Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

TAKIRON SUPER PET PLATE (PETEC)

“PET 6010”, “PET 6710”, “PET - 6010”, “PET - 6710”, “PET - 6010A”,
“PETM - 6010J”, “PET - 6820”, “PET - 6830” or “PET - 6920”

CAS RN

SUPPLIER

Company: TAKIRON Co., Ltd. ABOSHI PLANT
Address:
1455 Karlya, Mitsu-cho,
Tatsuno-shi, Hyogo-ken
Japan
Telephone: +81 79 322 1031
Inquiry Tel: +81 79 322 4190
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PRODUCT USE

Mainly used as a material for cutting parts and industrial material.

SYNONYMS

Section 2 - COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>NAME</th>
<th>CAS RN</th>
<th>INT HAZ</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyethylene terephthalate</td>
<td>25640-14-6</td>
<td>None</td>
<td>≧95</td>
</tr>
<tr>
<td>coloring agent</td>
<td>-</td>
<td>None</td>
<td>≦5</td>
</tr>
</tbody>
</table>

Section 3 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

Not considered a dangerous substance according to directive 1999/45/EC and its amendments. Molten material will produce thermal burns.

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

Although ingestion is not thought to produce harmful effects (as classified under EC Directives), the material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern. Not normally a hazard due to physical form of product.

EYE

Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterized by tearing or conjunctival redness (as with windburn). Not normally a hazard due to physical form of product.

SKIN

The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene
practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.
Not normally a hazard due to physical form of product.

INHALED
The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.
Not normally a hazard due to physical form of product.

CHRONIC HEALTH EFFECTS

Section 4 - FIRST AID MEASURES

SWALLOWED
Material is not expected to be absorbed from the gastrointestinal tract so that induction of vomiting should not be necessary.

EYE
If molten material contacts the eye, immediately flush with plenty of water for at least 15 minutes.
If easy to do, remove contact lenses. Get medical attention immediately.

SKIN
If burned by contact with molten material, cool as quickly as possible.
Do not peel material from skin.
Get medical attention.

INHALED
If symptomatic, move to fresh air. Get medical attention if symptoms persist.

NOTES TO PHYSICIAN
Burns should be treated as thermal burns. The material will come off as healing occurs; therefore, immediate removal from the skin is not necessary.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA
· Water spray or fog - Large fires only.
· Dry chemical powder.
· BCF (where regulations permit).
· Carbon dioxide.
· Foam

FIRE FIGHTING
· Alert Fire Brigade and tell them location and nature of hazard.
· Wear breathing apparatus plus protective gloves.
· Prevent, by any means available, spillage from entering drains or water courses.
· Use water delivered as a fine spray to control fire and cool adjacent area.
· DO NOT approach containers suspected to be hot.
· Cool fire exposed containers with water spray from a protected location.
· If safe to do so, remove containers from path of fire.
· Equipment should be thoroughly decontaminated after use.

FIRE/EXPLOSION HAZARD
Combustible. Will burn if ignited.

FIRE INCOMPATIBILITY
None known.
Hazardous Combustion Products
  carbon dioxide, carbon monoxide

Unusual Fire and Explosion Hazards:
  Powdered material may form explosive dust-air mixtures.

PERSONAL PROTECTION
  Glasses:
  Chemical goggles.
  Gloves:
  When handling larger quantities:
  General purpose rubber glove.
  Respirator:

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS
  • Clean up all spills immediately.
  • Secure leak if safe to do so.
  • Bundle/collect recoverable product.
  • Collect remaining material in containers with covers for disposal.

MAJOR SPILLS
  • Minor hazard.
  • Clear area of personnel.
  • Alert Fire Brigade and tell them location and nature of hazard.
  • Wear physical protective gloves e.g. Leather.
  • Contain spill/secure load if safe to do so.
  • Bundle/collect recoverable product and label for recycling.
  • Collect remaining product and place in appropriate containers for disposal.
  • Clean up/sweep up area.
  • Water may be required.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING
  • Limit all unnecessary personal contact.
  • Wear protective clothing when risk of exposure occurs.
  • Use in a well-ventilated area.
  • When handling DO NOT eat, drink or smoke.
  • Always wash hands with soap and water after handling.
  • Avoid physical damage to containers.
  • Use good occupational work practice.
  • Observe manufacturer's storing and handling recommendations.

SUITABLE CONTAINER
  No restriction on the type of containers. Packing as recommended by manufacturer.
  Check all material is clearly labeled.

STORAGE INCOMPATIBILITY
  None known

STORAGE REQUIREMENTS
  • Store in original containers.
  • Keep containers securely sealed.
  • Store in a cool, dry, well-ventilated area.
  • Store away from incompatible materials and foodstuffs containers.
  • Protect containers against physical damage and check regularly for leaks.
  • Observe manufacturer's storing and handling recommendations.
Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS
The following materials had no OELs on our record under the following CAS numbers.

PERSONAL PROTECTION

EYE
- Safety glasses with side shields
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

HANDS/FEET
Wear general protective gloves, eg. light weight rubber gloves.

OTHER
No special equipment needed when handling small quantities.
OTHERWISE:
- Overalls.
- Barrier cream.
- Eyewash unit.
The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required.
For further information consult site specific data (if available), or your Occupational Health and Safety Advisor.

ENGINEERING CONTROLS
General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL PROPERTIES
Solid.
Does not mix with water.
Sinks in water.

Molecular Weight: Not Applicable
Softening Point (°C): >100
Solubility in water (g/L): Immiscible
pH (1% solution): Not Applicable
Volatile Component (%vol): Not Applicable
Relative Vapor Density (air=1): Not Applicable
Lower Explosive Limit (%): Not Applicable
Auto ignition Temp (°C): 454
State: Manufactured

Boiling Range (°C): Not Applicable
Specific Gravity (water= 1): 1.28
pK (as supplied): Not Applicable
Vapor Pressure (kPa): Not Applicable
Evaporation Rate: Not Applicable
Flash Point (°C) : Not Applicable
Upper Explosive Limit (%): Not Applicable
Decomposition Temp (°C): Not Available
Viscosity: Not Applicable

APPEARANCE
Clear solid plate; insoluble in water.
Vicat softening temperature: 65-75 deg C.
Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

Product is considered stable and hazardous polymerization will not occur.

Section 11 - TOXICOLOGICAL INFORMATION

Takiron Super PET Plate (PETEC) toxicity data are not available unless listed below.

- Oral LD-50: (male rat) : >3,200 mg/kg (highest dose tested)
- Oral LD-50: (male mouse) : >3,200 mg/kg (highest dose tested)
- Dermal LD-50: (guinea pig) : >1,000 mg/kg
- Skin Irritation (guinea pig) : slight irritation
- Eye Irritation (rabbit, unwashed eyes) : slight
- Eye Irritation (rabbit, washed eyes) : slight
- guinea pig : slight

Section 12 - ECOLOGICAL INFORMATION

No data for Takiron Polyethylene Terephthalate Plate (Plastic Plate).

Acute Aquatic Effects Data:

- 96 h LC-50 (fathead minnow): >100 mg/ (highest concentration tested)
- 96 h LC-50 (daphnid): >100 mg/l (highest concentration tested)
- 96 h LC-50 (ramshorn snail): >100 mg/l (highest concentration tested)
- 96 h LC-50 (flatworm): >100 mg/l (highest concentration tested)

Section 13 - DISPOSAL CONSIDERATIONS

- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Management Authority for disposal.
- Bury residue in an authorized landfill.
- Recycle containers if possible, or dispose of in an authorized landfill.

According to the European Waste Catalogue, Waste Codes are not product specific but application specific. Waste Codes should be assigned by the User based on the application in which the product is used.

Section 14 - TRANSPORTATION INFORMATION

Shipping Name: Takiron Super PET Plate “PETEC”
HAZCHEM: None

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS ADR, IATA, IMDG

Section 15 - REGULATORY INFORMATION

RISK

None under normal operating conditions.

WHMIS (Canada) Status: non controlled
SARA 313: none, unless listed below

Carcinogenicity Classification (components present at 0.1% or more): none, unless listed below
TSCA (US Toxic Substances Control Act):
This product is listed on the TSCA inventory.
Any impurities present in this product are exempt from listing.

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act):
This product is listed on the DSL. Any impurities present in this product are exempt from listing.

EINECS (European Inventory of Existing Commercial Chemical Substances):
All components of this product are listed on EINECS. Any polymer intentionally present in this product has regulatory clearance under Directives of the European Union.

AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme):
This product is listed on AICS or otherwise complies with NICNAS.

MITI (Japanese Handbook of Existing and New Chemical Substances):
This product is listed in the Handbook or has been approved in Japan by new substance notification.

ECL (Korean Toxic Substances Control Act):
This product is listed on the Korean inventory or otherwise complies with the Korean Toxic Substances Control Act.

Section 16 - OTHER INFORMATION

RISK

Explanation of Risk Codes used in the Ingredient Table

R11 Highly flammable.
R19 May form explosive peroxides.
R20/22 Harmful by inhalation and if swallowed.
R33 Danger of cumulative effects.
R36/37 Irritating to eyes and respiratory system.
R40(3) Limited evidence of a carcinogenic effect.
R48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R58 May cause long-term adverse effects in the environment.
R60(2) May impair fertility.
R61(1) May cause harm to the unborn child.
R61(2) May cause harm to the unborn child.
R62(3) Possible risk of impaired fertility.
R66 Repeated exposure may cause skin dryness and cracking.
R67 Vapors may cause drowsiness and dizziness.

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