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		-	

### 1. IDENTIFICATION

- A. Product name
  - Product name: Hanwha TotalEnergies Petrochemical BCPP BI6200

### B. Recommended Use and Restriction on Use

- $\bigcirc$  General Use: Plastic articles or goods
- Restriction in use: Not available

### C. Manufacturer/Distributor Information

- Manufacturer Information

Compa	any	Hanwha	TotalEner	gies Pe	trochemi	cal Co	., Ltd.
Addre	ess	103,	Dokgot	2-ro,	Daesan-	-Up,	Seosan-Si,
		Chungn	am, Korea	31900			
Phone	9	82-41-	660-6190	FAX		82-41	-660-6189

## 2. HAZARDS IDENTIFICATION

A. GHS Classification 1) Physical Hazards : Not classified **TotalEnergies** 2) Health Hazards : Not classified 3) Environmental Hazards : Not classified B.GHS label elements 1) Hazard symbols : Not applicable 2) Signal Word : Not applicable 3) Hazard Statements Not applicable 4) Precautionary Statements ■ Prevention : Not applicable ■ Response : Not applicable ■ Storage : Not applicable ■ Disposal : Not applicable C. Other hazards which do not result in classification - Not available

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3. COMPOSION/II	NFORMATION ON INGREDIENTS				
Chemical name	Trade names and Synonyms	CAS	No	Cont	ents (%)
ETHYLENEPROPYLEN COPOLYMER	E 1–PROPENE, POLYMER WITH ETHENE	9010-	-79-1		$\geq 99$

\* In additive components, there are no 1% or more hazardous substance subject to management, no 0.1% or more carcinogens and germ cell mutagenic substance, no 0.2% or more respiratory sensitizing substance(gas), and no 0.3% or more reproductive toxic substance.

### 4. FIRST-AID MEASURES

A. Eye Contact

- Do n<mark>o</mark>t rub your eyes.

- Immediately flush eyes with plenty of water for at least 15 minutes and call a doctor/physician.

TotalEnergies

B. Skin Contact

- Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

- Wash contaminated clothing thoroughly before re-using.

- C. Inhalation
  - When exposed to large amounts of steam and mist, move to fresh air.
  - Take specific treatment if needed.
- D. Ingestion

- Please be advised by doctor whether induction of vomit is demanded or not.

- Rinse your mouth with water immediately.

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<ul> <li>E. Delayed and immediate effects and also chronic effects from short and long term exposure <ul> <li>Not available</li> </ul> </li> <li>F. Notes to physician <ul> <li>Notify medical personnel of contaminated situations and have them take appropriate protective measures.</li> </ul> </li> </ul>					
5. FIRE FIGHTING MEASURE					
<ol> <li>Suitable -Use mist,</li> <li>Unsuitab</li> <li>Unusual</li> <li>B. Specific haz</li> </ol>	suitable) extinguishing media extinguishing media fine water spray, chemical desiccant, le extinguishing media : Do not use wat fire(big fire) : Not available ards arising from the chemical s or combustion may produce irritati	ter in a jet	nd carbon		
<ul> <li>C. Special protective actions for firefighters <ul> <li>Cool containers with water until well after fire is out.</li> <li>Keep unauthorized personnel out.</li> <li>Notify your local fire station and inform the location of the fire and characteristics hazard.</li> <li>In case of conflagration, use automatic fire sprinkler. Major fire may require withdrawal, allowing the object itself to burn.</li> <li>Avoid inhalation of materials or combustion by-products.</li> <li>Keep containers cool with water spray.</li> </ul> </li> </ul>					
6. ACCIDENTAL	RELEASE MEASURES				
A.Personal pre	cautions, protective equipment and emer	gency proce	dures		

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- Remove all flammable sources
- If it is not dangerous, stop leaking.
- Take caution of substances and conditions that should be avoided.
- Ventilate properly.
- DO NOT touch the effluents or walk around the area.
- Prevent producing dust.

B. Environmental precautions

- -Prevent runoff and contact with waterways, drains or sewers.
- If large amounts have been spilled, inform the relevant authorities.

C. Methods and materials for containment and cleaning up

- Large spill : Stay upwind and keep out of low areas. Dike for later disposal.

- Notify the central and local government if the emission reach the standard threshold.

- Disp<mark>o</mark>sal of waste shall be in compliance with the Wa<mark>st</mark>es Control Act
- Appropriate container for disposal of spilled material collected.

- Small leak: sand or other non-combustible material, please let use absorption.

- Wipe off the solvent.
- Dike for later disposal.
- Prevent the influx to waterways, sewers, basements or confined spaces.

- Spilled material should be treated as a potential risk of waste collected.

### 7. HANDLING AND STORAGE

- A. Precautions for safe handling
  - Wash thoroughly after use.
  - Take caution against high temperature.
  - Refer Engineering Maintenance and Personal Protective Gears at work.

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	for safe storage, including any incompa	tibilities	
	efore storage. cool and dry places.		
	ion of substances and conditions that	should be ave	oided.
8. EXPOSURE CO	ONTROLS/PERSONAL PROTECTION		
A. Exposure l	imits		
1) ACGIH T			
- Not av			
2) OSHA PE - Not av			
Not av			
B. Engineerin	g controls		
- Busines	s owner is recommended to mainta	in below re	commended
expos <mark>u</mark> r e	limits for the working place with	gen <mark>er</mark> al ex	haust of
gas/vapor/	mist/fume.		
C Decent		lotalEne	araies
	rotective equipment tory protection		gics
-	conditions of frequent use or heavy	exposure. Re	spiratorv
	on may be needed.	• /	1 2
- Respir	atory protection is ranked in order fi	rom minimum t	o maximum
	er warning properties before use.		
	nemical cartridge respirator with organ		
	chemical cartridge respirator with a	a full face <u>r</u>	piece and
_	<pre>vapor cartridge(s). r-purifying respirator with a full fac</pre>	ceniece and a	n organic
vapor ca		cpree and a	
-	Inknown Concentration or Immediately	Dangerous to	Life or
Health	: Any supplied-air respirator with	full facep	oiece and
operated	• • • • •	tive-pressure	e mode in
	in a pressure-demand or other posi		

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<ul> <li>combination with a separate escape supply. Any self-contained breathing apparatus with a full facepiece.</li> <li>2) Eye protection <ul> <li>Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield.</li> <li>Provide an emergency eye wash station and quick drench shower in the immediate work area.</li> </ul> </li> <li>3) Hand protection <ul> <li>Wear appropriate chemical resistant glove.</li> </ul> </li> <li>4) Skin protection <ul> <li>Wear appropriate protective clothing by considering physical and chemical properties of chemicals.</li> <li>5) Others</li> </ul> </li> </ul>				
- Not av	allable			
9. Physical and C	Chemical Properties			
	(physical state, color etc.) : White p	pellet		
A. Appearance B. Odor : Not	(physical state, color etc.) : White p available	oellet TotalEne	ergies	
A. Appearance B. Odor : Not C. Odor Thres D. pH : Not a E. Melting po	e(physical state, color etc.) : White p available shold : Not available available bint/Freezing point : 130~170℃	TotalEne	ergies	
A. Appearance B. Odor : Not C. Odor Thres D. pH : Not a E. Melting po F. Initial bo G. Flash poin H. Evaporatio I. Flammabili J. Explosion K. VAPOR PRES L. Solubility M. Vapor Dens N. Specific g	e(physical state, color etc.) : White p available whold : Not available wailable	<b>FotalEne</b> Not available	ergies	

			1
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0 Decomposit	ion temperature: Not available		
_	Not available		
•	Weight: > 1,000		
S. Morecurar			
10. STABILITY AN	ND REACTIVITY		
A.Chemical Sta	bility		
- This prod	uct is stable at steady-state when sto	red and hand	led under
recommended	conditions, temperature and pressure.		
B.Possibility	of hazardous reactions		
– No repo	ort about harmful polymerized read	ctions in	the room
temperature	and pressure.		
C.Conditions t	o avoid		
	tact with heat, sparks, flame or other	ignition so	irces
	s may burst or explode when exposed to	-	
	y from waterways and sewers	nout	
	y from water ways and sewers		

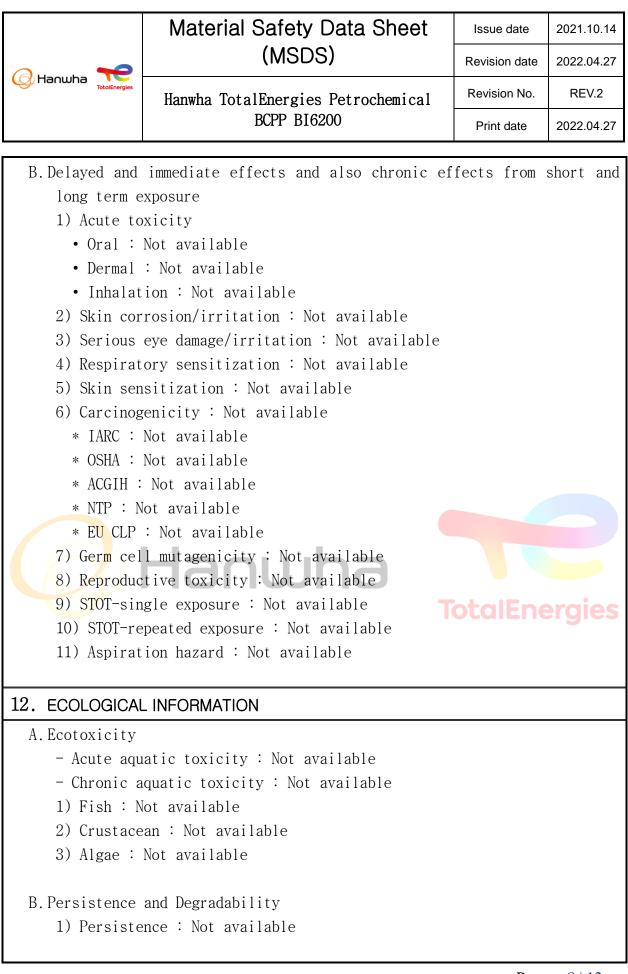
- Cylinders exposed to fire may release flammable gases (no code)
- D. Incompatible material
  - Flammable substance

E.Hazardous decomposition products

- Thermal decomposition product  $\rightarrow$  carbon oxides

# 11. Toxicological Information

- A. Information on the likely routes of exposure
  - 1) Respiratory tracts : Not available
  - 2) Oral : Not available
  - 3) Skin contact : Not available
  - 4) Eye contact : Not available



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- 2) Degradabiltiy : Not available
- C. Bioaccumulation potential
  - 1) Bioaccumulation : Not available
  - 2) Biodegration : Not available
- D. Mobility in soil : Not available
- E.Other adverse effects - Not available

### 13. Disposal Considerations

- A.Disposal method
  - When this waste is solid state and doesn't mixed with other materials, it should be entrusted to the waste recycling processor
  - When it is impossible to recycle, it should be entrusted to the waste recycling processor in accordance with the national regulated disposal methods(ex. incineration, landfill, etc)
  - When this waste is mixed with designated wastes, it is entrusted to the waste recycling processor in accordance with the national regulated disposal methods for the designated wastes
- B. Disposal instruction
  - Take care not to burst the package bag and/or the package container
  - Take care not to spill out of the package bag and/or the package container
  - Don't dispose of the waste which mixed with the reactive material
  - When disposing of the waste mixed with other materials, after stabilzing in order not to react each other, it should be safely disposed in accordance with the national regulation
  - Dispose of the waste in accordance with all national laws and regulations

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14. TRANSPORT INFORMATION						
A.UN No. (IMDG	G CODE/IATA DGR) : Not applicable					
B.Proper shipping name : Not applicable						
C.Hazard Class	: Not applicable					
D.IMDG CODE/IA	TA DGR Packing group : Not applicable					
E.Marine pollu	tant : Not applicable					
F.Special precautions for user related to transport or transportation measures						
	ansport follows in accordance with Da	angerous goo	ds Safety			
Management Law. - Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements. - Air transport(IATA): Not subject to IATA regulations. TotolEnergies						
15. REGULATORY INFORMATION						
A.National and/or international regulatory information						
1) POPs Man	agement Law : Not regulated					
2) Informat	ion of EU Classification					
• Classif	ication : Not applicable					
3) U.S. Fed	eral regulations					
• OSHA PR	OCESS SAFETY (29CFR1910.119) : Not regu	ulated				
• CERCLA	Section 103 (40CFR302.4) : Not regulate	ed				
	Section 302 (40CFR355.30) : Not regulate					
	Section 304 (40CFR355.40) : Not regulate	ed				
	Section 313 (40CFR372.65) Not regulated					
	m Convention listed ingredients : Not i	-				
5) Stockhol	m Convention listed ingredients : Not n	regulated				

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6) Montreal Protocol listed ingredients : Not regulated			

## 16. OTHER INFORMATION

#### Α.

A. Reference
○ TSCA ; 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
$\bigcirc$ UN Recommendations on the transport of dangerous goods 17th
$\bigcirc$ 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/Hpv/UI/Search.aspx
○ HSDB; http://toxnet.nlm.nih.gov/cgi-bin/sis/search2
○ EPA; http://www.epa.gov/iris
○ InCHEM; http://www.inchem.org/
O EPISUITE Program ver.4.1
TotalEnergies
B.Key acronyms
$\bigcirc$ ACGIH(American Conference of Governmental Industrial Hygienists)
○ ECHA(European Chemicals Agency)
$\bigcirc$ OECD(Organization for Economic Co-operation and Development)
○ CERCLA(Comprehensive Environmental Response, Compensation, and
Liability Act)
$\bigcirc$ IARC(International Agency for Research on Cancer)
○ NIOSH(National Institute for Occupational Safety and Health)

- $\bigcirc$  OSHA(Occupational Safety and Health Administration)
- NTP(National Toxicology Program)
- TSCA(Toxic Substances Control Act)
- NFPA(National Fire Protection Association)
- LC50(Lethal Concentration 50% kill)

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○ LD50(Lethal Dose 50% kill)

 $\bigcirc$  EC50(50% Effect Concentration)

- STEL(Short Term Exposure Limit)
- TWA(Time weight Average)
- TLV(Threshold Limit Value)
- C.Issued date : 2021.10.14
- D. Revision number and date : 2<sup>nd</sup>, 2022.04.27

E.Other material safety data sheet information:

- This SDS is prepared according to the Globally Harmonized System (GHS).

- This safety data sheet is based on current knowledge and information that we know.

- Please note that this information is not a guarantee of the product itself.

- 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. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability on completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.