Thai Polyethylene Co., Ltd. requires users to read and fully understand this Safety Data Sheet (SDS), as important information is contained throughout the document. Users shall comply with the precautions specified herein unless the specific conditions of use necessitate other appropriate methods or actions. If you are not sure that the SDS you have is current, please contact us for the most current version.

SECTION 1: Identification

1.1 Product identifier

Product name:	SCGC Green Polymer
Product grade:	PCRH01BN
Product type:	PCR High Density Polyethylene (Natural)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Uses:	Raw material for different industrial uses
Recommended use:	Uses advised against: Consumer use; any use other than as described above.

1.3 Details of the supplier of the safety data sheet

Manufacturer:	Teamplas R&D Co., Ltd. 3/3 Moo 1, Pimpavas Rd., Pimpa, Bangpakong, Chachoengsao, Thailand, 24180 Tel (+066) 38-570-400 – F (+066) 38-570-403 www.teamplasgroup.com
Emergency contact:	+66(0)38570400 ext.181

SECTION 2: Hazards identification

2.1 Classification of substance or mixture

According to GHS Classification (Rev. 11, 2025):

Not classified as hazardous

2.2 GHS label elements including precautionary statement

Label according to GHS Classification (Rev. 11, 2025)

Hazard Pictograms:	None
Signal Word:	Not applicable
Hazard Statements:	None
Precautionary Statements:	
Prevention	None
Response	None
Storage	None
Disposal	None

2.3 Other hazards

Results of PBT and vPvB assessment	This product is not PBT/vPvB. It does not contain constituents included in the SVHC candidate list as PBT/vPvB at concentrations above 0.1%.
Endocrine disrupting substances	No data is available.
Other hazards	Molten polymer can cause thermal burns. May form combustible dust concentrations in air. Plastic pellets may pose an environmental risk if not effectively managed and released into the environment

SECTION 3: Composition/information on ingredients

3.1 Distinction of Substance or Mixture: Mixture

Chemical Name	Identifiers	Concentration (wt%)	Hazard Classes
Polyethylene Homopolymer	CAS No.: 9002-88-4 EC-No.: 618-339-3	>99.8%	Not classified as hazardous
Additives	CAS No.: none	<0.2%	Not Classified as hazardous

	EC No.: none		

SECTION 4: First Aid Measures

4.1 Description of first aid measures:

General information: First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

Inhalation:

Remove to fresh air and keep at rest in a position comfortable for breathing. Keep patients calm. If breathing difficulties develop, aid in breathing and seek immediate medical attention.

Skin contact:

Wash exposed skin with soap and water. Seek medical attention if symptoms develop or persist. If the skin contacts molten polymer, rapidly cool the affected skin with chilly water or running water. Do not pull solidified polymer off the skin. Seek medical attention immediately. Consult a doctor if skin irritation persists. Wash contaminated clothing before reusing.

Eye contact:

In case of dust contact with eyes, flush thoroughly with running water for 5-15 minutes. Remove contact lenses, if worn. Seek medical attention if irritating persists. For thermal eye burns, immediately flush eyes with running water for 5-15 minutes. Do not remove contact lenses, if worn. Seek medical attention immediately, preferably an ophthalmologist.

Ingestion:

Rinse out mouth with water and gargle with plenty of water. If swallowed, consult a doctor. May cause gastrointestinal blockage. Do not give laxative. Do not induce vomiting unless directed to do so by medical personnel.

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

Skin and eye burn from molten products. Skin and eye irritation from product dust. Irritated respiratory tract from dust inhalation.

4.3 Indication of any immediate medical attention and special treatment needed:

Treat symptomatically and supportively.

SECTION 5: Firefighting Measures

5.1 Extinguishing media:

Suitable extinguishing agents: Carbon dioxide (CO_2), dry chemical powder, or water spray (fog). Fight larger fires with water spray (fog). Use fire extinguishing methods suitable to surrounding conditions.

Unsuitable extinguishing agents: Do not use water jet (solid stream).

5.2 Special hazards arising from the substance or mixture:

Hazard combustion products: Carbon dioxide (CO_2), Carbon monoxide (CO), other organic vapors, and soot.

5.3 Advice for firefighters:

Protective equipment: Fire-fighters wear appropriate protective equipment including fire-fighting helmet, coat, trousers, boots, gloves, and self-contained breathing apparatus (SCBA).

Fire Fighting Procedure: Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. If material is molten, do not apply direct water stream. Use fine water spray or foam. Cool surroundings with water to localize fire zone.

Additional information: Collect contaminated firefighting water separately. It must not enter the sewage system. Cool endangered receptacles with water spray.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment, and emergency procedures:

For non-emergency personnel:

Do not breathe dust. Do not touch or walk through spilled material. Evacuate personnel to safe areas. Remove all sources of ignition. Spilled material must be removed immediately to prevent slipping hazards

For emergency responders:

Use personal protective equipment. Ensure adequate ventilation. Stop the flow of material or leak if it can be done without risk. Avoid dust generation and dispersal in the air (e.g., do not clear dust surfaces with compressed air). Dust deposits should not be allowed to accumulate on surfaces, as they may form an explosive mixture if released into the atmosphere in sufficient concentrations.

6.2 Environmental precautions:

Avoid release to the environment. Do not allow pellets, granules, or powder to enter drains, surface waters, or soil. Prevent further leakage or spillage if safe to do so. Dike and contain the spilled material where possible. Retain and dispose of contaminated washing water appropriately. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up:

Promptly collect spilled material using dry methods such as sweeping or vacuuming. Do not allow water to contact the powder or material during cleanup operations. Collect the recovered material into suitable, closed containers for reuse or appropriate disposal.

6.4 Reference to other sections

For personal protection equipment, see Section 8. For waste disposal information, see Section 13.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling:

Protective Measures:

Put on appropriate personal protective equipment (see Section 8). Avoid contacting molten material with eyes, skin, and clothing. Avoid breathing dust and process fumes. Ensure good ventilation at the workplace. Prevent dust accumulation. Pneumatic conveying of powder and pellets and other mechanical handling operations can generate large static electrical charges. Dust can be ignited by static electrical discharge. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Handle the container with appropriate apparatus such as forklift and hand lift that avoid any sharp objects. Take a rest sufficiently when feel stiff.

Avoid the release of plastic pellets, granules, or powder to the environment. Implement good housekeeping practices to prevent spills and losses during handling, transfer, and processing.

Advice on general occupational hygiene:

Eating, drinking, and smoking are prohibited in areas where this material is managed, stored, and processed. Always wash hands and face after handling the product and before eating and drinking. Remove contaminated clothing and protective equipment before entering eating area.

7.2 Conditions for safe storage, including any incompatibilities:

Technical measures and storage conditions:

Ground or bond container and receiving equipment to prevent dust explosions and static electric sparks. Store in dry, cool, dust-free, and well-ventilated area. The storage temperature should be below 50°C. Protect from direct sunlight, UV radiation, heat, rain, and moisture to maintain product quality.

Stacking:

Always follow the company's specific "Transportation, Storage, and Handling Manual" for detailed instructions on safe stacking heights, forklift operations, and warehouse layout.

Ensure the stacking height does not exceed safe limits to avoid crushing the bottom packages.

Do not stack jumbo bags (FIBCs) more than two layers high, and ensure they are placed on stable, level pallets.

Stack containers on stable, compatible surfaces, following proper labeling and segregation practices. Ensure the heavy containers are placed at the bottom to prevent toppling.

Prohibited stacking: Do not stack the chemical containers unless designated to prevent collapsing or damage

Packaging materials:

The packaging is only used for industrial purposes. Keep only in the original container or suitable bulk containers (e.g., polyethylene bags, jumbo bags, octabins). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Incompatible materials:

Store away from flammable substances, oxidizing agents, sparks, open flames, all sources of ignition rain, and sunlight.

Do not mix with other chemicals that may react unfavorably.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters:

Component with Occupational Exposure Limits

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable. However, general regulatory limits for nuisance dust should be observed (Inhalable: 10 mg/m³, Respirable: 3 mg/m³)

8.2 Exposure controls:

Appropriate engineering controls:

Provide readily accessible eye washing stations and safety showers. Ensure adequate ventilation. If user operations generate dust, fumes, gas, vapor, or mist, use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protective equipment:

- Eye/Face protection

Use safety glasses with side shields. If this material is heated and there is potential for dust, wear chemical goggles. If exposure causes eye discomfort, use a full-face respirator.

- Skin protection

Hand protection:

Skin contact should be minimized. Use gloves to protect from mechanical injury. Chemical protective gloves should not be needed when handling this material. Use insulated gloves when handling the hot or molten material.

Body protection:

At ambient temperatures use of clean and protective clothing is good industrial practice. If the material is heated or molten, wear thermally insulated, heat-resistant gloves that can withstand the temperature of the molten product. If this material is heated, wear insulated clothing to prevent skin contact if engineering controls or work practices are not adequate.

Respiratory protection:

A properly fitted air purifying respirator or air supply respirator should be worn if a risk assessment indicates that respiratory protection is necessary. Respirator selection must be based upon known or measured levels of exposure.

Environmental exposure control:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:	Pellets
Physical state:	Solid
Color:	Natural
Odor:	Light
Odor threshold:	Not determined.
Melting point:	125-135 °C
Boiling point	Not determined.
Flammability:	Not determined.
Upper/Lower explosion or flammability limit:	Not applicable.
Flash point (Closed Cup):	Not applicable.
Auto-ignition temperature:	Not applicable.
Decomposition temperature:	>300 °C
pH:	Not applicable.
Kinematic viscosity:	Not applicable.

Solubility:	In water: Insoluble
Partition coefficient n-octanol/water:	Not applicable.
Vapor pressure:	Not applicable.
Relative density:	Not determined.
Density at 23°C	0.94-0.96 g/cm^3
Relative vapor density:	Not applicable.

9.2 Other information: No further relevant information available.

SECTION 10: Stability and Reactivity

10.1 Reactivity: No dangerous reaction is known under conditions of normal use.

10.2 Chemical stability: The product is stable in normal handling and storage conditions.

10.3 Possibility of hazardous reactions:

Polymerization will not occur. Dust may form explosive mixture in air.

10.4 Conditions to avoid:

Avoid prolonged storage at elevated temperature. Exposure to elevated temperatures can cause products to decompose (Temperature should be less than 300°C). See Technical Datasheet for suitable processing conditions.
Avoid dust formation. Avoid the build-up of electrostatic charge. Avoid direct sunlight, UV radiation, high temperatures, and moisture.

10.5 Incompatible materials: Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products:

Burning can produce carbon monoxide and/or carbon dioxide and other harmful products. The decomposition products are low molecular weight oligomers, hydrocarbons, and hydrocarbon oxidation products (aldehydes, alcohols, organic acids) depending on temperature and air availability.

SECTION 11: Toxicological Information

11.1 Information on toxicological effect

Acute Toxicity

Acute Oral Toxicity:	This product has very low acute oral toxicity.
Acute Dermal:	This product has very low acute dermal toxicity.
Acute Inhalation:	This product has very low acute inhalation toxicity.

Skin corrosion/ irritation:

Non-irritating skin. Mechanical injury only. Molten polymer may cause serious thermal burns.

Serious eye damage/irritation:

Dust may cause eye irritation upon repetitive or prolonged exposure. Molten polymer may cause serious thermal burns. Vapors released during thermal processing may cause eye irritation experienced as mild discomfort and redness.

Respiratory or skin sensitization:	No data is available.
Germ cell mutagenicity:	No data is available.
Carcinogenicity:	No data is available.
Specific target organ toxicity - single exposure:	No data is available.
Specific target organ toxicity - repeated exposure:	No data is available
Aspiration hazard:	No data is available.

11.2 Other information

Endocrine disrupting:	No data is available.
Other information:	No data is available.

SECTION 12: Ecological Information

12.1 Toxicity:

Fish:	No data is available.
Aquatic Invertebrates:	No data is available.
Algae:	No data is available.
Microorganisms:	No data is available.

12.2 Persistence and degradability: Not easily biodegradable.

12.3 Bio accumulative potential:

This material is not expected to bioaccumulate because of the high molecular weight (MW greater than one thousand).

12.4 Mobility in soil:

This material is expected to remain in the soil and float on the water surface.

12.5 Results of PBT and vPvB assessment:

This product is not PBT/vPvB. It does not contain constituents included in the SVHC candidate list as PBT/vPvB at concentrations above 0.1%.

12.6 Other information

The product in powder or pellet form may mechanically cause adverse effects if ingested by waterfowl or aquatic life.

SECTION 13: Disposal Considerations

13.1 Waste treatment methods:

Product/Packaging disposal:

Waste generation should be avoided or minimized wherever possible. **Do not dump into any sewers, on the ground, or into any body of water**. Mechanical and chemical recycling, or energy recovery (incineration with energy recovery), are the preferred disposal options for clean and uncontaminated material. If recycling is not possible, disposal must be conducted at an approved waste management facility in accordance with applicable European, national, and local regulations. Waste characterization and compliance with regulations are the sole responsibility of the waste generator. Consult a local authorized waste disposal expert for appropriate methods.

Packaging disposal:

Waste treatment option (including packaging):

The packaging is only used for industrial purposes. Empty packaging may retain product residues and must be managed with the same care as the product itself. Follow all label warnings even after the packaging is emptied. Improper disposal or unauthorized reuse of this packaging may be hazardous and illegal. Contaminated packaging must be disposed of or recycled through an approved waste management facility. Do not discharge into the environment or public sewage systems

13.2 Sewage disposal-relevant information

Do not discharge into the environment or public sewage systems

SECTION 14: Transport information

	14.1 Land (ADR)	**14.2 Sea transport (IMDG)**	**14.3 Air transport (IATA/ICAO)**
UN Number:	Not assigned.	Not assigned.	Not assigned.
UN Proper Shipping Name:	Not assigned.	Not assigned.	Not assigned.
Transport Hazard Class(es):	Not assigned.	Not assigned.	Not assigned.
Packing group:	Not assigned.	Not assigned.	Not assigned.
Environmental hazards:	No data is available.	No data is available.	No data is available.
Special precautions for user:	No special precautions.	No special precautions.	No special precautions.
Transport in bulk according to IMO instruments:	Not applicable.	Not applicable.	Not applicable.

SECTION 15: Regulatory information

15.1 Safety, health, and environmental regulations specific for the product

European Union:

REACH	The synthetic polymer microparticles supplied are subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council. Generic information on the identity of the polymers contained in the substance or mixture: 3901 Polymers of ethylene/ethylene compound, 3902 Polymers of propylene/propylene compound, in primary forms. Concentration of Synthetic Polymer Microparticles in the substance or mixture: 90-100%

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

16.1 Date of Preparation / Revision

Issue Date: 2026-09-16.
Revision Number: 1.0 (Initial GHS Ref)
Previous Issue Date: No previous issue.

16.2 Abbreviations and acronyms:

RID:	Regulations concerning the International Transport of Dangerous Goods by Rail
ICAO:	International Civil Aviation Organization
ADR:	Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG:	International Maritime Code for Dangerous Goods
IATA:	International Air Transport Association
GHS:	Globally Harmonized System of Classification and Labelling of Chemicals
EINECS:	European Inventory of Existing Commercial Chemical Substances
CAS:	Chemical Abstracts Service (division of the American Chemical Society)

16.3 References

[1] ECHA CHEM, Industry classifications under CLP regulation.

[2] ECHA CHEM, Harmonized classification and labelling is available in Table 3 to Annex VI of CLP.

[3] US OSHA; https://www.osha.gov/annotated-pels/table-z-1.

[4] Japan Society for Occupational Health (JSOH), Recommendation of Occupational Exposure Limits (OELs)

[5] Safe Work Australia, WORKPLACE EXPOSURE STANDARDS FOR AIRBORNE CONTAMINANTS, January 2024

[6] Announcement of the Department of Labor Protection and Welfare regarding concentration limits of hazardous chemicals B.E. 2560

[7] GESTIS - International Limit Values for Chemical Agents (GESTIS-ILV)

Disclaimer:

- It is customer's responsibility to inspect and test the product for suitability of the customer's own use and purpose. The customer is responsible for appropriate, safe, legal use, processing, and handling of the product.
- To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication. We, however, do not assume any liability whatsoever for the accuracy and completeness of the information contained herein.
- We make no warranties which extend beyond the description herein. Nothing herein shall constitute any implied warranty of merchantability or fitness for a particular purpose.
- No liability can be accepted in respect of the use of the product in conjunction with other materials. The information contained herein relates exclusively to the product when it is not used in conjunction with any third party's materials.

End of Safety Data Sheet