SAFETY DATA SHEET

Product name: SAN Resin

Grade Name: TAIRISAN NF2100, NF2200, NF2200AD, NF2200AE, NF2200AL, NF2300,

NX3000, NX3200, NX3200AL, NX3300, NX3400

Freight classification: Plastics, Clearness solid Used for: Injection and Extrusion

Dated Prepared: June 10, 1996

Dated Revised: March 30, 2016

1.COMPANY IDENTIFICATION

Manufacturer (Company)

Name: FORMOSA CHEMICALS & FIBRE CORPORATION.

Address: 1, Chung Yang Industrial Park, Chung Yang Village, Hsin-Kang Hsiang,

Chia Yi, Taiwan

Department: Plastics Division

Telephone Number: +886-5-3772111 Ext. 636

Facsimile Number: +886-5-3770184 Emergency Phone: +886-0800-211506

2.HEALTH HAZARD INFORMATION

GHS Classification:

This product is not hazardous under the criteria of U.S. Occupational Safety and Health Standard 29 CFR 1910 Subpart Z and United Nations GHS Parts 2, 3, and 4.

Potential Health Effects:

Eye: Dust and process vapors may irritate eyes.

Skin: Exposure to molten resin may cause thermal burns.

Inhalation: Dust and process vapors may cause respiratory tract irritation.

Ingestion: Not Applicable

3.COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name: Acrylonitrile-Styrene Copolymer Ingredients and Composition: Approx. 100% Chemical Formula (Constitutional or Structural):

$$\begin{array}{c|c} - \longleftarrow (CH_2 - CH) + (CH_2 - CH) & \\ & | & \\ & CN & C_6H_5 \end{array}$$

CAS No.: 9003-54-7

The First Phase of Existing Chemical Substances Registry Code:EPEP4A00383793

4.FIRST-AID MEASURES

Route(s) of Entry:

Inhalation:

Vapors and fumes produced during the melt-processing of these plastics may produce acute health effects in some individuals, especially irritation of eyes, nose and throat, and, in case of severe over-exposure, nausea and headache. In case of persistent discomfort, the selected person should be removed from the areas and provided medical attention. The gaseous emission from the vents of vented-barrel presses and extruders should not be discharged into the work areas. Fumes and vapors emitted from hot plastic during converting operations may condense on cool overhead metal surfaces or structures. That condensate, usually in the form of a soft grease-like, semi-sold, may contain substances which can be irritating and toxic. Avoid contact of that material with the skin. Wear rubber or other impermeable protective gloves when cleaning contaminated surfaces.

Skin: Not acutely toxic

Ingestion: Not acutely toxic

Health Hazards (Acute and Chronic): None

Cacinogenicity: NTP: Unknown

IARC Monographs: Unknown OSHA Regulated: Unknown Signs and Symptoms of Exposure:

See Inhalation of "Route of Entry" in case of melt-processing

Medical Conditions:

See Inhalation of "Route of Entry" in case of melt-processing

Emergency and First Aid Procedures:

Ingestion: Not Probable

Inhalation: Remove to fresh air and refer to a physician for treatment

Skin: Molten plastic causes severe burns. Cool rapidly with water and immediately obtain medical attention

to remove the cooled plastics.

Eyes: Flush with clean water

5.FIRE-FIGHTING MEASURES

Flash Point (Method Used): Over 350°C

Flammable Limits:

LEL: NA UEL: NA

Extinguishing Media: dry chemicals, carbon dioxide, foam or water

Special Fire Fighting Procedures:

Use water spray to cool fire-exposed surfaces and to protect personnel. Avoid inhalation of smoke and fume. Fire-fighters should be provided the necessary protective clothing and use a self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: None

6.ACCIDENTAL RELEASE MEASURES

PROTECT PEOPLE: Pellets or beads may present a slipping hazard.

PROTECT THE ENVIRONMENT: Keep out of irrigation ditches, sewers, and water supplies. Spills

should be collected to prevent contamination of waterways.

CLEANUP: Sweep up.

7.HANDLING AND STORAGE

HANDLING: Good housekeeping and controlling dusts are necessary for safe handing of product.

Workers should be protected from the possibility of contact with molten resin during

fabrication.

STORAGE: Store in a dry place.

8.EXPOSURE CONTROL / PERSONAL PROTECTION

Respiratory Protection (Specify Type):

Under conditions of excessive fume concentration during melt-processing a OSHA or MSHA approved device with an organic vapor acid gas rating or fresh air supply should be used.

Ventilation:

Local Exhaust: Local hood-exhausts for handling

Mechanical (General): Not Required

Special: Not Required
Other: Not Required
Protective Groves: Gloves
Eye Protection: Safety Glasses

Other Protective Clothing or Equipment: Ordinary work clothes, Dust mask

Work/Hygienic Protective: Required if there is melt-process

9.PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clearness solid

Odor: Odorless

Boiling Point: NA
Vapor Pressure (mmHg): NA
Vapor Density (Air=1): NA

Specific Gravity ($H_2O=1$): 1.07 ~ 1.08 (Net)

Melting Point: There is no definite melting point, and it becomes soft gradually over a broad

range (130°C ~ 150°C)

Evaporation Rate (Butyl Acetate=1): NA Solubility in Water: Insoluble

10.STABILITY AND REACTIVITY

Stability: Stable

Incompatibility (Materials to Avoid): Strong Oxidants

Hazardous Decomposition or Byproducts:

styrene, acrylonitrile monomer, acetoaldehyde, acetophenone, ethylbenzene,

cumene, benzaldehyde, phenol, acrolein.

Hazardous Polymerization: Will not occur

11.TOXICOLOGICAL INFORMATION

Skin Corrosiveness : None

Irritability (Skin, Eyes) : There is physical irritability.

Allergenic and Sensitizing Effects: None Acute Toxicity (Includes 50% Lethal Dose):

Oral LD 50 (Rat) > 5g/kg (Assumed Value)

Sub-Acute Toxicity : No Information
Chronic Toxicity : No Information
Carcinogenic Effects: No Information
Mutagenic Effects : No information

Effects on the Reproductive System: No Information

Teratogenic Effects: No Information

Others (Includes generation of toxic gases by reaction with water, etc.)

12.ECOLOGICAL INFORMATION

Biodegradability: Not Biodegradable Bioaccumulation: No Information Fish Toxicity: No Information

Others: In order to prevent the marine animals and birds from ingesting it, it just not be abandoned or

dumped in any ocean or water area.

13.DISPOSAL CONSIDERATIONS

It shall be handled in accordance with the laws, rules, and ordinances related to the disposal of waste matters.

14.TRANSPORT INFORMATION

Avoid wetting or rough handling so that the packaging will not be damaged. In case the bags are damaged and the powders are scattered, pay attention so that no one will slip and fall. All of the materials that have spilled shall be rapidly collected.

According IATA/ICAO regulation not restricted.

15.REGULATORY INFORMATION

The Fire Services Act Specified Flammables (3,000 kg or above)

16.OTHER INFORMATION

References: 1) Manual for Preventing the Discharging of Resin Pellets / Japan Plastics Industry Federation February, 1993.

The information described herein was prepared on the basis of the materials, information, and data available at the present time, and the above information may be revised by new knowledge. The precautionary items were based on ordinary handling. In case of special handling, safety measures in compliance with the application and usage shall be executed. The above was given as an information, and no guarantee, express or implied, is made. Final determination of safety and suitability of any material is the sole responsibility of the keeper and user. All materials may present unknown hazards, and therefore should be handled with adequate caution. Although certain hazards are described herein, they may not be the only hazards in relation to the products.