

# SAFETY DATA SHEET

**Date Printed:** February 16, 2022

**Version:** 0

**Regulation:** According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

## 1. Identification

### 1.1 Product identifier

**1.1.1 Product of name:** CTBB-8720BK

**1.1.2 Other means of identification:** Not available

### 1.2 Recommended use of the chemical and restrictions on use

**1.2.1 Recommended use:** It is used for insulation of medium-voltage EPR cables.

**1.2.2. Restrictions on use:** Do not use for purposes other than those recommended.

### 1.3 Details of the supplier of the safety data sheet

#### 1.3.1 Manufacturer

Company name: Hanwha Solutions Co, Ltd.

Address: Yeosu plant, Hanwha Chemical Co, Ltd., 117, Yeosusandan 3-ro, Yeosu-si, Jeollanam-do, Korea

Prepared by: W&C Production team

Contact Telephone: +82-61-688-1582, Fax: +82-61-688-1585, e-mail : h0500113@hanwha.com

#### 1.3.2 Supplier & Distributor

Company name: Hanwha Solutions Co, Ltd.

Address: 21F, Hanwha Bldg., 86, Cheonggyecheon-ro, Jung-gu, Seoul, Korea

Prepared by: PO Tech Center, W&C Sales team

Contact Telephone: +82-42-865-6631, +82-2-729-2644

### 1.4 Emergency phone number

Emergency phone: +82-2-729-2644

## 2. Hazard(s) identification

### 2.1 Classification of the substance or mixture

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

**Physical / Chemical Hazards:** Not classified

**Health Hazards:** Not classified

**Environmental Hazards:** Not classified

### 2.2 Label elements, including precautionary statements

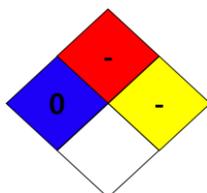
o **Pictogram and symbol:** Not applicable

o **Signal word:** Not applicable

o **Hazard statements:** Not applicable

o **Precautionary statements:** Not applicable

### 2.3 Other hazard information not included in hazard classification (National Fire Protection Association; NFPA)



o **Health:** 0

o **Flammability:** Not available

o **Reactivity:** Not available

### 3. Composition/information on ingredients

Component	Common name and synonyms	CAS No.	Conc. / %
Acetic acid ethenyl ester polymer with ethene	EVA;	24937-78-8	46~60
Carbon black	Acetylene black;	1333-86-4	30~50
[1,3(or 1,4)-Phenylenebis(1-methylethylidene)]bis[(1,1-dimethylethyl) peroxide	Bis(tert-butylperoxyisopropyl)benzene;	25155-25-3	<3

### 4. First aid measures

#### 4.1 Description of first aid measures

##### Eye contact

- In case of contact with substance, immediately flush eyes with running water at least 20 minutes.

##### Skin contact

- In case of contact with substance, immediately flush skin with running water for at least 20 minutes.
- Remove and isolate contaminated clothing and shoes.
- Wash contaminated clothing and shoes before reuse.
- Get immediate medical advice/attention.

##### Inhalation

- Specific medical treatment is urgent.
- Move victim to fresh air.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.

##### Ingestion

- Do not let him/her eat anything, if unconscious.
- Get immediate medical advice/attention.

#### 4.2 Most important symptoms and effects, both acute and delayed effects

- Not known

#### 4.3 Indication of immediate medical attention and notes for physician

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

### 5. Fire-fighting measures

#### 5.1 Extinguishing media

- Suitable extinguishing media: Dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO<sub>2</sub>
- Unsuitable extinguishing media: High pressure water streams

#### 5.2 Specific hazards arising from the chemical

- May be ignited by heat, sparks or flames.
- Containers may explode when heated.
- Some of these materials may burn, but none ignite readily.
- Fire will produce irritating, and/or toxic gases.
- If inhaled, may be harmful.

### 5.3 Special protective equipment and precautions for fire-fighters

- Dike fire-control water for later disposal; do not scatter the material.
- Move containers from fire area if you can do it without risk.
- Fire involving Tanks; Cool containers with flooding quantities of water until well after fire is out.
- Fire involving Tanks; Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- Fire involving Tanks; Always stay away from tanks engulfed in fire.

## 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

- Eliminate all ignition sources.
- Stop leak if you can do it without risk.
- Please note that materials and conditions to avoid.
- Ventilate the area.
- Do not touch or walk through spilled material.
- Prevent dust cloud.

### 6.2 Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

### 6.3 Methods and materials for containment and cleaning up

- Small Spill; Flush area with flooding quantities of water. And take up with sand or other non-combustible absorbent material and place into containers for later disposal.
- Large Spill; Dike far ahead of liquid spill for later disposal.
- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

## 7. Handling and storage

### 7.1 Precautions for safe handling

- Storing plastic dust that has undergone polymerization process or during abnormal operation, there is a high risk of ignition, so it is necessary to monitor the temperature inside the dust during the process. In case of abnormal operation, completely remove dust or manage ignition sources.
- Although plastic dust has a large average particle size, the proportion of fine dust with a particle size of several  $\mu\text{m}$  is very high and the specific gravity is small, so it is easy to generate suspended dust in the air. Also, be careful about the risk of ignition or explosion because the ignition energy is small.
- The lower explosive limit concentration of plastic dust is  $50\text{g}/\text{m}^3$  or less, so the possibility of fire and explosion is high, so manage the dust concentration when handling or using dust.
- Please note that materials and conditions to avoid.
- Wash thoroughly after handling.
- Please work with reference to engineering controls and personal protective equipment.
- Be careful to high temperature.

### 7.2 Conditions for safe storage, including any incompatibilities

- Store in a closed container.
- Store in cool and dry place.

## 8. Exposure controls/personal protection

### 8.1 Occupational Exposure limits

<Carbon black>

o ACGIH regulation:  $\text{TWA}=3\text{ mg}/\text{m}^3$  (inhalable particulate matter)

o OSHA regulation:  $\text{TWA}=3.5\text{ mg}/\text{m}^3$  (Final PELs);  $3.5\text{ mg}/\text{m}^3$  (Vacated PELs)

o NIOSH regulation:  $\text{TWA}=3.5\text{ mg}/\text{m}^3$ ;  $0.1\text{ mg}/\text{m}^3$  (Carbon black in presence of Polycyclic aromatic hydrocarbons, as PAH)

o Biological exposure index: Not available

o **EU regulation:** Not available

o **Other:**

- Australia: TWA=3 mg/m<sup>3</sup>
- China: TWA=4 mg/m<sup>3</sup> (total dust)
- Denmark: TWA=3.5 mg/m<sup>3</sup>

## 8.2 Exposure controls

### Appropriate engineering controls

- Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

### Individual protection measures, such as personal protective equipment

#### Respiratory protection

- Wear NIOSH approved full or half face piece (with goggles) respiratory protective equipment when necessary.

#### Eye protection

- Wear breathable safety goggles to protect from particulate material causing eye irritation or other disorder.
- An eye wash unit and safety shower station should be available nearby work place.

#### Hand protection

- Wear appropriate protective gloves by considering physical and chemical properties of chemicals.

#### Body protection

- Wear appropriate protective clothing by considering physical and chemical properties of chemicals.

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Description:</b>	Solid, Pellet
<b>Color:</b>	Black
<b>Odor:</b>	Not available
<b>Odor threshold:</b>	Not available
<b>pH:</b>	Not available
<b>Melting point/freezing point:</b>	90~110°C
<b>Initial boiling point and boiling range:</b>	Decompose on heating
<b>Flash point:</b>	Not applicable
<b>Evaporation rate:</b>	Not available
<b>Flammability (solid, gas):</b>	Not flammable
<b>Upper/lower flammability or explosive limits:</b>	Not applicable
<b>Vapor pressure:</b>	Not available
<b>Vapor density:</b>	Not applicable
<b>Relative density</b>	1.14±0.05 (23°C)
<b>Solubility:</b>	Not available
<b>Solubility in organic solvents:</b>	Not available
<b>Partition coefficient: n-octanol/water:</b>	Not available
<b>Auto ignition temperature:</b>	Not available
<b>Decomposition temperature:</b>	Not available
<b>Viscosity:</b>	Not applicable
<b>Molecular weight:</b>	Not available as it is a mixture
<b>Particle Size (Polymer compound)</b>	Not available
<b>Self-accelerated decomposition temperature (Polymer compound)</b>	Not available

“NOTE: The physical data presented above are typical values and should not be construed as a specification”

## 10. Stability and reactivity

### 10.1 Reactivity/Chemical stability/Possibility of hazardous reactions:

- Fire may produce irritating and/or toxic gases.
- If inhaled, may be harmful.

### 10.2 Conditions to avoid:

- Heat, sparks or flames

### 10.3 Incompatible materials:

- Combustibles

### 10.4 Hazardous decomposition products:

- Irritating and/or toxic gases

## 11. Toxicological information

Information on toxicological effects	
(a) Acute toxicity	
Oral	Not classified (ATE <sub>mix</sub> > 3,200 mg/kg bw)
	<ul style="list-style-type: none"> <li>- Acetic acid ethenyl ester polymer with ethene               <ul style="list-style-type: none"> <li>· No data(male/female), LD<sub>50</sub> &gt; 2,000 mg/kg bw</li> </ul> </li> <li>- Carbon black :               <ul style="list-style-type: none"> <li>· Rat, LD<sub>50</sub> &gt; 8,000 mg/kg bw</li> </ul> </li> <li>- [1,3(or 1,4)-Phenylenebis(1-methylethylidene)]bis[(1,1-dimethylethyl) peroxide] :               <ul style="list-style-type: none"> <li>· Rat (male/female), LD<sub>50</sub> &gt; 2,000 mg/kg bw (OECD TG 401, 423, GLP)</li> </ul> </li> </ul>
Dermal	Not classified (ATE <sub>mix</sub> > 2,000 mg/kg bw)
	<ul style="list-style-type: none"> <li>- [1,3(or 1,4)-Phenylenebis(1-methylethylidene)]bis[(1,1-dimethylethyl) peroxide]:               <ul style="list-style-type: none"> <li>· Rat (male/female), LD<sub>0</sub> &gt; 2,000 mg/kg bw (OECD TG 402, GLP)</li> </ul> </li> </ul>
Inhalation	Not available
(b) Skin Corrosion/ Irritation	Not classified
	<ul style="list-style-type: none"> <li>- Carbon black :               <ul style="list-style-type: none"> <li>· It was not irritating to the skin of rabbits in tests performed similar to current OECD guidelines.(OECD TG 404)</li> </ul> </li> <li>- [1,3(or 1,4)-Phenylenebis(1-methylethylidene)]bis[(1,1-dimethylethyl) peroxide] :               <ul style="list-style-type: none"> <li>· It is not considered as a primary dermal irritant.(OECD TG 404, GLP)</li> </ul> </li> </ul>
(c) Serious Eye Damage/ Irritation	Not classified
	<ul style="list-style-type: none"> <li>- Carbon black :               <ul style="list-style-type: none"> <li>· It was not irritating to the eyes of rabbits in tests performed similar to current OECD guidelines.(OECD TG 405)</li> </ul> </li> <li>- [1,3(or 1,4)-Phenylenebis(1-methylethylidene)]bis[(1,1-dimethylethyl) peroxide] :               <ul style="list-style-type: none"> <li>· The test material was not an eye irritant.(OECD TG 405, GLP)</li> </ul> </li> </ul>

(d) Respiratory sensitization	Not available
(e) Skin Sensitization	Not classified
	- [1,3(or 1,4)-Phenylenebis(1-methylethylidene)]bis[(1,1-dimethylethyl) peroxide : · Under the experimental conditions of this study, the test item did not induce delayed contact hypersensitivity in the murine Local Lymph Node Assay. (OECD TG 429, GLP)
(f) Carcinogenicity	Not classified * Although there is no data on carcinogenicity of the product, the possibility of direct exposure of workers to the powder during storage and handling is low because carbon black in the product is a chip-type masterbatch that has been mixed in a substrate and subjected to a compression process. Therefore, the classification of carcinogenicity is not applied.
	- Acetic acid ethenyl ester polymer with ethene : · IARC, NTP, OSHA, ACGIH, EU CLP 1272/2008: not listed - Carbon black : · IARC: Group 2B (Possibly carcinogenic to humans) · OSHA : applicable · ACGIH: A3 (Confirmed animal carcinogen with unknown relevance to humans) · The lung cancers in rats are considered by some to be the result of a non-genotoxic mechanism secondary to cellular toxicity brought about by lung overloading, inflammation, and oxidative stress. The relevance of Carbon Black induced lung tumours in rats to human health is uncertain, and it appears that the rat is the most sensitive species to the effects of lung overload. At present the potential of the chemical to induce lung tumours in humans cannot be ruled out on theoretical grounds, although the epidemiological evidence* does not suggest such a causal link. * Regarding lung cancer, various cohort and case-controlled studies in the United States did not show an increased risk of lung cancer among carbon black-producing workers. In a cohort study of workers exposed to carbon black in the UK, lung cancer was excessive in some factories, but not all factories were included in the study, there was no association between exposure duration and lung cancer mortality, and no possible confusion due to smoking or past occupation. - [1,3(or 1,4)-Phenylenebis(1-methylethylidene)]bis[(1,1-dimethylethyl) peroxide : · IARC, NTP, OSHA, ACGIH, EU CLP 1272/2008: not listed
(g) Mutagenicity	Not classified
	- Carbon black : · <i>In vitro</i> : Bacterial Reverse Mutation Assay : negative · <i>In vitro</i> : mouse lymphoma assay : negative · <i>In vitro</i> : sister chromatid exchanges assay : negative · It may be concluded that the available evidence strongly suggests that it is not directly mutagenic. - [1,3(or 1,4)-Phenylenebis(1-methylethylidene)]bis[(1,1-dimethylethyl) peroxide : · <i>In vitro</i> : Mammalian Chromosome Aberration Test: Metabolic activation: with and without; negative (OECD TG 473, GLP) · <i>In vitro</i> : Gene mutation study in mammalian cells: Metabolic activation: with and without; negative (OECD TG 476, GLP) · <i>In vivo</i> : Not available
(h) Reproductive toxicity	Not classified
	- Carbon black : · Carbon black has not been tested in guideline studies for its effects on fertility,

	<p>reproduction and the developing organism. Based on the available toxicokinetic principles, it is very unlikely that carbon black particles will reach the reproductive organs, the embryo or the fetus under in vivo conditions. No adverse effects on reproduction and development would therefore be expected.</p> <ul style="list-style-type: none"> <li>- [1,3(or 1,4)-Phenylenebis(1-methylethylidene)]bis[(1,1-dimethylethyl) peroxide :</li> <li>· The NOAEL for the systemic toxicity in the parental generation is considered to be 300 mg/kg bw/day, based on decreased body weight gain and food consumption in males and females and microscopic changes in kidneys of females observed at 1,000 mg/kg bw/day. The NOAEL for the fertility was 1,000 mg/kg bw/day in males and 300 mg/kg bw/day in females) The NOAEL for the foetal development was 100 mg/kg body weight/day based a lower body weight gain at 300 and 1,000 mg/kg bw/day. (OECD TG 422, GLP)</li> <li>· Based on the outcome of this study, the treatment with Luperox F did not cause any adverse effect on maternal and foetal organisms, therefore the NOAEL (No Observed Adverse Effect Level) for maternal and developmental toxicity was higher than 200 mg/kg/day for orally administered Luperox F to rabbits. No teratogenic potential was noted up to the dose level of 200 mg/kg/day, the highest dose level tested within this study. (OECD TG 414, GLP)</li> </ul>
(i) Specific target organ toxicity (single exposure)	<p>Not classified</p> <ul style="list-style-type: none"> <li>- Carbon black : <ul style="list-style-type: none"> <li>· The acute oral toxicity of carbon black in animals is very low; no clinical signs of toxicity were noted in rats gavaged with the maximum technically achievable dose (8,000-10,000 mg/kg bw). Small inflammatory changes in lung and bronchoalveolar fluid were found in rats after a 7-hour inhalation exposure to a high surface area carbon black (20 nm primary particle size; 1 mg/m<sup>3</sup>), whilst low surface area carbon black (200 nm primary particle size; 1 mg/m<sup>3</sup>) had no effect.</li> </ul> </li> <li>- [1,3(or 1,4)-Phenylenebis(1-methylethylidene)]bis[(1,1-dimethylethyl) peroxide :</li> <li>· In acute oral/and dermal study, clinical signs of toxicity were not observed.</li> </ul>
(j) Specific target organ toxicity (repeat exposure)	<p>Not classified</p> <p>* Although there is no data on carcinogenicity of the product, the possibility of direct exposure of workers to the powder during storage and handling is low because carbon black in the product is a chip-type masterbatch that has been mixed in a substrate and subjected to a compression process. Therefore, the classification of specific target organ toxicity (repeat exposure) is not applied.</p> <ul style="list-style-type: none"> <li>- Carbon black : <ul style="list-style-type: none"> <li>· After repeated inhalation of a high surface area carbon black for 13 weeks, no pathological or biochemical changes were found in the lungs of rats at 1.1 mg/m<sup>3</sup> (NOAEL, respirable fraction) but there were clear dose related increases in both biochemical and cellular markers of inflammation and lung damage at the next higher concentration of 7.1 mg/m<sup>3</sup> (respirable fraction). By 8 months post-exposure there was substantial clearance of the carbon black retained in the lungs of animals exposed to 1.1 mg/m<sup>3</sup> , moderate clearance in the mid-exposure group (7.1 mg/m<sup>3</sup>) and very little at 52.8 mg/m<sup>3</sup>. Severe lung damage (including lung tumours) was seen in rats of both sexes exposed for 2 years to 2.5 mg/m<sup>3</sup> (16 hrs/day, 5 days/week).</li> </ul> </li> <li>- [1,3(or 1,4)-Phenylenebis(1-methylethylidene)]bis[(1,1-dimethylethyl) peroxide :</li> <li>· The NOAEL is considered to be 300 mg/kg bw/day, based on decreased body weight gain and food consumption in males and females and microscopic changes in kidneys of females observed at 1,000 mg/kg bw/day. The NOEL is considered to be 100 mg/kg bw/day based on kidney multifocal tubular degeneration / regeneration and increase in kidney/body weight ratio in males at 300 mg/kg. This NOEL is considered as secure, since effects on male kidneys are related to a species specific alpha 2- µglobuline accumulation as demonstrated in a subsequent 90-day oral study. (OECD TG 422, GLP)</li> </ul>

(k) Aspiration Hazard	Not applicable
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## 12. Ecological information

12.1 Toxicity	
Acute toxicity	Not classified (ATEmix = 13,250 mg/L)
	<ul style="list-style-type: none"> <li>- Carbon black : <ul style="list-style-type: none"> <li>· Fish: 96h-LC<sub>50</sub> (<i>Tribolodon hakonensis</i>) &gt; 1,000 mg/L</li> <li>· Invertebrate: 24h-EC<sub>50</sub> (<i>Daphnia magna</i>) &gt; 5,600 mg/L (OECD TG 202)</li> <li>· Algae: 72h-ErC<sub>50</sub> (<i>Scenedesmus</i>) &gt; 10,000 mg/L</li> </ul> </li> <li>* Acute toxicities were not reported at levels up to the water solubility due to being insoluble in water.</li> <li>- [1,3(or 1,4)-Phenylenebis(1-methylethylidene)]bis[(1,1-dimethylethyl) peroxide] : <ul style="list-style-type: none"> <li>· Fish: 96h-LC<sub>50</sub> (<i>Pimephales promelas</i>)=750 mg/L (semi-static, freshwater) (OECD TG 203, GLP)</li> <li>· Invertebrate: 48h-NOELR (<i>Daphnia magna</i>) &gt; 0.022 mg/L (static, freshwater) (OECD TG 202, GLP); No immobilisation or adverse effects on the <i>Daphnia</i> were noted.</li> <li>· Algae: 72h-ErC<sub>50</sub> (<i>Pseudokirchneriella subcapitata</i>) &gt; 1.0 mg/L (static, freshwater) (OECD TG 201, GLP)</li> <li>72h-NOELrR(<i>Pseudokirchneriella subcapitata</i>) &gt; 1 mg/L (static, freshwater) (OECD TG 201, GLP)</li> </ul> </li> <li>* Acute toxicities were not reported at levels up to the water solubility due to being insoluble in water.</li> </ul>
Chronic toxicity	Not classified
	<ul style="list-style-type: none"> <li>- [1,3(or 1,4)-Phenylenebis(1-methylethylidene)]bis[(1,1-dimethylethyl) peroxide] : Category 4</li> <li>· Algae: 72h-NOELrR(<i>Pseudokirchneriella subcapitata</i>) &gt; 1 mg/L (static, freshwater) (OECD TG 201, GLP)</li> <li>* Chronic toxicity was not reported at levels up to the water solubility due to being insoluble in water.</li> </ul>
12.2 Persistence and degradability	<ul style="list-style-type: none"> <li>- Carbon black : <ul style="list-style-type: none"> <li>· It is not biodegradable by micro-organisms.</li> </ul> </li> <li>- [1,3(or 1,4)-Phenylenebis(1-methylethylidene)]bis[(1,1-dimethylethyl) peroxide] : <ul style="list-style-type: none"> <li>· Extrapolated values at 25°C (using the Arrhenius equation): half-life = 56.4 d (pH 4), 74.7 d (pH 7), 96.5 d (pH 9) (OECD TG 111 &amp; EPA OPPTS 835.2110, GLP)</li> <li>· 0% biodegradation was observed after 28 days; not readily biodegradable) (OECD TG 301D, GLP)</li> </ul> </li> </ul>
12.3 Bio-accumulative potential	<ul style="list-style-type: none"> <li>- Carbon black : <ul style="list-style-type: none"> <li>· Based on its insolubility in organic solvents, and in water, a relevant bioaccumulation of carbon black is not expected.</li> </ul> </li> <li>- [1,3(or 1,4)-Phenylenebis(1-methylethylidene)]bis[(1,1-dimethylethyl) peroxide] : <ul style="list-style-type: none"> <li>· log Kow = 7.3 (20 °C, pH:&gt; 5 - &lt; 9) (OECD TG 107, GLP)</li> <li>· BCF = 536 kg/day (GLP)</li> </ul> </li> </ul>
12.4 Mobility in soil	<ul style="list-style-type: none"> <li>- [1,3(or 1,4)-Phenylenebis(1-methylethylidene)]bis[(1,1-dimethylethyl) peroxide] : <ul style="list-style-type: none"> <li>· Koc = 1,259-63,096</li> </ul> </li> </ul>
12.5 Results of PBT and vPvB assessment	<ul style="list-style-type: none"> <li>- Carbon black : The substance is not PBT / vPvB.</li> <li>- [1,3(or 1,4)-Phenylenebis(1-methylethylidene)]bis[(1,1-dimethylethyl) peroxide] : The substance is not PBT / vPvB.</li> </ul>
12.6 Hazardous to	Not classified

the ozone layer	
12.7 Other adverse effects	Not available

### 13. Disposal considerations

#### 13.1 Disposal method

- Waste must be disposed of in accordance with federal, state and local environmental control regulations.

#### 13.2 Disposal precaution

- Consider the required attentions in accordance with waste treatment management regulation.

### 14. Transport information

**14.1 UN No.:** Not applicable

**14.2 UN Proper shipping name:** Not applicable

#### 14.3 Transport Hazard class:

- ADR: Not applicable
- IMDG: Not applicable
- ICAO/IATA: Not applicable
- RID: Not applicable

**14.4 Packing group:** Not applicable

**14.5 Environmental hazards:** Not applicable

**14.6 Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** Not applicable

#### 14.7 Special precautions for user

- in case of fire:** Not applicable
- in case of leakage:** Not applicable

### 15. Regulatory information

#### 15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture USA Regulatory Information

<Acetic acid ethenyl ester, polymer with ethene>

**TSCA (Toxic Substances Control Act):** Section 8 (b) inventory: Present [XU] (ACTIVE)

**Proposition 65:** Not regulated

**OSHA Regulation:** Not regulated

**CERCLA Regulation:** Not regulated

**SARA 302 Regulation:** Not regulated

**SARA 304 Regulation:** Not regulated

**SARA 313 Regulation:** Not regulated

#### Foreign Regulatory Information

**Substance of Rotterdam Protocol:** Not regulated

**Substance of Stockholm Protocol:** Not regulated

**Substance of Montreal Protocol:** Not regulated

**Foreign Inventory Status**

- Korea management information: Existing Chemical Substance (KE-00037)
- Canada management information: Domestic Substances List (DSL): Present
- Australia management information: Inventory of Industrial Chemicals (AIIC): Present
- China management information: Inventory of Existing Chemical Substances (IECSC): Present (06470)
- Japan management information: Existing and New Chemical Substances (ENCS): Present ((6)-81))
- New Zealand management information: Inventory of Chemicals (NZIoC): May be used as a single component chemical under an appropriate group standard.
- Philippines management information: Inventory of Chemicals and Chemical Substances (PICCS): Present
- Taiwan management information: Taiwan Chemical Substance Inventory (TCSI): Present

**<Carbon black>**

**TSCA (Toxic Substances Control Act):** Section8 (b) inventory: Present (ACTIVE)

**Proposition 65:** Not regulated

**OSHA Regulation:** Regulated

**CERCLA Regulation:** Not regulated

**SARA 302 Regulation:** Not regulated

**SARA 304 Regulation:** Not regulated

**SARA 313 Regulation:** Not regulated

**Foreign Regulatory Information**

**Substance of Rotterdam] Protocol:** Not regulated

**Substance of Stockholm Protocol:** Not regulated

**Substance of Montreal Protocol:** Not regulated

**Foreign Inventory Status**

- Korea management information: Existing Chemical Substance (KE-04682)
- European Inventory of Existing Commercial chemical Substances (EINECS): Present (215-609-9)
- Canada management information: Domestic Substances List (DSL): Present
- Australia management information: Inventory of Industrial Chemicals (AIIC): Present
- China management information: Inventory of Existing Chemical Substances (IECSC): Present (34022)
- Japan management information: Existing and New Chemical Substances (ENCS): Present ((5)-5222, (5)-3328)
- New Zealand management information: Inventory of Chemicals (NZIoC): Present [HSNO Approval: HSR002801]
- Philippines management information: Inventory of Chemicals and Chemical Substances (PICCS): Present
- Taiwan management information: Taiwan Chemical Substance Inventory (TCSI): Present

**<[1,3(or 1,4)-Phenylenebis(1-methylethylidene)]bis[(1,1-dimethylethyl) peroxide>**

**TSCA (Toxic Substances Control Act):** Section8 (b) inventory: Present (ACTIVE)

**Proposition 65:** Not regulated

**OSHA Regulation:** Not regulated

**CERCLA Regulation:** Not regulated

**SARA 302 Regulation:** Not regulated

**SARA 304 Regulation:** Not regulated

**SARA 313 Regulation:** Not regulated

**Foreign Regulatory Information**

**Substance of Rotterdam] Protocol:** Not regulated

**Substance of Stockholm Protocol:** Not regulated

**Substance of Montreal Protocol:** Not regulated

**Foreign Inventory Status**

- Korea management information: Existing Chemical Substance (KE-28332)
- European Inventory of Existing Commercial chemical Substances (EINECS) : Present (246-678-3)
- Canada management information: Domestic Substances List (DSL): Present
- Australia management information: Inventory of Industrial Chemicals (AIIC): Present
- China management information: Inventory of Existing Chemical Substances (IECSC): Present (11007)

- Japan management information: Existing and New Chemical Substances (ENCS): Present ((3)-1067)
- New Zealand management information: Inventory of Chemicals (NZIoC): May be used as a single component chemical under an appropriate group standard.
- Philippines management information: Inventory of Chemicals and Chemical Substances (PICCS): Present
- Taiwan management information: Taiwan Chemical Substance Inventory (TCSI): Present

## 16. OTHER INFORMATION

### 16.1 Indication of changes:

Preparation date: February 16, 2022

Version: 0

Revision date: February 16, 2022

### 16.2 Key literature reference and sources for data:

- TSCA; [http://iaspub.epa.gov/sor\\_internet/registry/substreg/searchandretrieve/searchbylist/search.do](http://iaspub.epa.gov/sor_internet/registry/substreg/searchandretrieve/searchbylist/search.do)
- EU Regulation 1272/2008
- TOMES;LOLI ; <http://csi.micromedex.com/fraMain.asp?Mnu=0>
- UN Recommendations on the transport of dangerous goods 17<sup>th</sup>
- IARC Monographs on the Evaluation of Carcinogenic Risks to Humans; <http://monographs.iarc.fr>
- ECHA CHEM; <http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances>
- OECD SIDS; <http://webnet.oecd.org/>
- HSDB; <https://pubchem.ncbi.nlm.nih.gov/>
- EPA; <http://www.epa.gov/iris>
- EPISUITE Program ver.4.1
- NIOSH(The National Institute for Occupational Safety and Health)
- ACGIH(American Conference of Governmental Industrial Hygienists)
- National chemicals information systems; <http://ncis.nier.go.kr>
- National Emergency Management Agency-Korea dangerous material inventory management system; <http://hazmat.mpss.kfi.or.kr/material.do>
- Danger Evaluation Report about PVC and SAP (KOSHA)

### 16.3 Abbreviations

ACGIH: American Conference of Governmental Industrial hygienists

NIOSH: The National Institute for Occupational Safety and Health

OSHA: Occupational Safety & Health Administration

IARC: International Agency for Research on Cancer

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Dangerous Goods

ICAO/IATA: International Civil Aviation Organization/ International Air Transport Association

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail

### 16.4 Other

- Product should be handled, stored, and used in accordance with the generally accepted industrial hygiene practices and in conformity with all the applicable legal regulations.
- The information provided herein is based on the knowledge possessed at this present time from the view point of safety requirements.
- It should, therefore, not be construed as guaranteeing specific properties.