#### GHS Format

# SAFETY DATA SHEET



## 1. IDENTIFICATION

Trademark : LEXAN™ resin

Product name : 945-4B7D013

Product code : 22204983

Product description : Polycarbonate

Appearance : pellets

Recommended use : May be used to produce molded or extruded articles or as a

component of other industrial products.

Manufacture of plastics products, including compounding and

conversion

Restrictions on use : For industrial use only.

Supplier : SABIC Innovative Plastics Hong Kong Limited.

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## 2. HAZARDS IDENTIFICATION

### **GHS Remark**

The additives in this product (if any) are bound in a thermoplastic resin matrix. In accordance with GHS for the classification of the product, the hazard potential may be assessed with respect to the physico-chemical form and/or bioavailability of the individual components in the thermoplastic resin. UN GHS says, that even if adverse effects are seen in animal studies or in-vitro tests, no classification is needed if the mechanism or mode of action is not relevant to humans. The European CLP Regulation also mentions, that no classification is indicated if the mechanism is not relevant to humans. Where GHS classifications are shown below, these are based on the individual components in the thermoplastic resin matrix. Under the typical use conditions for the resin, these hazardous components are unlikely to contribute to workplace exposure. Please read the entire safety data sheet and/or consult an EHS professional for a complete understanding.

## Other hazards which do not result in classification

None known.

### **SABIC Emergency Overview**

Pellets with slight or no odor

Spilled material may create slipping hazard.



Can burn in a fire creating dense, toxic smoke

Molten plastic can cause severe thermal burns

Fumes produced during melt processing may cause eye, skin, and respiratory tract irritation. Severe over-exposure may result in nausea, headache, chills, and fever.

Secondary operations, such as grinding, sanding, or sawing can produce dust which may present an explosion or respiratory hazard.

#### Other information

OSHA, IARC and/or NTP have listed carbon, titanium dioxide, crystalline silica (quartz), respirable glass and certain heavy metals, present in some colorants and fillers, as carcinogens. If these materials are present in this product at significant quantities, they are shown in Section 2/3. These materials are essentially bound to the plastic matrix and are unlikely to contribute to workplace exposure under recommended processing conditions.

#### **Processing Issues**

Processing vapors may cause irritation to the eyes, skin, and respiratory tract. In cases of severe exposure, nausea and headache can also occur. Grease-like processing vapor condensates on ventilation ductwork, molds, and other surfaces can cause irritation and injury to skin.

### **Aggravated Medical Condition**

MEDICAL RESTRICTIONS: There are no known health effects aggravated by exposure to this product. However, certain sensitive individuals and individuals with respiratory impairments may be affected by exposure to components in the processing vapors.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Mixture

### Components

Chemical name	CAS-No.	Concentration (%
		w/w)
Titanium Dioxide PW6	13463-67-7	>= 0.3 - < 1
Substituted Pyrazolone	4702-90-3	>= 0.3 - < 1
1,8-Diphenylthio-Anthraquinone	13676-91-0	>= 0.1 - < 0.25

## 4. FIRST AID MEASURES

General advice : Thermal decomposition can lead to release of irritating gases

and vapours.

Move the victim to fresh air. Obtain medical attention.

If inhaled : Move to fresh air in case of accidental inhalation of dust or

fumes from overheating or combustion. If symptoms persist, call a physician.

In case of skin contact : After contact with skin, wash immediately with plenty of cold

water

Wash off immediately with soap and plenty of water.

Consult a physician.

If skin irritation persists, call a physician.

In case of eye contact : Immediately flush eye(s) with plenty of water.

Remove contact lenses, if present and easy to do. Continue



rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Negligible or unlikely exposure pathways

If accidentally swallowed obtain immediate medical attention.

Most important symptoms and effects, both acute and

delaved

None known.

Notes to physician

No information available.

### 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use dry chemical, CO2, water spray or "alcohol" foam. Water

is the best extinguishing medium. Carbon dioxide and dry chemical are not generally recommended because their lack of cooling capacity may permit re-ignition on larger resin fires

(blobs, drools, etc.).

Unsuitable extinguishing

media

Do not use a solid water stream as it may scatter and spread

fire

Specific hazards during

firefighting

Avoid generating dust; fine dust dispersed in air in sufficient

concentrations, and in the presence of an ignition source is a

potential dust explosion hazard.

Material is not sensitive to mechanical impact.

Hazardous combustion

products

Fire will produce dense black smoke containing hazardous

combustion products, carbon oxides, hydrocarbon fragments. If present, certain hazardous additives can also liberate

halogenated hydrocarbons.

No hazardous combustion products are known

Specific extinguishing

methods

Take precautionary measures against static discharges.

During processing, dust may form explosive mixture in air.

Thermal decomposition can lead to release of irritating gases

and vapours.

Special protective equipment

for firefighters

Wear self-contained breathing apparatus for firefighting if

necessary.

Stay upwind/ keep distance from source.

# 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Take precautionary measures against static discharges.

Environmental precautions : Do not flush into surface water or sanitary sewer system.

Should not be released into the environment.

SABIC is committed to implementing Responsible Care® and global sustainability programs (such as The Alliance to End Plastic Waste, Operation Clean Sweep®, etc.) throughout the



value chain that are designed to prevent and address accidental releases into the environment. Accordingly, SABIC recommends implementation of systems and practices by downstream users to prevent and address incidental releases in order to protect the aquatic environment from potential (long term) negative effects of plastic materials.

Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal.

Do not create a powder cloud by using a brush or compressed

air.

### 7. HANDLING AND STORAGE

### Handling

Advice on safe handling : Handle in accordance with good industrial hygiene and safety

practice.

Provide for appropriate exhaust ventilation and dust collection

at machinery.

Avoid dust formation.

All metal parts of the mixing and processing equipment must

be earthed.

Open containers only in well-ventilated area.

Storage

Conditions for safe storage : Keep tightly closed in a dry and cool place.

Keep away from heat and sources of ignition.

Residual monomer vapors can accumulate in the headspace

of closed containers.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Titanium Dioxide PW6	13463-67-7	OEL-TWA (inhalable dust)	10 mg/m3	HK OEL
		OEL-TWA (Respirable dust)	4 mg/m3	HK OEL

**Engineering measures** : Handle in accordance with good industrial hygiene and safety practice.

Provide appropriate exhaust ventilation at machinery.

Processing fume condensate may be a fire hazard and toxic; remove periodically from exhaust hoods, ductwork, and other

surfaces using appropriate personal protection.

Personal protective equipment

Respiratory protection : Use adequate ventilation and/or engineering controls in high



temperature processing to prevent exposure to vapours. If dust or powder are produced from secondary operations such as sawing or grinding, use a respirator approved for

protection from dust.

No personal respiratory protective equipment normally

required.

Hand protection

Material : Wear protective gloves.

Eye protection : Safety glasses with side-shields

Chemical resistant goggles must be worn.

Skin and body protection : Long sleeved clothing

Protective measures : Wear suitable protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : pellets

Colour : yellow

Odour : none or slight

Odour Threshold : No information available.

pH : No data available

Melting point/ range : This product does not exhibit a sharp melting point but softens

gradually over a wide range of temperatures.

Boiling point/boiling range : not determined

Flash point : Not applicable

Upper explosion limit / Upper

flammability limit

not determined

Lower explosion limit / Lower

flammability limit

not determined

Vapour pressure : negligible

Relative vapour density : not determined

Relative density : >1 (water = 1)

Density : not determined



Solubility(ies)

Water solubility insoluble

Solubility in other solvents not determined

Partition coefficient: n-

octanol/water

No information available.

Auto-ignition temperature 630 °C

Decomposition temperature not determined

Viscosity

Not applicable Viscosity, dynamic

Viscosity, kinematic Not applicable

Explosive properties Not applicable

## 10. STABILITY AND REACTIVITY

Reactivity Stable under recommended storage conditions.

Chemical stability Stable at normal ambient temperature and pressure.

Hazardous polymerisation does not occur.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid To avoid thermal decomposition, do not overheat.

Heating can release hazardous gases.

Do not exceed melt temperature recommendations in product literature. Purgings of hot material should be collected in small, flat, thin shapes and quenched with water to allow for rapid cooling. Do not allow product to remain in barrel at elevated temperatures for extended periods of time.

Incompatible materials No special restrictions on storage with other products.

Hazardous decomposition

products

No hazardous decomposition products are known.

Hazardous decomposition Process vapors under recommended processing conditions products may include trace levels of

hydrocarbons, phenols, alkylphenols, diarylcarbonates If present, certain hazardous additives can also liberate halogens, hydrohalogen acids or halogenated hydrocarbons.

## 11. TOXICOLOGICAL INFORMATION

## Acute toxicity

**Product:** 

Acute oral toxicity Remarks: >5000 mg/kg (estimated)

Acute dermal toxicity Remarks: >2000 mg/kg (estimated)



## Reproductive toxicity

## **Components:**

## Substituted Pyrazolone:

Effects on foetal development

Test Type: Fertility/early embryonic development

Species: Rat, male and female

Strain: wistar

Application Route: oral (gavage)

Developmental Toxicity: NOAEL: >= 300 Method: OECD Test Guideline 422

GLP: yes

Reproductive toxicity -

Assessment

Suspected of damaging fertility or the unborn child.

### STOT - repeated exposure

## **Components:**

### **Titanium Dioxide PW6:**

Target Organs : Lungs

## Experience with human exposure

### **Product:**

Inhalation : Remarks: Inhalation unlikely due to physical form. Processing

fumes evolved at recommended conditions may contain trace

amounts of hazardous chemicals. Extreme processing conditions or temperatures may result in higher levels.

Processing vapors may cause irritation to the eyes, skin, and respiratory tract. In cases of severe exposure, nausea and headache can also occur. Grease-like processing vapor condensates on ventilation duct work, molds, and other

surfaces can cause irritation and injury to skin.

Skin contact : Remarks: Not a hazard during normal industrial use. If

present, some additives (like glass fiber or flame retardants)

may cause skin irritation in susceptible persons.

Eye contact : Remarks: Resin particles, like other inert materials, are

mechanically irritating to eyes.

Ingestion : Remarks: Ingestion unlikely due to physical form.

## **Further information**

**Product:** 

Remarks : The toxicological data has been taken from products of similar

composition.

## 12. ECOLOGICAL INFORMATION



## **Ecotoxicity**

### **Components:**

### Substituted Pyrazolone:

## **Ecotoxicology Assessment**

Chronic aquatic toxicity : May cause long lasting harmful effects to aquatic life.

### Persistence and degradability

No data available

#### Bioaccumulative potential

No data available

### Mobility in soil

No data available

#### Other adverse effects

## **Product:**

Additional ecological

information

: Do not flush into surface water or sanitary sewer system. Ecological injuries are not known or expected under normal

use.

## 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues : Waste must be classified and labelled prior to recycling or

disposal.

Empty containers should be taken to an approved waste handling site for recycling or disposal. Where possible

recycling is preferred to disposal or incineration.

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value chain that are designed to prevent and address

accidental releases into the environment. Accordingly, SABIC recommends implementation of systems and practices by downstream users to prevent and address incidental releases in order to protect the aquatic environment from potential (long

term) negative effects of plastic materials.

Contaminated packaging : Where possible recycling is preferred to disposal or

incineration.

Can be landfilled or incinerated, when in compliance with local

regulations.

## 14. TRANSPORT INFORMATION

### **International Regulations**

### **UNRTDG**

Not regulated as a dangerous good



#### **IATA-DGR**

Not regulated as a dangerous good

### **IMDG-Code**

Not regulated as a dangerous good

## Transport in bulk according to IMO instruments

Not applicable for product as supplied.

#### Special precautions for user

Not applicable

#### 15. REGULATORY INFORMATION

SABIC is disclosing information on minor components in section 15 that, to the best of our knowledge, are based upon data from our raw material suppliers or manufacturers. Note that analysis of the raw materials and/or SABIC products for presence of these or other chemicals on a routine basis is neither part of our quality control plan, nor is it a part of our product specifications, and hence it shall not be construed as any warranty, expressed or implied. Chemical(s) listed in this section can be considered to be present with a concentration below 0.1 (% w/w), unless also appearing in section 3 where a higher concentration range may be displayed.

Further, this does not exclude presence of negligibly slight traces of other chemicals due to, amongst others, impurities or residuals in the components supplied by external parties and/or used in the production of such components. It is the responsibility of the manufacturer or seller to confirm and establish compliance of the final product with local/country regulatory requirements. The information provided here is current as of the date of this document, based on data available to SABIC.

### **National regulatory information**

Waste Disposal (Chemical Waste) (General) Regulation negligible

# The components of this product are reported in the following inventories:

TCSI(Taiwan) : On the inventory, or in compliance with the inventory

TSCA(USA) : All substances listed as active on the TSCA inventory

AIIC(Australia) : Notification/Registration approved with condition(s). For

further information, please contact SABIC.

DSL(Canada) : All components of this product are on the Canadian DSL

ENCS(Japan) : On the inventory, or in compliance with the inventory

KECI(Korea) : On the inventory, or in compliance with the inventory

PICCS(Philippines) : On the inventory, or in compliance with the inventory

IECSC(China) : On the inventory, or in compliance with the inventory

NZIoC(New Zealand) : On the inventory, or in compliance with the inventory

REACH(European Union) : If purchased in Europe, complies with No 1907/2006 (REACH)

or is exempted. If not, please contact Supplier/Importer.

CH INV(Switzerland) : Exempted as long as EU-REACH conditions are met. For

further information, please contact: Manufacture, Importer,

Supplier.



CCA/ARECS : If purchased in S. Korea, complies with K-REACH or is

exempted. If not, please contact Supplier/Importer.

CICR(Türkiye) : For further information, please contact: Manufacturer,

importer, supplier

### 16. OTHER INFORMATION

Further information

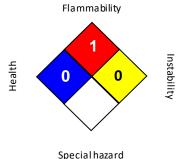
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or its subsidiaries or affiliates.

Prepared by : Product Stewardship

Date format : yyyy/mm/dd

### NFPA:



#### HMIS III:

HEALTH	0
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High

4 = Extreme, \* = Chronic

### NFPA/HMIS disclaimer

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End of Safety Data Sheet