POLYPROPYLENE

MATERIAL SAFETY DATA SHEET

SECTION 1: Identification of Material and Supplier

- **Trade Name:** **DHR020TF**
- **Synonyms:** Polypropylene, Propylene Polymer, Propane polymer, 1- Propane, Homopolymer
- **Product Use:** Application in the food Industry, Polymer extrusion, Injection molding, blow moulding & Thermoforming applications
- **Supplier Name:** Dangote Petroleum Refinery and Petrochemicals FZE

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SECTION 2: Hazards Identification

*Globally Harmonized System of Classification and Labelling of Chemicals-(GHS)
NOT CLASSIFIED AS HAZARDOUS ACCORDING TO GHS CRITERIA

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE GHS CODE

None Allocated	Hazchem Code None Allocated	Pkg Group	None Allocated
None Allocated	Subsidiary Risks None Allocated	EPG	None Allocated

SECTION 3: Composition/Information on Ingredients

- **Substance:** Polypropylene
- **Contents:** 99.00- 100.00 % w/w
- **HS code:** 3921000

SECTION 4: First Aid Measures

Description of necessary first-aid measures

Inhalation	Product does not release fumes at ambient temperatures. If exposed to fumes from heated polymer move to fresh air environment.
Skin contact	At room temperature the product is not considered harmful when in contact with skin. In case of skin contact with molten polymer immediately submerse the affected area in cold water to cool down polymer.
Eye contact	At room temperature the product is not considered hazardous in contact with eyes. In case of eye contact with molten polymer, cool under running water for 3-5 minutes. Do not attempt to remove molten polymer. Get medical attention immediately.
Ingestion	At room temperature the product is not considered harmful when swallowed.

Most important symptoms/effects, acute and delayed

Refer to SECTION 11

Indication of any immediate medical attention and special treatment needed

SECTION 5: Fire Fighting Measures

Suitable extinguishing media:	Dry chemical. Carbon dioxide (CO2). Water spray.
Special hazards arising from the substance or mixture:	Substance evolves toxic gases when burned.
Special protective equipment for firefighters:	Wear self-contained breathing apparatus and protective suit

SECTION 6: ACCIDENTAL RELEASE MEASURES

Environmental precautions	No special environmental precautions required.
Methods for cleaning up	Shovel into suitable containers for disposal
Reference to other sections:	Refer to Section 8 and 13

SECTION 7: Handling and Storage

Safe handling advice	No special handling advice required under normal conditions. Molten polymer: Wear heat resistant protective equipment.
Advice on protection against fire and explosion	Keep away from heat and sources of ignition
Requirements for storage areas and containers:	Keep away from direct sunlight. Keep away from heat.
Advice on common storage	Keep in a cool, well-ventilated place.

SECTION 8: Exposure Controls and Personal Protection

Components with workplace control parameters

National Occupational Exposure Limits	
Exposure Controls	Contains no substances with occupational exposure limit values
Engineering measures	If user operations generate dust, fumes or mists, use ventilation to keep exposure to airborne contaminants below the exposure limit. Use only in an area equipped with explosion proof exhaust ventilation. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Ensure adequate ventilation.

Personal protective equipment	
Respiratory protection	No personal respiratory protective equipment normally required. In the case of respirable dust and/or fumes, use self-contained breathing apparatus
Hand protection	No hand protection required under normal conditions. Molten polymer: Wear heat-resistant gloves
Eye protection	No eye protection is required under normal conditions. Molten polymer: Wear safety glasses with side shields.
Skin and body protection	No special body protection is required under normal conditions. Molten polymer: Wear heat-resistant protective clothing.

SECTION 9: Physical and Chemicals Properties

Information on basic physical and chemical properties			
Form	Solid form	Flammability (solid, gas)	No data available
State of matter	Solid	Auto-ignition temperature	> 390° C
Colour	Translucent to white	Lower explosion limit	No data available
Odour	None to slightly waxy	Upper explosion limit	No data available
Odour Threshold	No data available	Vapour pressure	No data available
pH	No data available	Vapour density	No data available
Melting point/range	130 - 165° C	Density	0.88 - 0.92 g/cm3
Flash point	> 350° C; Open cup	Water solubility	Insoluble
Evaporation rate	No data available	Partition coefficient: n-octanol/water:	No Data available

SECTION 10: Stability and Reactivity

Reactivity	**Stable under normal conditions. Continuous heating above 160 °C will lead to thermal oxidation.**
Chemical stability	Stable under recommended storage conditions
Conditions to avoid	Heat, flames and sparks.
Materials to avoid	Oxidizing agents.
Hazardous decomposition products:	Carbon dioxide (CO2). Carbon monoxide. Acrolein formaldehyde - like

SECTION 11: Toxicological Information

Information on toxicological effects Acute toxicity

Irritation and corrosion	
Skin irritation	No data available
Eye irritation	No data available
Sensitisation	No data available
Repeated dose toxicity	No data available
Carcinogenicity	No data available
Mutagenicity	No data available
Toxicity for reproduction	No data available
Eye contact	No data available
Skin contact	Molten polymer can cause severe burns in contact with skin and eyes.
Inhalation	No data available
Ingestion	No data available

SECTION 12: Ecological Information

Ecotoxicity effects	
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment:	No data available
Other adverse effects	No data available

SECTION 13: Disposal Considerations

Product Disposal can be done with normal domestic waste. Can be recycled. Can be incinerated.

SECTION 14: Transport Information

Further Information Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Registration, Evaluation and Authorization of Chemicals (REACH):	All chemical constituents are listed in: Registration, Evaluation and Authorization of Chemicals (REACH) *(See chapter 3)*
Inv. of Exist. Chem. Substances in China	All chemical constituents are listed in: Inv. of Exist. Chem. Substances in China *(See chapter 3)*
USA TSCA Inventory	All chemical constituents are listed in: USA TSCA Inventory *(See chapter 3)*
Canadian Domestic Substances List (DSL)	All chemical constituents are listed in: Canadian Domestic Substances List (DSL) *(See chapter 3)*
Australian Inv. of Chem. Substances (AICS)	All chemical constituents are listed in: Australian Inv. of Chem. Substances (AICS) *(See chapter 3)*
New Zealand Inventory of Chemicals (NZIoC)	All chemical constituents are listed in: New Zealand Inventory of Chemicals (NZIoC) *(See chapter 3)*
Jap. Inv. of Exist. & New Chemicals (ENCS)	All chemical constituents are listed in: Jap. Inv. of Exist. & New Chemicals (ENCS) *(See chapter 3)*
Japan. Industrial Safety & Health Law (ISHL)	All chemical constituents are listed in: Japan. Industrial Safety & Health Law (ISHL) *(See chapter 3)*
Korea. Existing Chemicals Inventory (KECI)	All chemical constituents are listed in: Korea. Existing Chemicals Inventory (KECI) *(See chapter 3)*
China Inv. Existing Chemical Substances (IECSC)	All chemical constituents are listed in: China Inv. Existing Chemical Substances (IECSC) *(See chapter 3)*
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	All chemical constituents are listed in: China Inv. Existing Chemical Substances (IECSC) *(See chapter 3)*

SECTION 16: Other Information

Disclaimer:

All reasonable efforts were exercised to compile this SDS in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). The SDS only provides information regarding health, safety and environmental hazards at the date of issue, to facilitate the safe receipt, use and handling of this product in the workplace and does not replace any product information or product specifications. Since Dangote Petroleum Refinery and Petrochemicals FZE and its subsidiaries cannot anticipate or control all conditions under which this product may be handled, used and received in the workplace, it remains the obligation of each user, receiver or handler to, prior to usage, review this SDS in the context within which this product will be received, handled or used in the workplace. The user, handler or receiver must ensure that the necessary mitigating measures are in place with respect to health and safety.

This does not substitute the need or requirement for any relevant risk assessments to be conducted. It further remains the responsibility of the receiver, handler or user to communicate such information to all relevant parties that may be involved in the receipt, use or handling of this product.

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SECTION 17: Other Information

IARC	International Agency for Research on Cancer
NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
R-Phrase	Risk Phrase
SUSDP	Standard for the Uniform Scheduling of Drugs & Poisons
UN Number	United Nations Number

THIS MSDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS MSDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS.

OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

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Please read all labels carefully before using product.

This MSDS is prepared in accord with the ASCC document "National Code of Practice for the Preparation of Material Safety Data Sheets" 2nd Edition [NOHSC:2011(2003)]