

LETTER OF CONFIRMATION

TO WHOM IT MAY CONCERN

This letter serves to inform and confirm that in Section 1 under the heading of "Other means of identification" of the Safety Data Sheet for Polypropylene (Homopolymer), the nomenclature used by PENGERANG PETROCHEMICAL COMPANY SDN. BHD. (PRefChem) is corresponding to the nomenclature adopted by PETRONAS CHEMICALS GROUP which is printed and displayed on the bag as stated below:

PH402 = H456HY PH703 = H740JY PH503 = H525JB PH403 = H526JB PH404 = H456JY PH607 = H612MC PH509 = H515MG PH511 = H525NW PH512 = H500NG PH518 = H554PG PH420 = H400RG PH653 = H648TT PH533 = H561SS PH425 = H461RS

Should you have any further questions, please contact PETRONAS Chemicals Marketing (Labuan) Ltd. Thank you.

For and on behalf of PETRONAS Chemicals Marketing (Labuan) Ltd.

Yours sincerely.

HBK Hong Boon Khiam Technical Sales Specialist

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According to Occupational Health and Safety (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Malaysia Regulation 2013

Polypropylene (Homopolymer)

Version: 1.2 Date of issue: 04 Jan 2022

Section 1. Identification of the hazardous chemical and of the supplier

Product identifier : Polypropylene (Homopolymer)

Other means of : PH402, PH703, PH503, PH403, PH404, PH607, PH509, PH511, PH512, PH518,

identification PH420, PH653, PH533, PH425

Recommended use : Thermoplastic resin for extrusion and molding applications.

Restrictions on use : This product must not be used in applications other than the above without first

seeking the advice of the supplier

Manufacturer or Supplier's details

: Pengerang Petrochemical Company Sdn Bhd Manufacturer

First Floor, Administration Block A2,

Pengerang Integrated Complex Management Office (PICMO),

81600 Pengerang, Johor,

Malaysia.

Emergency telephone

number (with hours of

operation)

: 999 (BOMBA)

National Poison Centre: +604-6570099 (Mon-Fri: 8.10 am - 5.10 pm)

+6012-4309499 (Mon-Fri: 5.10 pm - 10.10 pm) & (Sat, Sun & Public holiday: 8.10 am - 5.10 pm)

Section 2. Hazards identification

Classification of the : Not classified.

substance or mixture

Label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

General : Not applicable. Prevention : Not applicable. Response : Not applicable. Storage : Not applicable. **Disposal** : Not applicable.

result in classification

Other hazards which do not : Spilled product may present a dangerous slipping hazard

Product dust may be irritating to eyes

The molten form can cause thermal burns if in contact with skin



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Section 3. Composition and information of the ingredients of the hazardous chemical

Substance/mixture: Substance, may contain additives and stabilizers

Ingredient name	%	CAS number
1-Propene, homopolymer	>98	9003-07-0

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Get medical attention if irritation

occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Get medical attention if symptoms occur.

Skin contact: Molten material can cause severe burns. Do not try to peel molten material from the

skin. Flush contaminated skin with plenty of water. Remove contaminated clothing

and shoes. Get medical attention if symptoms occur.

Ingestion: Wash out mouth with water. Remove victim to fresh air and keep at rest in a

position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms

occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Dust may cause irritation.

Inhalation: No known significant effects or critical hazards.

Skin contact: The molten form can cause thermal burns if in contact with skin.

Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)



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Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing

media

: Use dry chemical, CO₂, water spray (fog) or foam.

: None known.

Specific hazards arising from the chemical

: No specific fire or explosion hazard.

Special protective actions

for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without

suitable training.

Special protective equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).



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Advice on general occupational hygiene

: Prevent dust accumulation. Avoid contact with heated or molten product. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

including any incompatibilities

Conditions for safe storage, : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. 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. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls

: 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.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.



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Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the

appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important

aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state : Solid. [Pellets.]

Color : Opaque.
Odor : Odorless.

Odor threshold : No data available.

pH : No data available.

Melting point : 140 to 168°C (284 to 334.4°F)

Boiling point : No data available.

Flash point : No data available.

Evaporation rate : Not applicable.

Flammability (solid, gas) : Polymer will burn but does not easily ignite.

Lower and upper explosive

(flammable) limits

: No data available.

Vapor pressure : No data available.
Vapor density : No data available.
Density : 0.85 to 0.92 g/cm³
Bulk density : Not available.
Relative density : No data available.

Solubility: Insoluble in the following materials: cold water and hot water.

Solubility in water : No data available.

Partition coefficient: n- : No data available.

octanol/water

Auto-ignition temperature : No data available.

Decomposition temperature : No data available.

Viscosity : Not applicable

Viscosity : Not applicable.

Flow time (ISO 2431) : Not available.

Molecular weight : Not applicable.

Type of aerosol : Not applicable.

Ignition distance : Not applicable.

Enclosed space ignition - : Not applicable.

Time equivalent

Enclosed space ignition - Deflagration density

: Not applicable.

Flame height : Not applicable.
Flame duration : Not applicable.



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Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid contact with strong oxidizers, excessive heat, sparks or open flame.

Incompatible materials : Strong oxidizing materials

Hazardous decomposition

products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide

Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.



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Information on the likely

routes of exposure

: Not available.

Potential acute health effects

Eye contact : Dust may cause irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact: The molten form can cause thermal burns if in contact with skin.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.
 Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Teratogenicity : No known significant effects or critical hazards.
 Developmental effects : No known significant effects or critical hazards.
 Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.



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Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc})

: Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal information

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.

Additional information



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Special precautions for user: **Transport within user's premises**: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

Transport in bulk according

to Annex II of MARPOL and

the IBC Code

: Not available.

Section 15. Regulatory information

Safety, health, and environmental regulations specific for the hazardous chemical

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of hazardous Chemicals) Regulations 2013. Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : All components are listed or exempted.

Canada : All components are listed or exempted.

China : All components are listed or exempted.

Europe : Not determined.

Japan: **Japan inventory (ENCS)**: All components are listed or exempted.

Japan inventory (ISHL): All components are listed or exempted.

New Zealand: All components are listed or exempted.Philippines: All components are listed or exempted.Republic of Korea: All components are listed or exempted.Taiwan: All components are listed or exempted.United States: All components are listed or exempted.



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Section 16. Other information

History

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Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

References: Not available.

Indicates information that has changed from previously issued version.

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