KOLON PLASTICS, INC.

MATERIAL SAFETY DATA SHEET

KOPA - POLYAMIDE

Updated Date: Jun. 01. 2010

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT	Polyamide
TRADE NAME	KOPA KN333G15
RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE:	
RECOMMENDED USE OF THE CHEMICAL	injection molding
RESTRICTIONS ON USE	N.A
SUPPLIER'S DETAILS	
MANUFACTURER NAME	KOLON PLASTICS, Inc.
ADDRESS	Kolon Tower, 1-22, Byelyang-Dong, Kwacheon-City Kyunggi-Do, S.Korea
EMERGENCY PHONE	(82) 2-3677-3580 ~ 3588

2. HAZARDS IDENTIFICATION

CLASSIFICATION HAZARDS	This product is not classified as dangerous.
WARNING SIGN PERTAINING TO PREVENTIVE MESURE WORDS	
PICTORIAL SYMBOLS	N.A
SIGNAL WORDS	N.A
HAZARDS WORDS	N.A
PREVENTIVE MESURE WORDS	N.A

* N.A : Not Applicable

OTHER HAZARDS NOT INCLUDED CLASSIFICATION HAZARDS

health	1	fire	0	reactivity	0

3. COMPOSITION / INFORAMTION ON INGREDIENTS

CHEMICAL NAME	Polymer: poly(hexamethylene dodecanediamide)	
CHEMICAL FORMULA	Polymer: [NH(CH2)6NHCO(CH2)4CO]n	
GENERAL NAME	polyamide 6/6	
ABBREVIATION NAME	PA6/6, N6/6, N66	**Contents**
CAS NO.	Polymer : 32131-17-2 Glass Fiber : 65997-17-3	<85% =15±3%

SUBSTANCE( ),MIXTURE(O) No class & No number

4. FIRST-AID MEASURES

INHALATION

- In working you inhalate the gas, go to avoid that area and breath fresh air.
- When excessivly, after doing above state and take a measure with doctor

SKIN CONTACT

- Cool it with proper water, when the molten flow contact.
- Don't remove it enhancing the skin when it is attached very critically
- In allergic conditon, wash it with clean water and soap
- With injured, go to doctor for measure

EYE CONTACT

- If not hot comes, wash eye with flowing, clean water
- Don't rub eye, wash it with blink
- If hot melten contact, go to doctor immediately for measure

INGESTION

- Vomit it after drinking several cup of water if not hot material
- In case of hot material, drinking clean water and take a measure from doctor

5. FIRE-FIGHTING MEASURES

EXTINGUISH KNACK

- Occupy safty distance, and spray an extinguisher of fiber
- If there is not extingusher available, use sand or hydrant
- Firefighter should wear proper protective equipment
- Take the people shelter who is near by.
- The harzard gas can be occured when combusting

  Gas can be occured : Carbon Dioxide
  Carbon Monooxide
- Note, sometimes water might be not available, when extinguishment

A KIND OF EXTINGUISHMENT

- ABC POWDER, HARON EXTINGUISHMENT, SAND, CARBONDIOXIDE, WATER, etc

FIREFIGHTING PROTECTIVE EQUIPMENT

- Full firefighting turn-out gear (bunker gear).
- Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.
- Any self-contained breathing apparatus with a full facepiece.

6. ACCIDENTAL RELEASE MEASURES

MEASURES FOR HANDLING PERSONNEL

- Shut off all sources of ignition : no flames, no smoking in area

MEASURES FOR ENVIRONMENTAL EFFECTS

- Take away in assortment
- Don't discharge to river

MEASURES WHEN HANDLING SPILLED SUBSTANCES

- Keep it saperately after having it sweeped

7. HANDLING AND STORAGE

HANDLING

Exposure control for handling personnel

Use only in the well-ventilated areas

Don't breathe dust

When using, don't somke and don't have igniter

Protective measures against & explosion

Shut off all gas polot and electrical(spark or hot wire)ignites and other sources of ignition during use and until all vapors(odors) are gone.

Prevent deposition of dust.

Don't expose to friction or shock

Prevent build-up of electostatic charges (e-g . by grounding)

In case of fire and/or explosion, don't breathe fumes.

Others

Avoid rough handling or dropping

Don't flush to sewer or waterways.

Don't mix with : In a molding machine : acids

STORAGE

Make it packed to prevent the moisture

Keep away from heat, steam pipe or sunlight.

Incompatibility (Specific materials to be avoided) : acids, bases, oxydizing agents, water

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Control parameter e.g. occupational exposure limit values or biological limit values

local regulation	N.A
ACGIH regulation	N.A
biological limit values	N.A

Appropriate engineering controls

Use only in the well-ventilated areas
Don't breathe dust
When using, don't somke and don't have igniter
Shut off all gas polot and electrical(spark or hot wire)ignites and other sources of ignition during use and until all vapors(odors) are gone.
Prevent deposition of dust.
Don't expose to friction or shock
In case of fire and/or explosion, don't breathe fumes.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection

Any air-purifying respirator with a high-efficiency particulate filter.
Any powered, air-purifying respirator with a high-efficiency particulate filter.

Eye Protection

Wear protective eyeglasses or chemical safety goggles.
Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Hand Protection

Wear appropriate chemical resistant gloves.

Body Protection

Wear appropriate chemical resistant cloths.

Matters that require attention for reasons of sanitation

N.A

Exposure standard

N.A

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance	Pellet form solids	**Vapor pressure**	N.A
Odor	Odorless	**Solubility(%)**	in water : insoluble
Threshold Of Odor	Odorless	**Vapor Density**	N.A
pH	N.A	**Specific Gravity**	1.24
Melting Point	255℃	**Distribution Coefficient**	N.A

Boiling Point	N.A	**Of Octanol/Water**	N.A
Flash Point	N.A	**Combution Temp.**	N.A
Volatility	N.A	**Decomposition Temp.**	N.A
Flammability	N.A	**Melt Index**	N.A
Span Of Flammability	N.A	**Molecular Weight**	N.A

10. STABILITY & REACTIVITY

Chemical reactivity and stability

In general condition it is most safe.

Possibility of hazardous reactions

In general condition it is most safe.

Condition to be avoided

Mixture with acids or bases.
Exposure of water

Incompatibility with Other Material

Strong acids, base (decomposes forming formaldehyde) and oxidizing materials. At melt temperatures,

Harzard Gases from combustion

Mono-oxide, Carbon dioxide
This product is considered a stable material under normal and anticipated storage
The mixture of air and dust can be explusion.

11. TOXICOLOGICAL INFORMATION

Imformation about high chance of exposure rute

INHALATION : N.A
SKIN. EYE : N.A
INGESTION : N.A

Acute and chronic main sympton

Acute toxicity	N.A
Skin corrosiveness or stimulation	N.A
Serious eye damage	N.A
Respiratory irritability	N.A
Skin irritability	N.A
Carcinogenic effects : OSHA	N.A
NTP	

	IARC
Gamete mutage nicity	N.A
Reproductive toxicity	N.A
Specific targetorgan toxicoid(acute exposure)	N.A
Specific targetorgan toxicoid(chronic exposure)	N.A

12. ECOLOGICAL INFORMATION

Ecotoxicity	N.A
persistence and degradability	N.A
Bioaccumulative potential	N.A
Mobility in soil	N.A
Other adverse effects	N.A

13. DISPOSAL CONSIDERATION

Discard methods : According to method of administration of waste.
Disposal Considerations: Discard it within an airtight container to prevent spilling.

14. TRANSPORT INFORMATION

UN number :	There is no reliable information about classification.
UN proper shipping name:	N.A
Transport hazard class :	N.A
Packing group, if applicable :	N.A
Environmental hazards :	N.A
Transport in bulk :	N.A

Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises :

N.A

15. REGULATORY INFORMATION

U.S. REGULATIONS

TSCA INVENTORY STATUS:	Y
TSCA 12(b) EXPORT NOTIFICATION:	Not listed.
CERCLA SECTION 103 (40CFR302.4):	N
SARA SECTION 302 (40CFR355.30):	N
SARA SECTION 304 (40CFR355.40):	N
SARA SECTION 313 (40CFR372.65):	N

SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21)

ACUTE:	N
CHRONIC:	N
FIRE:	N
REACTIVE:	N
SUDDEN RELEASE:	N
OSHA PROCESS SAFETY (29 CFR 1910.1200):	N

STATE REGULATIONS:

CALIFORNIA PROPOSITION 65:	N

16. OTHER INFORMATION

The information related to this specific material may not be valid for using in combination with any other materials or with any other process. Kindly, note that the matter is uses's responsibility.
The information herein given is good faith, but no warranty, expressed or implied, is made.
Please consult Kolon Plastics, Inc. for further information.
To the best of our knowledge, the information contained here in is accurate,however, neither Kolon Plastics nor any subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herin. Final determination of suitability of any material is the sole responsibility of user.
All materials may present unknown hazards and should be used in caution. Although certain harzards are described herein, we can't guarantee that these are the only hazards exist.
This information contained in this data sheet represents the best information currently available to us. But, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It is advised to make their own tests to determinate the safety and suitability of each product of combination for their own purposes.