

<b>Product</b>	<b>PV2511</b>
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**1. Chemical Product and Company Information****1) Product**

PV2511 (Synonyms : Flame retardant Polypropylene)

**2) Recommended use of the chemical and restrictions on use**

- Recommended use : Extrusion molding, industrial Parts
- Restrictions on use : No data

**3) Manufacture/Supplier Information**

- Supply Company : DAEWON Chemical Co., LTD
- Address : 67-34, Cheonheung 8-gil, Seonggeo-eup, Seobuk-gu, Cheonan-si,  
Chungcheongnam-do, Korea
- Information service or emergency call  
TEL : +82 41 622 3765  
FAX : +82 41 522 9525

**2. Hazards Identification**

**1) Classification of the substance or mixture :** N/A

**2) GHS labels, including precautionary statements**

- Symbol : N/A
- Signal word : N/A
- Hazard statement : N/A
- Signal word : N/A
- Hazard statement : N/A
- Precautionary statement
- Prevention : N/A
- Response : N/A
- Storage : N/A
- Disposal : N/A

**3) Other hazards which do not result in classification**

- NFPA
- Health 1
- Fire 1
- Reactivity 0

### 3. Composition and Information on Ingredients

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Component	Synonyms	CAS No.	Content(%)
Polypropylene	-Propene, polymer with ethen	9010-79-1	92~96
TBBA	Tetrabromobisphenol A	21850-44-2	2~4
Antimony trioxide	Antimony oxide	1309-64-4	2~4
Others	Additives	-	< 3

### 4. First Aid Measures

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#### 1) Eye contact

Wash eyes thoroughly with plenty of water for at least 15 minutes

#### 2) Skin contact

Wash contaminated area perfectly with soap and water for at least 15 minutes during removing contaminated clothes and shoes.

#### 3) Inhalation

Move affected individual to fresh air from the exposure area.

If person is not breathing, provide artificial respiration.

If there is labored respiration, certified person should manage the oxygen.

Seek medical attention immediately.

#### 4) Ingestion

Seek medical attention immediately

#### 5) First-aid treatment and information on medical doctors

No Data

### 5. Fire Fighting Measures

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#### 1) Recommended extinguished media

- Recommended extinguishing media : Water, CO<sub>2</sub>, Extinguishing powder, Fire fighting foam
- Prohibited extinguishing media : No Data
- Large fire : Fire fighting foam or water spray

#### 2) Specific hazard from chemical material

- Toxicant from combustion Carbon Oxides, Aldehydes, Hydrocarbons, Ketones
- Fire and Explosion Hazard: There is the slight fire hazard.  
Flammability

#### 3) Extinguishment

If it can be done without risk, Move container form fire area.

If it will be leak, do not spray high-pressure water streams.

Dike for later processing.

Use extinguishing agents appropriate for surrounding fire

Avoid inhalation of materials and combustion products

Up the wind and avoid low areas

## **6. Accidental Release Measures**

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### **1) Necessary actions to protect human health**

Avoid heat, flame, spark and other ignition sources.

If there are methods to stop release safely, do so.

Spray water to reduce vapors

### **2) Necessary action to protect the environment**

Keep out of irrigation ditches, sewers, and water supplies.

Spills should be collected to prevent contamination of waterways

### **3) Purification and removal methods**

Sweep up

## **7. Handling and Storage**

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### **1) Safety handling**

Avoid direct physical contact.

Encourage appropriate personal hygiene habits

### **2) Storage**

Pressure, cutting, grinding, heating, etc. Avoid physical shock.

Keep stored in airtight containers.

Keep stored in a cool, dry place.

## **8. Exposure Control and Personal Protection**

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### **1) Exposure limits and biological exposure limits of chemical**

- KOSHA : No Data
- AIHA : No Data
- ACGIH : No Data
- OSHA : No Data
- NIOSH : No Data
- Biological exposure limits : No Data

### **2) Engineering management**

Ventilation equipment should be explosion-proof if explosive concentrations of dust, vapor or fume are present.

Install local ventilation system.

Comply with limits.

### **3) Personal protection equipment**

- Respiratory protection :

Use approved supplier air respiratory protection for entry into confined space.

- Eyes protection :

Safety glasses or goggles are recommended for the eyes protection from dusts or mists.  
a business proprietor should install eyes washing facilities near working areas to protect worker's eyes for emergency.

· Hands protection :

Use proper protective gloves.

· Human body protection :

Use proper protective clothes.

## 9. Physical and Chemical Properties

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1) Appearance	Pellet (colored solid)
2) Odor	Slight Odor
3) Odor threshold	No Data
4) pH	No applicable
5) Melting point	165°C~170°C
6) Initial boiling point or boiling range	No Data
7) Flash point	No Data
8) Evaporation rate	No Data
9) flammability(solid, gas)	No Data
10) Upper/lower flammability or explosive limits	-/-
11) vapor pressure	No Data
12) Solubility	Insolubility
13) vapor density	No Data
14) Relative density	0.98~1.02
15) Partition coefficient : n-octane/water	No Data
16) Viscosity	No Data
17) Molecular weight	≥40,000

## 10. Stability and Reactivity

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### 1) Chemical stability

Stable at room temperature and pressure

### 2) Toxicant generation possibility during reaction

for combustion reaction, toxic carbon compounds may generate

### 3) Prohibited conditions

Avoid heat, sparks, open flames and other ignition sources

If containers are exposed to heat, container damage or explosion may occur.

Keep away from water supply facilities and sewage.

### 4) Prohibited materials

Oxidizing agent, peroxides

### 5) Toxicant during decomposition

Carbon Oxides, Aldehydes, Hydrocarbons, Ketones

## 11. Toxicological Information

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### 1) Information on the likely routes of exposure : No Data

### 2) Delayed and immediate effects and chronic effects from short or long term exposure

- Acute toxicity
- Oral : No Data
- Dermal : No Data
- Inhalation : No Data
- Skin corrosion/irritation : No Data
- Serious eye damage/eye irritation : No Data
- Respiratory sensitization : No Data
- Skin sensitization : No Data
- Carcinogenicity : IARC Group 3  
ACGIH A4  
EU CLP (No Data)
- Germ cell mutagenicity : No Data
- Reproductive toxicity : No Data
- Specific target organ systemic toxicity(single exposure) : No Data
- Specific target organ systemic toxicity(repeated exposure) : No Data
- Aspiration hazard : No Data

### 3) Numerical measures of toxicity(such as ATE)

No Data

## 12. Ecological information

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### 1) Hazardous to the aquatic environment

- Fish : LC50 > 100000 mg/l 24hr Brachydanio rerio
- Crustacean : LC50 94983.781 mg/l 48hr
- Algae : LC50 48545.539 mg/l

### 2) Persistence and degradability

- Persistence : log Kow -1.50
- Degradability : No Data

### 3) Bio accumulative potential

- Biodegradability : No Data
- Bioaccumulation : No Data

### 4) Mobility in soil

No Data

### 5) Other adverse effects

No Data

## 13. Disposal Considerations

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**1) Disposal methods**

Dispose according to the related regulations.

**2) Disposal cautions**

Follow details of related waste management act.

**14. Transport Information**

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**1) UN number**

N/A

**2) UN Proper Shipping Name**

N/A

**3) Transport hazard classes**

N/A

**4) Packing group, if applicable**

N/A

**5) Environmental hazards**

N/A

**6) Special precautions for user**

- Emergency management type of fire : N/A
- Emergency management type of leak : N/A

**15. Regulatory Information**

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**1) Industrial safety and health act (Korea)**

No Data

**2) Toxic chemical substance subject to management act (Korea)**

No Data

**3) Wastes control act (Korea)**

No Data

**4) Hazardous material safety act (Korea)**

No Data

**5) Other internal and foreign acts**

- Persistent organic pollutant control act (Korea) : N/A
- EU classification : No Data
- U.S. acts
  - OSHA (29CFR1910.119) : N/A
  - CERCLA 103 (40CFR302.4) : N/A

## **16. Other Information**

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This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process.

The information submitted in this MSDS is based on our current knowledge and experience. Because it is not possible to anticipate all conditions of use additional safety precautions may be required, we make no warranty.

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