### Acrylonitrile:

- Toxic by inhalation, in contact with skin and if swallowed.
- May cause cancer. Suspected of damaging the unborn child.
- Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage.

###### Symptoms

- Dust: Can cause skin, eye and respiratory tract irritation.
- The melted product can cause severe burns.
- Thermal treatment, Processing:
- Irritating to eyes, respiratory system and skin.
- In case of ingestion: Swallowing may cause gastrointestinal irritation and pain of guts.

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## Section 12. Ecological information

### 12.1 Toxicity

| Method                                                                                                                                       | Results | Reference |
|----------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------|
| <b>Short-term aquatic toxicity</b>                                                                                                           |         |           |
| Based on available data on the constituents the classification criteria are not met                                                          |         |           |
| LC(50) <sub>mixture</sub> = 5.78 mg/l (additivity and summation method, toxicity information available for 92,5 % of the mixture)            |         |           |
| <b>Long-term aquatic toxicity</b>                                                                                                            |         |           |
| Based on available data on the constituents the classification criteria are met and the mixture is therefore classified as Aquatic Chronic 1 |         |           |
| NOEC <sub>mixture</sub> = 0.0079 mg/l (additivity and summation method, toxicity information available for 78 % of the mixture)              |         |           |

### 12.2 Persistence and degradability

**Biodegradation:** Product is not readily biodegradable.

**Effects in sewage plants:** In sewage treatment plants it may be separated mechanically.

### 12.3 Bioaccumulative potential

To avoid bioaccumulation plastics should not be disposed in the sea or in other water environments.

### 12.4 Mobility in soil

no data available

### 12.5 Results PBT & vPvB assessment

According to the revised Annex XIII of regulation (EC) 1907/2006 and (EC) 253/2011: No information available on the product as such

### 12.5 Other adverse effects:

General information: Do not allow to enter into ground-water, surface water or drains.

### 12.7 Additional information: -

## Section 13. Disposal considerations

### 13.1 Waste treatment methods

Product / Packaging disposal: Dispose in accordance with the current local regulations.

Waste codes according to European Waste Catalogue: -

Waste treatment-relevant information: Inadequate incineration may generate toxic gases such as CO, HCN, AN and SM

Sewage disposal-relevant information: -

Other disposal recommendations: -

## Section 14. Transport information

### ADR/RID

#### 14.1 UN number

Not applicable

#### 14.2 UN proper shipping name

Proper Shipping Name: NOT REGULATED

#### 14.3 Transport hazard class(es)

Not applicable

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**14.4 Packing Group**

Not applicable

**14.5 Environmental hazards**

Not considered environmentally hazardous based on available data

**14.6 Special precautions for user**

Special Provisions: no data available

Hazard identification No: no data available

**ADNR / ADN**

**14.1 UN number**

Not applicable

**14.2 UN proper shipping name**

Proper Shipping Name: NOT REGULATED

**14.3 Transport hazard class(es)**

Not applicable

**14.4 Packing Group**

Not applicable

**14.5 Environmental hazards**

Not considered environmentally hazardous based on available data

**14.6 Special precautions for user**

no data available

**IMDG**

**14.1 UN number**

Not applicable

**14.2 UN proper shipping name**

Proper Shipping Name: NOT REGULATED

**14.3 Transport hazard class(es)**

Not applicable

**14.4 Packing Group**

Not applicable

**14.5 Environmental hazards**

Not considered environmentally hazardous based on available data

**14.6 Special precautions for user**

EMS Number: Not applicable

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

**ICAO/IATA**

**14.1 UN number**

Not applicable

**14.2 UN proper shipping name**

Proper Shipping Name: NOT REGULATED

**14.3 Transport hazard class(es)**

Not applicable

**14.4 Packing Group**

Not applicable

**14.5 Environmental hazards**

Not considered environmentally hazardous based on available data

**14.6 Special precautions for user**

no data available



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## Section 15. Regulatory information

### 15.1 Safety, health and environmental regulations /legislation specific for the substance or mixture

Authorization and / or restrictions on use: None

Other EU regulations: The following substances are under European Seveso regulation:

| Substance     | Seveso category | Other Seveso categories | Seveso concentrations | Categories |
|---------------|-----------------|-------------------------|-----------------------|------------|
| Acrylonitrile | 2               | 9ii<br>7b               | 10 % ≤ C < 20 %       | 2          |
| Styrene       | 6               | -                       | C ≥ 12,5 %            | -          |

Other national regulations: -

### 15.2 Chemical Safety Assessment

For this substance a chemical safety assessment is not yet required.

## Section 16. Other information

### 16.1 Indication of changes

Version 1: First issue according to Regulations (EC) 1907/2006 (REACH) & 1272/2008 (CLP)

### 16.2 Abbreviations and acronyms

|       |                                                              |        |                                                                                    |
|-------|--------------------------------------------------------------|--------|------------------------------------------------------------------------------------|
| AGS   | Ausschuss für Gefahrstoffe                                   | LoW    | List of Waste                                                                      |
| AF    | Assessment Factor                                            | MARPOL | MARine POLLution                                                                   |
| BCF   | BioConcentration Factor                                      | MIE    | Minimum Ignition Energy                                                            |
| CAS   | Chemical Abstract Service                                    | N°EC   | European Commission number                                                         |
| CMR   | Carcinogenic, Mutagenic and Reprotoxic                       | NFPA   | National Fire Protection Association                                               |
| CSR   | Chemical Safety Report                                       | NIOSH  | National Institute of Occupational Safety and Health                               |
| DFG   | German Research Foundation                                   | NOEC   | No Observed Effect Concentration                                                   |
| DNEL  | Derived No Effect Level                                      | NOELR  | No Observed Effect Loading Rate                                                    |
| EC    | European Commission                                          | OECD   | Organisation for Economic Co-operation and Development                             |
| EC50  | Effective Concentration<br>(required to induce a 50% effect) | OEL    | Occupational Exposure Limit                                                        |
| EEC   | European Economic Community                                  | OSHA   | Occupational Safety and Health Administration                                      |
| EWC   | European Waste Catalogue Code                                | PBT    | Persistent Bioaccumulable Toxique                                                  |
| IDLH  | Immediately Dangerous to Life or Health                      | PNEC   | Previsible Non Effect Concentration                                                |
| IBC   | International Bulk Chemical                                  | QSAR   | Quantitative Structure-Activity Relationship                                       |
| Koc   | Soil/Water Partition Coefficient                             | STOT   | Specific Target Organ Toxicity                                                     |
| Kow   | Octanol/Water Partition Coefficient                          | TCLo   | Toxic Concentration Low                                                            |
| LC50  | Lethal Concentration 50                                      | TDLo   | Toxic Dose Low                                                                     |
| LD50  | Lethal Dose 50                                               | UN     | United Nations                                                                     |
| LEL   | Lower Explosive Limit                                        | UVCB   | Unknown or Variable Composition Complex Reaction Products, or Biological Materials |
| LL100 | Lethal Loading                                               | vPvB   | very Persistent, very Bioaccumulative                                              |
| LOEC  | Lowest Observed Effect Concentration                         |        |                                                                                    |

### 16.3 Key literature references and sources for data

<http://esis.jrc.ec.europa.eu/>

<http://echa.europa.eu/>

<http://gestis-en.itrust.de>



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**16.4 Relevant R-phrases and/or H-statements (number and full text):**

|      |                                                 |           |                                                                                                 |
|------|-------------------------------------------------|-----------|-------------------------------------------------------------------------------------------------|
| H220 | Extremely flammable gas                         | R10       | Flammable                                                                                       |
| H225 | Highly flammable liquid and vapour              | R11       | Highly flammable                                                                                |
| H226 | Flammable liquid and vapour                     | R12       | Extremely flammable                                                                             |
| H301 | Toxic if swallowed                              | R20       | Harmful by inhalation                                                                           |
| H311 | Toxic in contact with skin                      | R23/24/25 | Toxic by inhalation, in contact with skin and if swallowed                                      |
| H315 | Causes skin irritation                          | R36       | Irritating to eyes                                                                              |
| H317 | May cause an allergic skin reaction             | R37       | Irritating to respiratory system                                                                |
| H318 | Causes serious eye damage                       | R38       | Irritating to skin                                                                              |
| H319 | Causes serious eye irritation                   | R40       | Limited evidence of a carcinogenic effect                                                       |
| H331 | Toxic if inhaled                                | R41       | Risk of serious damage to eyes                                                                  |
| H332 | Harmful if inhaled                              | R43       | May cause sensitisation by skin contact                                                         |
| H335 | May cause respiratory irritation                | R45       | May cause cancer                                                                                |
| H340 | May cause genetic defects                       | R46       | May cause inheritable genetic damage                                                            |
| H350 | May cause cancer                                | R50/53    | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment |
| H351 | Suspected of causing cancer                     | R51/53    | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment      |
| H400 | Very toxic to aquatic life                      |           |                                                                                                 |
| H411 | Toxic to aquatic life with long lasting effects |           |                                                                                                 |

**16.5 Training advice: -**

**16.6 Further information:** According to the guidance version 2.0 for monomers and polymers from the European Chemicals Agency dated as of April 2012, the classification of the polymer takes into account the classification of all its constituents, such as unreacted monomers. These constituents in fact should be taken into account for classification of the polymer. This means that the same classification methods as for mixture should be applied to polymer substances.

In order to determine a classification for the studies about the water soluble fraction as well as the absorption should be performed on the polymer as such.

*To the best of our knowledge and belief, the information contained herein is accurate and obtained from sources believed to be reliable. No representation is made that the information is complete or the material is suitable for all purposes. The final determination as to the suitability of the user's intended use of the material is the sole responsibility of the user. All materials may present unknown hazards even when used in common applications and accordingly, it is the sole responsibility of the user to understand and address all potential hazards, including those identified herein. The information set forth in Sections 11 and 12 reflects data available as of the date hereof. It is anticipated that such data will be updated.*