GGINK INTERNATIONAL LIMITED

Material Safety Data Sheet

1. Chemical Product and Company Identification:

Product Name: Polyamide Resin 311-L, 311, 311A, 311B, 311C, 311H, 311C,

310, 310A, 310E

Generic Name: Fatty Acid Dimer-Based Polyamide Resin

Chemical Family: INKOPLAS®

CAS No.: confidential

Manufacturer: GGINK INTERNATIONAL LIMITED.

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MSDS No.: TDS001

Efficient Time: From Aug. 16, 2008

CHEMTREC: 800-424-9300

2. Composition/Information of Ingredients (***):

	ACGIH TLV (mg/m³)		OSHA PEL (mg/m³)	
	<u>TWA</u>	<u>STEL</u>	<u>TWA</u>	<u>STEL</u>
Particulates not otherwise classified	10	NE	NE	NE
Particulates not otherwise regulated				
Total dust	NE	NE	15	NE
Respirable fraction	NE	NE	5	NE

TLV = Threshold Limit Value

PEL = Permissible Exposure Limit

TWA = Time-weighted average (8 hours)

STEL = short term (15 minute) exposure limit

NE = not established

3. Hazards Identification:

Emergency Overview:

Amber solid with a mild amine odor, in crushed form.

- 1. Non- flammable or Non- explosive.
- 2. Avoid breathing dust.

Potential health effects:

Skin: Prolonged or repeated contact may cause mild irritation.

Eye: resin dust can cause irritation.

Inhalation: Inhalation of dust, molten resin vapor or fumes may cause minor irritation of the nose and throat in sensitive individuals. The molten resin vapors or fumes may cause sensitization and the development of an asthmatic reaction in certain sensitive individuals.

Ingestion: not a probable route of entry into the body.

Subchronic effects (Target organ effects): no known effects.

Chronic effects: no known effects.

4.First Aid Measures:

Skin contact: in case of contact, flush eyes with plenty of water. Call a physician if signs of irritation appear.

Eye contact:

Solid resin: as good industrial hygiene practice, at the end of each work shift, wash skin with plenty of soap and water. Call a physician if signs of irritation appear.

Molten Resin: cool the affected area with cold water, but do not attempt to remove the solidified resin from the skin. Consult a physician immediately for burn treatment.

Inhalation: remove to fresh air if effects occur from inhalation of molten resin or fumes, or resin dust.

Ingestion: Emergency care should not be needed.

5.Fire Fighting Measures:

Flash point: not applicable

Upper/Lower flammable limits: unknown

Auto-ignition temperature: unknown

Flammability classification: non-hazardous Flame propagation rate: not applicable

Recommended extinguishing media: carbon dioxide, dry chemical, foam or water fog.

Special precautions: toxic gases such as carbon monoxide may be released during fire. Use positive-pressure self-contained breathing apparatus and full protective clothing.

Unusual fire and explosion hazards: may form flammable dust-air mixtures. See hazards: engineering controls.

6. Accidental Release Measures:

In a clean area, recover for reuse. Dispose of contaminated material.

7. Handling and Storage:

When handling molten resin, use adequate ventilation to avoid the accumulation of fumes. Use good housekeeping to prevent dust accumulation. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

8. Exposure Controls/Personal Protection:

Eyes:

Solid Resin: use safety glasses. An eye wash is recommended.

Molten Resin: Use chemical safety goggles. An eye wash is recommended.

Skin:

Solid Resin: As good industrial hygiene practice, impervious (for example, nitrile) gloves are recommended

Molten Resin: heat-resistant gloves and other protective clothing should be worn to prevent body contact. A safety shower is recommended.

Inhalation:

Solid Resin: for normal operations, no respiratory protection is required. A dust mask is recommended if resin dust becomes airborne.

Molten resin: an air purifying respirator designed for organic vapors should provide adequate protection.

Engineering controls: use adequate ventilation. In process operations, capable of generating static electricity and/or dust clouds; grounding, venting, and explosion relief provisions must be used.

9. Physical and Chemical Properties:

Appearance/state: Amber solid

PH: not applicable

Vapor pressure: < 0.001mmHg at 20° C (68°F)

Vapor density: not applicable Boiling point: not applicable

Melting point: 113℃

Solubility in water: negligible < 0.1% at 25° C $(77^{\circ}$ F)

Specific gravity: 0.97 at 25° C/ 25° C (water = 1.00)

Evaporation rate: Approx. 0(n-butyl acetate =1)

% Volatile by weight: 0

10. Stability and Reactivity:

Chemical stability: stable under normal temperatures and pressures.

Conditions to avoid: Formation of dust clouds. The product is not reactive with water.

Chemicals to avoid: none known.

Hazardous polymerization: will not occur.

Hazardous decomposition products: thermal decomposition products may include toxic

oxides of carbon.

11. Toxicological Information:

This product is not on the International Agency for Research on Cancer (IARC) or national toxicology program (NTP) or OSHA lists of carcinogens or potential carcinogens.

Toxicity data: the following data on test animals indicate that chemically similar products have low acute toxicity potential.

Route-Species	Test	Dosage	Units	Irritation Data
Oral-rat	LD50	>20	g/kg	Skin-rabbit slight irritant
Skin-rabbit	LD50	>6	g/kg	Eye-rabbit mild irritant

Other: molten resin can cause thermal burns.

12. Ecological Information:

There is no data available at this time.

13. Disposal Considerations:

Dispose of waste by landfill or incineration in accordance with all local, state and federal regulations.

Resource Conservation and Recovery Act (RCRA): this product is not included in the lists of hazardous substances (40 CFR 261.33), nor does it exhibit the characteristics of hazardous waste (40 CFR 261.20-24).

14. Transportation Information:

DOT-Department of Transportation Hazardous Materials Regulations

DOT hazard class: not applicable

DOT proper shipping name: not applicable

Technical name: not applicable

DOT identification number: not applicable

Surface freight classification: plastic synthetic

Packing Group: not applicable

15. Regulatory Information:

Toxic Substances Control Act (TSCA): this product is on the TSCA inventory.

<u>SARA</u>, <u>Title III</u>, <u>Section 313 (40 CFR 372)</u>: This product contains the following substances at a level which is reportable under SARA Toxic Chemical Release Reporting Regulations.

Chemical Name CAS # Wt%

None

SARA 311/312 Hazard Categories: this product has the following hazard categories: none

<u>New Jersey Worker and Community Right to Know Act:</u> this product contains the following substances which appear on the Hazardous Substance List, are Trade Secret or are top five ingredients:

Chemical NameCAS or NJTS #Wt%ConfidentialNJTSRN-6818100

<u>Pennsylvania Worker and Community Right To Know Act:</u> this product contains the following substances which appear on the Hazardous Substance List at a level which requires notification under the Act:

Chemical name CAS # Wt%

None

WHMIS (Canada) Status: not a controlled product under WHMIS.

Canadian Environmental protection Act (CEPA) Status: this product is on the DSL.

16. Other Information:

Hazard Ratings: NFPA 1 Health 1 Fire 0 Reactivity

Prepared by: Shi Chang Wang Title: Product Safety Assistant

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