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Material Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME (Trade name As Used On Label): PARAPET HR-L

COMPANY NAME : Kuraray Co.,Ltd.

 ${\tt COMPANY\,ADDRESS} \hspace*{0.2in} : \hspace*{0.2in} 1\text{--}3,1\text{--}CHOME,OTEMACHI,CHIYODA-KU\,TOKYO,} 100\text{--}8115\,JAPAN$

TEL : +81-3-6701-1542 FAX : +81-3-6701-1575 EMERGENCY TEL : +81-3-6701-1542

2.HAZARDS IDENTIFICATION

GHS CLASSIFICATION

HEALTH HAZARDS

PHYSICAL HAZARDS Flammable solids : Not applicable

Pyrophoric solids : Not applicable
Self-heating substances : Not classified
Acute toxicity(oral) : Not applicable

 $\begin{tabular}{ll} Respiratory/Skin sensitizer & : Not classified \\ Toxic to reproduction & : Not applicable \\ \end{tabular}$

Classification is impossible not applicable for hazards not mentioned above.

GHS LABEL ELEMENT

SYMBOL : -

EMERGENCY OVERVIEW:

Skin contact of molten polymer causes thermal burn.

Low levels of methyl methacrylate monomer may be generated, when the polymer is heated during molding, grinding, extrusion, sawing, or machining operations.

POTENTIAL HEALTH EFFECTS:

Monomer vapors, given off at a high temperature, may cause irritation of the eyes and mucous membranes, nausea, headache and dizziness.

HEALTH HAZARD: Not acutely and chronically toxic.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Not known.

PRIMARY ROUTES OF ENTRY: Not hazardous.

CARCINOGEN LISTED IN: Not listed.

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3. COMPOSITION, INFORMATION ON INGREDIENTS

SINGLE CHEMICAL SUBSTANCE OR MIXTURE : Single Chemical Substance

COMPOSITION:

COMPONENTS	PERCENTAGE	OSHA	ACGIH	OTHER LIMITS
	(by Wt.)	PEL	TLV	RECOMMENDED
1. P(MMA/MA)	99.8	None	None	None
2. MMA(Residual monomer)	0.2			
Non-Hazardous ingredients	100			
TOTAL	100			

Abbreviation : MMA=methyl methacrylate, MA=methyl acrylate CHEMICAL OR STRUCTUAL FOMURA : $(C_5\ H_8\ O_2\ \cdot\ C_4\ H_6\ O_2\)_n$

CAS NO.: 9011-87-4

UN CLASSIFICATION & UN NO. : Not applicable.

OSHA: This product is not hazardous under the criteria of 29 CFR 1910.1200.

4.FIRST AID MEASURES

INHALATION : If exposed to monomer vapors generated during processing, moves subject to fresh air.

EYE CONTACT : Flush eyes with a large amount of water for at least 15 minutes.

Consult an ophthalmologist if irritation persists.

SKIN CONTACT: Wash exposed skin with soap and water.

5.FIRE FIGHTING MEASURES

FLASH POINT: Not Applicable AUTO-IGNITION TEMPERATURE : Above 400°C LOWER EXPLOSIVE LIMIT: Not Applicable UPPER EXPLOSIVE LIMIT : Not Applicable

UNUSUAL HAZARDS:

Material as sold is combustible, burns Vigorously with intense heat.

EXTINGUISHING AGENTS:

Use the following extinguishing media when fighting fires involving this material;

- carbon dioxide - dry chemical - water spray

PERSONAL PROTECTIVE EQUIPMENT:

As in any fire, wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear.

6.ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTION:

Wear gloves made of the following material; cotton, canvas or leather

Additional personal protective equipment should include the following; safety glasses (ANSI Z87.1 or approved equivalent)

7. HANDLING AND STORAGE

HANDLING:

Avoid heating for prolonged periods above softening point(100°C).

If moved with air flow, static charges can accumulate, employ bonding or grounding in operations capable of generating static electricity to prevent dust explosion.

STORAGE:

Store the material away from heat and ignition sources.

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It will not degrade during storage, but should be stored indoors to protect the packaging material from rain, or excessive moisture.

8.EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS: Not established for product as whole. Refer to Section 2.

TLVs-ACGIH(1994-1995): Nuisance dust 10mg/m³ (TWA)

OSHA LIMITS FOR AIR CONTAMINANTS: Total dust 15mg/m³

ENGINEERING MEASURES:

The exhaust hoods should be positioned to prevent inhalation of smoke, fume, dust and vapors from molding and vapors from molding and other operations.

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION:

A NIOSH approved respirator for dust is recommended if there is possibility of dust generation.

EYE PROTECTION : Safety glasses with side shields.

HAND PROTECTION : Recommended to wear gloves during processing.

SKIN PROTECTION : Wear as needed.

9.PHISICAL & CHEMICAL PROPERTIES

APPEARANCE : Pellets
VOLATALITY : None
SPECIFIC GRAVITY : 1.19

MELTING POINT : About 100°C

BOILING POINT : Not Applicable (N.A.)

SOLUBILITY IN WATER : Insoluble

10.STABILITY & REACTIVITY

AUTOIGNITION POINT : Above 400°C

FLAMMABILITY: Flammable

STORAGE STABILITY:

Stable at room temperature.

Decomposes thermally at temperature greater than 300°C gradually.

HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition may yield carbon dioxide, carbon monoxide and methyl methacrylate monomer.

REACTIVITY WITH WATER : None OXDIZING PROPERTY : None

SELF-REACTIVITY/POTENTIAL FOR EXPLOSION: None

HAZARDOUS POLYMERIZATION : None

WATER REACTIVE : Negligible

11.TOXICOLOGICAL INFORMATION

IRRITANT PROPERTY:

Monomer vapors, given off at a high temperature, may cause irritation of the eyes and mucous membranes, nausea, headache and dizziness.

12.ECOLOGICAL INFORMATION

Never dump or discharge this material into ocean or any other body of water, to avoid ingestion by marine life or birds.

13.DISPOSAL CONSIDERATION

Incinerate in approved equipment or landfill according to local, state and federal regulations.

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14.TRANSPORT INFORMATION

Avoid water contact and violent handling to prevent bag rupture.

In the event of bag rupture and pellet spill, be careful not to slip and fall.

15.REGULATORY INFORMATION

US Federal regulations:

OSHA: Not hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

16.OTHER INFORMATION

For further information, please contact:

Resin and Optical Devices Marketing & Sales Dept.

Methacrylate Division

Kuraray Co.,Ltd.

TEL: +81-3-6701-1542 FAX: +81-3-6701-1575

NOTE: The information contained herein relates only to the specific material identified.

Kuraray Co.,Ltd. believes that such information is accurate and reliable as of the date of this material safety date sheet, but no representation, guarantee or warranty, express or implied, is made as to the accuracy, reliability, or completeness of the information.

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