	<p align="center">SAFETY DATA SHEET (SDS)</p> <p align="center">PLS GREEN 5</p>	SDS:	PET0004
		Revision:	8
		Date:	03/10/2025
		Page:	1 of 9

1. IDENTIFICATION

- 1.1. Product identification: **PLS GREEN 5**
- 1.2. Other ways of identification: **Not available.**
- 1.3. Recommended uses of the chemical and restrictions on use: It is widely used in the production of PVC compounds for injection, extrusion, spreading, etc. It can also be used in compounds based on vinyl polyesters, acrylic resins, alkyd resins, nitrocellulose, nitrile rubber, varnishes, glues, paints, emulsions, impregnation products for textiles and papers.
- 1.4. Supplier details: **Name: PETROM – Petrochemical Mogi das Cruzes S/A.**
Address: Dom Paulo Rolim Loureiro Highway, km 09, Vila Moraes – Zip Code: 08766-500 – Mogi das Cruzes – SP – Brazil.
Telephone: +55 (11) 4798-7500/7600
Website: <http://www.petrom.com.br>
E-mail: petrom@petrom.com.br
- 1.5. Emergency telephone number: **+55 (11) 4798-7500**

2. HAZARDS IDENTIFICATION

Hazard classification according to ABNT Standard – NBR 14725:2023 in compliance with the GHS (Globally Harmonized System for Classification and Labeling of Chemicals, UN).

2.1 Classification of the substance or mixture

NOT CLASSIFIED AS DANGEROUS ACCORDING TO ABNT NBR 14725.

2.2 Label elements of the GHS, including cautionary phrases

Pictograms: Not applicable.

Word of warning: Not applicable.

Hazard Phrases: Not applicable.

Additional data: Not applicable.

Cautionary Phrases: Not applicable.

2.3 Other hazards that do not result in a classification

There are no other dangers.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

3.1 Substance

Chemical name: Acids fatty, oils vegetables epoxidized, isopentyl esters

CAS No.: **1394959-45-5**

Concentration Range: > 90%

3.2 Mixing

Not applicable.

	SAFETY DATA SHEET (SDS) PLS GREEN 5	SDS:	PET0004
		Revision:	8
		Date:	03/10/2025
		Page:	2 of 9

Other ingredients: There are no other ingredients classified as hazardous in concentrations above the cut-off value/concentration limit according to ABNT NBR 14725:2023.

4. FIRST AID MEASURES

4.1 Description of necessary first-aid measures

Inhalation	Remove the victim to a ventilated area and keep him/her at rest in a position that does not hinder breathing. Place the victim face down in a calm place and protect him/her from hypothermia. Monitor respiratory function. If the victim is breathing with difficulty, provide oxygen. If necessary, apply artificial respiration. Seek medical assistance, taking this SDS, the product label and leaflet.
Skin contact	Wash exposed skin with sufficient water to remove the material. In case of skin irritation: Seek medical assistance, taking this SDS, the product label and leaflet.
Eye contact	Rinse thoroughly with water for several minutes. If you are wearing contact lenses, remove them if this is easy to do. Preferably use an eye wash device. Seek medical assistance, taking this SDS, the product label and package insert with you.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. To prevent aspiration of the ingested product, place the victim on their side with the head lower than the waist. Seek medical assistance, taking this SDS, the product label and package insert.
What actions should be avoided	Do not induce vomiting. Never give anything by mouth if the victim is unconscious.
Protection for first aid providers	Avoid contact with the product when assisting the victim.

4.2 Symptoms and most important effects, acute or late

May cause mild irritation to skin and eyes.

4.3 Identification of immediate medical attention and special treatments required, if necessary

There is no specific antidote. Treatment should be symptomatic, according to the patient's clinical condition. Keep the victim under observation.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Appropriate	Use dry chemical, carbon dioxide or chemical foam.
Not appropriate	Water jet-based extinguishers should be avoided to prevent the product from spreading to other areas.

5.2 Specific hazards arising from the substance or mixture

Special Procedures	Evacuate the area within a 800-meter radius. Fight the fire from a safe distance. Wear full PPE and positive-pressure self-contained breathing apparatus (SCBA). Use dikes to contain water used in fighting the fire. Stand with your back to the wind. Use water fog to cool exposed equipment near the fire.
Dangers arising from combustion	During thermal decomposition it forms irritating and toxic gases such as carbon

	<p align="center">SAFETY DATA SHEET (SDS)</p> <p align="center">PLS GREEN 5</p>	SDS:	PET0004
		Revision:	8
		Date:	03/10/2025
		Page:	3 of 9

monoxide and carbon dioxide.

5.3 Special protective measures for fire-fighting personnel

Positive pressure self-contained breathing apparatus (SCBA) and full protective clothing. Containers and tanks involved in the fire should be cooled with water jets

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Do not touch damaged containers or spilled material without wearing appropriate clothing. Avoid inhalation, eye and skin contact. Use personal protective equipment as described in section 8. Respiratory protection should be provided depending on the concentrations present in the environment or the extent of the spill/leak; therefore, respiratory masks with a filter against vapors and mists should be chosen. Do not handle ruptured packaging unless you are properly protected with personal protective equipment. Do not touch or walk over spilled product. Remove all sources of ignition. Do not smoke. Stay away from low areas, with the wind at your back.

6.1.1 - For the staff that is not part of emergency services

Removal of ignition sources: cut off the electrical power and turn off sources of sparks. Remove from the area all material that could cause a fire (e.g. spilled diesel oil).

Dust control: Not applicable as it is a liquid.

Prevention of inhalation and contact with skin, mucous membranes and eyes: Use PPE as described in section 8.

6.1.2 – For emergency service personnel

Personal precautions: Use complete PPE, with appropriate protective clothing, goggles guards, closed-toe shoes, nitrile or PVC gloves or other impermeable material. Respiratory protection should be provided depending on the concentrations present in the environment or the extent of the spill/leak. Therefore, respiratory masks with a filter against vapors and mists should be chosen.

6.2 Precautions to the environment

Prevent contamination of watercourses by sealing the entrance to storm drains. Prevent product residues from reaching water collections, and stop human and animal consumption. Build a dike around the spilled product.

6.3 Methods and materials for containment of cleaning

Paved Floor: Use water mist or vapor suppressant foam to reduce vapor dispersion. Use natural or spill containment barriers. Collect the spilled product and place it in appropriate containers. Absorb the remaining product with dry sand, earth, vermiculite, or any other inert material. Place the adsorbed material in appropriate containers and remove them to a safe location. Soil: Remove layers of contaminated soil until reaching uncontaminated soil, collect this material and place it in a sealed and properly identified container; Water bodies: Immediately stop collection for human or animal consumption, and contact the nearest environmental agency and the company's emergency center, since the measures to be adopted depend on the proportions of the accident, the characteristics of the water body in question, and the quantity of the product involved. For final disposal, proceed in accordance with Section 13 of this SDS.

Methods for cleaning

	SAFETY DATA SHEET (SDS) PLS GREEN 5	SDS:	PET0004
		Revision:	8
		Date:	03/10/2025
		Page:	4 of 9

Prevention of secondary hazards	Prevent the product from contaminating streams, lakes, water sources, wells, sewers, storm drains and effluents.
Procedures	Isolate the area within a radius of at least 50 meters (liquid products) in all directions. Use PPE. Remove sources of ignition. Contain the spill. Collect in containers for disposal. Avoid contamination of waterways.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Guidelines for safe handling	Use the product as recommended by the manufacturer. Use PPE as described in Item 8. Avoid contact with skin, eyes and clothing. Keep people, especially children and pets, away from the workplace. Do not come into direct contact with the product. Keep the product in its original container. Keep any leftovers in their original, properly closed packaging. Handle the product with appropriate local exhaust or in a well-ventilated area; in open spaces, handle it downwind. In the event of symptoms of poisoning, stop work immediately and proceed as described in Item 4 of this sheet.
Exposure prevention for workers	Handle in a ventilated area or with a general ventilation/local exhaust system and in accordance with good industrial hygiene and safety practices. Do not handle the product until you have read and understood all safety precautions. Use personal protective equipment as described in section 8. Do not eat, drink or smoke while handling the product. Wash your hands before eating, drinking, smoking or going to the toilet. When opening the package, do so in a way that avoids spillage. Do not use damaged and/or defective personal protective equipment. Do not unclog nozzles, orifices, pipes and valves with your mouth. Do not handle and/or carry damaged packages. Always keep the workplace clean.

7.2 Conditions for safe storage, including any incompatibilities

Appropriate Conditions	Store in a tightly sealed container in a dry, cool, well-ventilated place away from incompatible materials. Carefully close opened containers and store upright to prevent leaks. Always store in containers that correspond to the original packaging. Follow the instructions on the label. Protect from direct sunlight. Keep away from sources of ignition. Keep away from heat.
Conditions to avoid	Heat sources and direct sunlight.
Prevention of fire and explosion	Keep the product away from heat, sparks, flames and other sources of ignition.
Product and incompatible materials / other information	Do not store together with food, feed, medicines, drinks intended for human and animal consumption and incompatible materials, such as: oxidizing agents, strong acid solutions and strong alkaline solutions.
Safe materials for packaging	<u>Recommended:</u> Product already packaged in appropriate packaging. Store in metal or polyethylene drums.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

8.1 Control parameters

Exposure limits occupational	Not established.
Biological indicators	Not established.

8.2 Engineering control measures

	SAFETY DATA SHEET (SDS) PLS GREEN 5	SDS:	PET0004
		Revision:	8
		Date:	03/10/2025
		Page:	5 of 9

Suitable

When applicable, use an appropriate exhaust system to ensure adequate ventilation in the workplace. Handle the product in a location with good natural or mechanical ventilation to keep the concentration of vapors/dust below the tolerance limit.

8.3 Personal protective measures



Respiratory protection:	Respiratory protection mask with filter against vapors and mists.
Hand protection:	Nitrile or PVC safety gloves.
Eye protection:	Safety glasses with side splash protection.
Skin and body protection:	Suitable protective clothing and closed shoes. The material used must be waterproof.
Thermal Hazards:	It does not present thermal hazards.
Special Precautions:	Keep PPE properly clean and in suitable conditions for use, periodically carrying out inspections and possible maintenance and/or replacement of damaged equipment.
Hygiene Measures:	Take a shower and change clothes after using the product. Wash contaminated clothes separately, avoiding contact with other personal items.
Collective emergency measures:	Emergency shower and eye wash station.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Basic physical and chemical properties

Physical state	Liquid.
Color	Light yellow.
Odor	Characteristic.
Molecular weight	Not available.
pH	Not available.
Melting Point / Freezing Point	Not available.
Initial Boiling Point and Boiling Temperature Range	Not available.
Flash Point	204°C (closed vessel);
Flammability	Not applicable.
Lower/Upper Flammability or Explosive Limit	Not available.

	<p align="center">SAFETY DATA SHEET (SDS)</p> <p align="center">PLS GREEN 5</p>	SDS:	PET0004
		Revision:	8
		Date:	03/10/2025
		Page:	6 of 9

Relative vapor density	Not available.
Density	0.932 g/cm ³ (water=1).
Vapor Pressure	Very low.
Solubility	Insoluble in water.
Partition coefficient – n-octanol / water (Log Kow value)	Not available.
Autoignition temperature	Not available.
Decomposition temperature	Not applicable.
Kinematic viscosity	31 cP (20°C).
Particle characteristics	Not applicable.

10. STABILITY AND REACTIVITY

10.1 Reactivity

There are no known dangerous reactions.

10.2 Chemical Stability

Stable under normal handling and storage conditions.

10.3 Possibility of dangerous reactions

Polymerization may occur if the product comes into contact with strong mineral acids.

10.4 Conditions to avoid

High temperatures and contact with incompatible materials. Avoid direct contact with sunlight.

10.5 Incompatible materials

Oxidizing agents, strong acid solutions and strong alkaline solutions.


10.6 Hazardous decomposition products

During thermal decomposition it forms irritating and toxic gases such as carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Oral LD50 in rats: 22,400 mg/kg.
Dermal LD50 in rabbits: 19,900 mg/kg.
CL50 Inhalation (4hs): Not available.

Skin corrosion and
irritation: May cause mild skin irritation.

	SAFETY DATA SHEET (SDS) PLS GREEN 5	SDS:	PET0004
		Revision:	8
		Date:	03/10/2025
		Page:	7 of 9

Serious eye damage/eye irritation:

May cause mild eye irritation.

Respiratory or skin sensitization:

The product is not expected to cause respiratory or skin sensitization.

Carcinogenicity: The product is not expected to present carcinogenicity.

Chronic toxicity:

Mutagenicity: The product is not expected to present germ cell mutagenicity.

Effects on reproduction: The product is not expected to be toxic to reproduction.

Systemic toxicity to target organ:

Single exposure: The product is not expected to cause organ damage through single exposure.

Repeated exposure: The product is not expected to cause damage to organs through prolonged or repeated exposure.

Aspiration hazard:

The product is not expected to present an aspiration hazard.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Toxicity to aquatic organisms: CE0 Algae: Not available.
CE50 Microcrustaceans: Not available.
CL50 Fish: Not available.

Toxicity to other organisms: DL50 Birds: Not available.
DL50 Bees: Not available.
CL50 Soil organisms: Not available.

Main effects: There is no data to prove the danger to aquatic organisms.

12.2 Persistence and degradability

Rapid degradation and low persistence are expected.

12.3 Bioaccumulative potential

bioaccumulation potential is expected based on estimated BCF.

12.4 Mobility in soil

Low mobility in the soil.


12.5 Other adverse effects

No other environmental effects are known for this product.

13. DISPOSAL CONSIDERATIONS

13.1 Recommended methods for final disposal

Product/Leftover of the product: It must be disposed of in accordance with local legislation. Treatment and disposal must be assessed specifically for each product. Federal, state and municipal legislation should be consulted, including: CONAMA Resolution 005/1993, Law No. 12,305, of August 2, 2010 (National Solid Waste Policy). Keep any remaining product in its original packaging and properly closed. Disposal should be carried out as established for the product.

	<p align="center">SAFETY DATA SHEET (SDS)</p> <p align="center">PLS GREEN 5</p>	SDS:	PET0004
		Revision:	8
		Date:	03/10/2025
		Page:	8 of 9

Used packaging: Empty packaging must be stored in a covered, ventilated place, protected from rain and with waterproof flooring, in addition to containment dikes. Do not reuse empty packaging. These may contain product residues and must be kept closed and sent for appropriate disposal as established for the product.

14. TRANSPORTATION INFORMATION

National and international regulations:

Land Classification (Rail, Road) according to the National Land Transportation Agency (ANTT):

- PRODUCT NOT COMPLIED WITH IN THE CURRENT RESOLUTION ON THE TRANSPORTATION OF DANGEROUS PRODUCTS.

Air Classification as per International Aviation Organization – Technical Instructions (ICAO - TI) and National Civil Aviation Agency (ANAC):

- PRODUCT NOT COMPLIED WITH IN THE CURRENT RESOLUTION ON THE TRANSPORTATION OF DANGEROUS PRODUCTS.

Waterway Classification (Sea, River, Lake) according to International Maritime Dangerous Goods (IMDG) and National Waterway Transportation Agency (ANTAQ):

- PRODUCT NOT COMPLIED WITH IN THE CURRENT RESOLUTION ON THE TRANSPORTATION OF DANGEROUS PRODUCTS.

15. INFORMATION ABOUT REGULATIONS

National regulations:

Decree No. 10,088/2019 - Consolidates normative acts issued by the federal executive branch that provide for the promulgation of conventions and recommendations of the International Labor Organization - ILO ratified by the Federative Republic of Brazil.

Ordinance No. 229 of May 24, 2011 and its amendments – Amends Regulatory Standard No. 26.

Regulatory Standard NR 26 – Safety signage.

ABNT – Brazilian Association of Technical Standards - NBR 14725 :2023.

GHS Criteria - Globally Harmonized System of Classification and Labelling of Chemicals (GHS): 2019 - published by UN (Organization of the United Nations), which as others countries Brazil and signatory.

Resolution 5,998/22 - Updates the Regulation for the Road Transportation of Dangerous Products and approves its Supplementary Instructions, and provides other measures.


ABNT – Brazilian Association of Technical Standards - NBR 14619: 2023 - Incompatibility Chemical.

ABNT – Brazilian Association of Technical Standards - NBR 7500: 2023 - Identification for land transport, handling, movement and storage of products.

16. OTHER INFORMATION

Recommended use - Follow all recommendations for use, storage and disposal indicated by the manufacturer/registrant and described on the packaging, product leaflet and cited in this SDS.

Important Legal Notice - The data and information transcribed in this document are provided in good faith and represent the best knowledge available on the subject to date, and are based on data provided by the registering company, manufacturer or importer of this product, available at the time, but this does not mean that they are exhaustive of the subject. No guarantee is given regarding the result of the application of this data and information,

	<p align="center">SAFETY DATA SHEET (SDS)</p> <p align="center">PLS GREEN 5</p>	SDS:	PET0004
		Revision:	8
		Date:	03/10/2025
		Page:	9 of 9

and this does not exempt users/recipients/workers/employers from their responsibilities at any stage of the handling, storage, processing, packaging and distribution of this material/product. The provisions of the legislation, regulations and standards in force prevail over the data contained herein. The registrant assumes no responsibility for losses, damages or expenses related to the handling, storage, use or disposal of the product, repair of damages or compensation of any kind.

It is noted that handling any chemical substance requires prior knowledge of its dangers by the user. It is the responsibility of the company using the product to provide training to its employees and contractors regarding the possible risks arising from the product.

This document is mandatory and provides information on various aspects of this material/chemical product regarding risks, handling, storage, emergency actions, protection, safety, health and the environment, from the supplier of this material/product to the user/recipient/workers.

Captions and abbreviations:

ABNT – Brazilian Agency for Technical Standards.

ACGIH – American Conference of Governmental Industrial Hygienists.

AMES - A widely used test that uses bacteria to test whether a particular chemical can cause mutations in the DNA of the test organism.

BUEHLER - in vivo test to screen for substances that cause sensitization of human skin.

CAS – Chemical Abstracts Service.

EC50 – Effective concentration.

CL50 – Lethal Concentration 50%.

LD50 – Lethal dose 50%.

DOT - DOT (Department of Transportation).

DRAIZE – test to identify the potential for skin and/or eye irritation.

EPA – Environmental Protection Agency.

PPE's - Personal protective equipment.

GHS – Globally Harmonized System.

IATA - International Air Transport Association, Dangerous Goods Regulations.

IMO/IMDG - International Maritime Dangerous Goods Code.

NA – Not applicable.

NBR – Brazilian Standard.

ND – Not available.

NFPA - National Fire Protection Association.

NOAEL – No Observed Adverse Effect Level.

NR – Regulatory Standard.

OECD - Organization for Economic Cooperation and Development.

UN - United Nations.

OSHA - Occupational Safety and Health Administration.

PEL – Permissible Exposure Limits.

REL – Recommended Exposure Limits.

TLV - Threshold limit value.

TWA – Time Weighted Average.