

## Material Safety Data Sheet

### 1.CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME (Trade name As Used On Label) : PARAPET GH-S

COMPANY NAME : Kuraray Co.,Ltd.

COMPANY ADDRESS : 1-3,1-CHOME,OTEMACHI,CHIYODA-KU TOKYO,100-8115 JAPAN

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### 2.HAZARDS IDENTIFICATION

#### GHS CLASSIFICATION

PHYSICAL HAZARDS Flammable solids : Not applicable

Pyrophoric solids : Not applicable

Self-heating substances : Not classified

HEALTH HAZARDS Acute toxicity(oral) : Not applicable

Respiratory/Skin sensitizer : Not classified

Toxic to reproduction : Not applicable

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.

### 3.COMPOSITION, INFORMATION ON INGREDIENTS

SINGLE CHEMICAL SUBSTANCE OR MIXTURE : Single Chemical Substance

COMPOSITION :

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

Abbreviation : MMA=methyl methacrylate, MA=methyl acrylate

CHEMICAL OR STRUCTURAL FORMULA :  $(C_5H_8O_2 \cdot C_4H_6O_2)_n$

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, move 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.

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/m<sup>3</sup> (TWA)

OSHA LIMITS FOR AIR CONTAMINANTS : Total dust 15mg/m<sup>3</sup>

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.

#### 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.

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