

CSDE-GYL

Version 1

Revision Date 05/01/2009

Print Date 05/01/2009

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Aegis® Nylon Resin
MSDS Number : 000000011530
Product Use Description : Plastic resin for use in the manufacture of items used in industrial packaging, food packaging and other multi-purpose applications.

Company : Honeywell International, Inc.
101 Columbia Road
Morristown, NJ 07962-1057

For more information call : 800-707-4555
(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : Medical: 1-800-498-5701
: **Transportation: 1-800-424-9300 or +1-703-527-3887**
: (24 hours/day, 7 days/week)

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Form : pellets

Color : natural colour

Odor : slight organic

Hazard Summary : The molten product can cause serious burns. Product dust may be irritating to eyes, skin and respiratory system. Thermal decomposition can lead to release of irritating gases and vapours.

Potential Health Effects

Skin : May cause mechanical irritation.
The molten product can cause serious burns.

Eyes : May cause mechanical irritation.
Thermal decomposition can lead to release of irritating gases and vapours.

Ingestion : Unlikely route of exposure.
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Inhalation : May cause respiratory tract irritation.
Thermal decomposition can lead to release of irritating gases

CSDE-GYL

Version 1

Revision Date 05/01/2009

Print Date 05/01/2009

and vapours.

Chronic Exposure : None known.

Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Weight %
Polyamide resin	-	>90.00
Proprietary additives	-	<10.00
.epsilon.-Caprolactam	105-60-2	<1.00

SECTION 4. FIRST AID MEASURES

- Inhalation : Remove to fresh air. Call a physician if irritation develops or persists.
- Skin contact : Wash off immediately with plenty of water. Use a mild soap if available. Call a physician if irritation develops or persists. Cool skin rapidly with cold water after contact with hot polymer. Call a physician immediately.
- Eye contact : Rinse thoroughly with plenty of water, also under the eyelids. Call a physician if irritation develops or persists.
- Ingestion : Unlikely route of exposure. Seek medical advice.

Notes to physician

Treatment : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

- Flash point : not determined
- Lower explosion limit : not applicable
- Upper explosion limit : not applicable
- Suitable extinguishing media : Water spray
Foam
Dry chemical

CSDE-GYL

Version 1

Revision Date 05/01/2009

Print Date 05/01/2009

Carbon dioxide (CO2)

Extinguishing media which shall not be used for safety reasons : High volume water jet

Specific hazards during fire fighting : In case of fire hazardous decomposition products may be produced such as:
Carbon monoxide
Ammonia
Amines
Ketones
Nitriles
Hydrogen cyanide (hydrocyanic acid)

Special protective equipment for fire-fighters : In the event of fire and/or explosion do not breathe fumes. Wear self-contained breathing apparatus and protective suit.

Additional advice : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Wear personal protective equipment. Unprotected persons must be kept away.
Ensure adequate ventilation.

Environmental precautions : Should not be released into the environment.

Methods for cleaning up : Sweep up or vacuum up spillage and collect in suitable container for disposal.
Avoid dust formation.

SECTION 7. HANDLING AND STORAGE

Handling

Handling : Wear personal protective equipment.
Heat only in areas with appropriate exhaust ventilation.
Do not breathe fumes, vapour.
Provide appropriate exhaust ventilation at machinery and at places where dust can be generated.
Do not breathe dust.
Avoid contact with skin and eyes.
Handle in accordance with good industrial hygiene and safety practice.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Storage

CSDE-GYL

Version 1

Revision Date 05/01/2009

Print Date 05/01/2009

Requirements for storage areas and containers : Keep containers tightly closed in a dry, cool and well-ventilated place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Protective measures : Handle in accordance with good industrial hygiene and safety practice.
Ensure that eyewash stations and safety showers are close to the workstation location.
- Engineering measures : Effective exhaust ventilation system
Use adequate ventilation and/or engineering controls in high temperature processing to prevent exposure to vapors.
- Eye protection : Wear as appropriate:
Safety glasses with side-shields
Face-shield
- Hand protection : When handling hot material, use heat resistant gloves.
- Skin and body protection : Wear heat protective clothing for handling hot material.
- Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Exposure Guidelines

.epsilon.-Caprolactam	105-60-2	ACGIH	TWA		5 mg/m3	
			Form of exposure	Inhalable fraction and vapor.		
		NIOSH	REL	0.22 ppm	1 mg/m3	
			Form of exposure	Vapor.		
		NIOSH	REL		1 mg/m3	
			Form of exposure	Dust.		
		NIOSH	STEL	0.66 ppm	3 mg/m3	
			Form of exposure	Vapor.		
		NIOSH	STEL		3 mg/m3	
			Form of exposure	Dust.		
US CA OEL	TWA PEL	5 ppm	20 mg/m3			
	Form of exposure	Vapor.				
US CA OEL	TWA PEL		1 mg/m3			
	Form of exposure	Dust.				
US CA OEL	STEL	10 ppm	40 mg/m3			
	Form of exposure	Vapor.				
US CA OEL	STEL		3 mg/m3			

CSDE-GYL

Version 1

Revision Date 05/01/2009

Print Date 05/01/2009

Particulates Not
Otherwise Regulated

Form of exposure	Dust.		
OSHA Z1A TWA			1 mg/m3
Form of exposure	Dust.		
OSHA Z1A TWA		5 ppm	20 mg/m3
Form of exposure	Vapor.		
OSHA Z1A STEL		10 ppm	40 mg/m3
Form of exposure	Vapor.		
OSHA Z1A STEL			3 mg/m3
Form of exposure	Dust.		
ACGIH TWA			10 mg/m3
Form of exposure	Inhalable particles.		
ACGIH TWA			3 mg/m3
Form of exposure	Respirable particles.		
OSHA Z1 PEL			5 mg/m3
Form of exposure	Respirable fraction.		
All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by the Particulates Not Otherwise Regulated (PNOR) limit which is the same as the inert or nuisance dust limit of Table Z-3.			
OSHA Z1 PEL			15 mg/m3
Form of exposure	Total dust.		
All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by the Particulates Not Otherwise Regulated (PNOR) limit which is the same as the inert or nuisance dust limit of Table Z-3.			
OSHA Z1A TWA			5 mg/m3
Form of exposure	Respirable fraction.		
OSHA Z1A TWA			15 mg/m3
Form of exposure	Total dust.		
Z3 TWA		15 millions of particles per cubic foot of air	
Form of exposure	Respirable fraction.		
Z3 TWA		50 millions of particles per cubic foot of air	
Form of exposure	Total dust.		
Z3 TWA			5 mg/m3

CSDE-GYL

Version 1

Revision Date 05/01/2009

Print Date 05/01/2009

	Form of exposure	Respirable fraction.	
Z3	TWA		15 mg/m3
	Form of exposure	Total dust.	
US CA OEL	TWA PEL		10 mg/m3
	Form of exposure	Total dust.	
US CA OEL	TWA PEL		5 mg/m3
	Form of exposure	Respirable fraction.	

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: pellets
Color	: natural colour
Odor	: slight organic
pH	: not applicable
Melting point/range	: 220 °C (428 °F)
Boiling point/boiling range	: not applicable
Vapor pressure	: not applicable
Relative vapour density	: not applicable
Density	: not determined
Water solubility	: insoluble

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	: Avoid exposure to temperatures exceeding recommended processing conditions. Honeywell should be contacted if questions arise concerning specific processing conditions.
Materials to avoid	: Strong acids Strong oxidizing agents
Hazardous decomposition products	: In case of fire hazardous decomposition products may be produced such as: Carbon monoxide Ammonia Amines Ketones Nitriles Hydrogen cyanide (hydrocyanic acid)

CSDE-GYL

Version 1

Revision Date 05/01/2009

Print Date 05/01/2009

Hazardous reactions : Hazardous polymerisation does not occur.
Stable under recommended storage conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 rat
Dose: 930 - 2,500 mg/kg
Test substance: Caprolactam

Acute dermal toxicity : no data available

Acute inhalation toxicity : LC50 rat
Dose: 8,160 mg/m³
Exposure time: 4 h
Test substance: Caprolactam

Skin irritation : May irritate skin.

Eye irritation : Resin particles, like other inert materials, are mechanically irritating to eyes.

Sensitisation : no data available

Additional advice : There is no data available for this product.

SECTION 12. ECOLOGICAL INFORMATION

Additional ecological information : Accumulation in aquatic organisms is unlikely.
Not inherently biodegradable.
Aquatic toxicity is unlikely due to low solubility.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Information: Observe all Federal, State, and Local Environmental regulations.

SECTION 14. TRANSPORT INFORMATION

DOT Not dangerous goods

TDG Not dangerous goods

IATA Not dangerous goods

IMDG Not dangerous goods

CSDE-GYL

Version 1

Revision Date 05/01/2009

Print Date 05/01/2009

SECTION 15. REGULATORY INFORMATION

Inventories

US. Toxic Substances Control Act : On the inventory, or in compliance with the inventory

Australia. Industrial Chemical (Notification and Assessment) Act : On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133) : On the inventory, or in compliance with the inventory

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

Korea. Toxic Chemical Control Law (TCCL) List : On the inventory, or in compliance with the inventory

Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act : On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances : On the inventory, or in compliance with the inventory

EU. EINECS : On the inventory, or in compliance with the inventory

National regulatory information

SARA 311/312 Hazards : Acute Health Hazard

California Prop. 65 : This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

Massachusetts RTK : .epsilon.-Caprolactam 105-60-2

New Jersey RTK : .epsilon.-Caprolactam 105-60-2

CSDE-GYL

Version 1

Revision Date 05/01/2009

Print Date 05/01/2009

Pennsylvania RTK : .epsilon.-Caprolactam 105-60-2

WHMIS Classification : Not Rated
This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

SECTION 16. OTHER INFORMATION

	HMIS III	NFPA
Health Hazard	: 1	1
Flammability	: 1	1
Physical Hazard	: 0	
Instability	:	0