UAB ORION GLOBAL PET (A subsidiary of INDORAMA POLYMERS PUBLIC COMPANY LIMITED )

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: RAMAPET A1, RAMAPET N1, RAMAPET N2, RAMAPET R1

SECTION I NAME

PRODUCT: **RAMAPET** 

POLYETHYLENE TEREPHTHALATE (PET) CHEMICAL NAME:

CHEMICAL FAMILY: COPOLYMER RESIN

CHEMICAL FORMULA:  $(C_{10}H_8O_4)_n$ PRODUCT CODE: A1, N1, N2, R1

MANUFACTURER: UAB ORION GLOBAL PET, LITHUANIA

(A subsidiary of INDORAMA POLYMERS PUBLIC COMPANY LIMITED )

Tel: +370 46 300 684, +370 46 300 686

SECTION II TOXICOLOGICAL INFORMATION

SPECIFIC TOXICITY TESTS HAVE NOT BEEN CONDUCTED ON THIS PRODUCT. OUR HAZARD EVALUATION IS BASED ON INFORMATION FROM SIMILAR PRODUCTS, THE INGREDIENTS, TECHNICAL LITERATURE, AND/OR PROFESSIONAL EXPERIENCE.

NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN 0.1% IS IDENTIFIED AS CARCINOGEN BY THE U.S.NATIONAL TOXICOLOGY PROGRAM, THE U.S. OCCUPATIONAL SAFETY AND HEALTH ACT, OR THE INTERNATIONA AGENCY ON RESEARCH ON CANCER (IARC).

SECTION III HEALTH INFORMATION

THE HEALTH EFFECTS BELOW ARE BASED UPON COMPONENT HEALTH EFFECTS CONSISTENT WITH REQUIREMENTS UNDER OSHA HAZARD COMMUNICATION (29 CFR 1910.1200).

**EYE CONTACT:** PRODUCT FINES CAN CAUSE MECHANICAL IRRITATION.

SKIN CONTACT: PRODUCT IS UNLIKELY TO CAUSE IRRITATION

**INHALATION:** PRODUCT FINES MAY CAUSE MECHANICAL IRRITATION.

IN GESTATION: PRODUCT IS PRACTICALLY NON - TOXIC.

SIGNS AND SYMPTOMS: IRRITATION AS NOTED ABOVE.

AGGRAVATED MEDICAL PRE EXISTING EYE AND RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO

CONDITIONS: PRODUCT FINES

SECTION IV **EMERGENCY AND FIRST AID PROCEDURES** 

FLUSH EYES WITH WATER IF IRRITATION OCCURS. IF MOLTEN MATERIAL CONTACTS WITH **EYE CONTACT:** 

EYE, IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET

MEDICAL ATTENTION IMMEDIATELY.

IF CONTACT WITH MOLTEN PRODUCT OCCURS, TREAT AS FOR THERMAL BURN. SKIN CONTACT:

INHALATION: NOT ORDINARILY REQUIRED NOT ORDINARILY REQUIRED INGESTION:

BURNS SHOULD BE TREATED AS THERMAL BURNS. THE MATERIAL WILL COME OFF AS HEALING OCCURS, THEREFORE, IMMEDIATE REMOVAL FROM SKIN IS NOT NECESSARY. NOTE TO PHYSICIAN:

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SECTION V	PHYSICAL DATA		
BOILING POINT :	NOT APPLICABLE		
SPECIFIC GRAVITY(H <sub>2</sub> O=1):	1.3 - 1.5		
VAPOR PRESSURE :	NOT APPLICABLE		
MELTING POINT ( °C ):	245 - 265		
SOLUBILITY (IN WATER) :			
VAPOR DENSITY (AIR=1) NOT APPLICABLE			
EVAPORATION RATE :	NOT APPLICABLE		
PHYSICAL FORM :	SOLID		
ODOR:	ODORLESS		
COLOR:	VARIES WITH FORMATION		
SECTION VI	FIRE AND EXPLOSION HAZARD		
FLASH POINT & METHOD	NOT APPLICABLE		
FLAMMABLE LIMITS / % VOLUME IN AIR :	LOWER: NOT APPLICABLE UPPER: NOT APPLICABLE		
EXTINGUISHING MEDIA :	USE WATER FOG , FOAM , DRY CHEMICAL , OR CO2		
SPECIAL FIRE FIGHTING PROCEDURE AND PRECAUTIONS :	MATERIAL WILL NOT BURN UNLESS PREHEATED. DO NOT ENTER CONFINED FIRE SPACE WITHOUT FULL BUNKER GEAR (HELMET WITH FACE SHIELD, BUNKER COATS, GLOVES AND RUBBER BOOTS), INCLUDING A POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER.		
UNUSUAL FIRE AND EXPLOSION HAZARD :	HIGH DUST CONCENTRATIONS HAVE A POTENTIAL FOR COMBUSTION OR EXPLOSION. TREAD AS A SOLID THAT CAN BURN. MOLDED PARTS GENERALLY BURN SLOWLY WITH A LOW SMOK DENSITY AND FLAMING DRIPS. UNDER CERTAIN CONDITIONS CAN BURN WITH A HIGH SMOK DENSITY.		
EXPOSURE LIMITS :	PERMISSIBLE EXPOSURE LIMIT (PEL) AND THRESHOLD LIMIT VALUE (TLV)- NOT ESTABLISHED, HOWEVER, VENTILATION ADEQUATE TO MAINTAIN LESS DUST CONCENTRATION (~10 AIR CHANGES / HOUR) SHOULD BE MAINTAINED.		
SECTION VII	REACTIVITY		
STABILITY:	STABLE		
HAZARDOUS POLYMERIZATION :	WILL NOT OCCUR.		
CONDITIONS AND MATERIAL TO AVOID :	STRONG OXIDIZING AGENTS.		
HAZARDOUS DECOMPOSITION PRODUCTS:	AT PROCESSING TEMPERATURE, SOME DEGREE OF THERMAL DEGRADATION WILL OCCUR, ALTHOUGH HIGHLY DEPENDENT ON THE TEMPERATURE AND ENVIRONMENTAL CONDITIONS, A VARIETY OF DECOMPOSITION PRODUCTS MAY BE PRESENT RANGING FROM SIMPLE HYDROCARBONS TO TOXIC / IRRITATION GASES		

HYDROCARBONS TO TOXIC / IRRITATION GASES.

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SECTION VIII	EMPLOYEE PROTECTION
RESPIRATORY PROTECTION :	NOT ORDINARILY REQUIRED.
PROTECTIVE CLOTHING	G NOT ORDINARILY REQUIRED.
ADDITIONAL PROTECTIVE MEASURES :	ADEQUATE VENTILATION AND / OR ENGINEERING CONTROL'S ARE REQUIRED WHEN PRODUC IS HEATED IN PROCESSING.
l	
SECTION IX	ENVIRONMENTAL PROTECTION
SPILL OR LEAK PROCEDURES :	ENVIRONMENTAL PROTECTION  SHOVEL AND SWEEP UP OR USE INDUSTRIAL VACUUM CLEANER, AVOID GENERATING DUST CLOUDS. PUT INTO CONTAINERS FOR RECLAIMING OR DISPOSAL.
SPILL OR LEAK	SHOVEL AND SWEEP UP OR USE INDUSTRIAL VACUUM CLEANER , AVOID GENERATING DUST

AVOID VAPORS FROM HEATED PRODUCTS. ADEQUATE VENTILATION AND / OR ENGINEERING CONTROLS MUST BE EMPLOYED IN HIGH TEMPERATURE PROCESSING TO PREVENT EXPOSURE TO POTENTIALLY TOXIC/IRRITATING FUMES.

SECTION XI	TRANSPORTATION INFORMATION		
EUROPEAN ROAD/RAIL AIR : ICAO (INTERNATIO	ATION OF DANGEROUS GOODS (ADR/RID) NAL CIVIL AVIATION ORGANIZATION) DNAL MARITIME DANGEROUS	NOT REGULATED.  NOT REGULATED.  NOT REGULATED.  NOT REGULATED.  NOT REGULATED.	
SECTION XII	HANDLING AND STORAGE		
HANDLING:	AVOID EXTREME CONDITIONS OF HEAT AND HUMIDITY. AVOID BUILD UP OF STATIC ELECTRICITY. PELLET HANDLING EQUIPMENT SHOULD BE GROUNDED TO PREVENT BUILDUP OF ELECTROSTATIC CHARGE. USE WITH ADEQUATE VENTILATION. AVOID DUST ACCUMULATION.		
STORAGE:	KEEP CONTAINER CLOSED. PELLETS ON THE FLOOR MAY BE SLIPPERY AND CAUSE FALLS.		

STORE IN BOXES IN ACCORDANCE WITH GOOD MATERIALS-HANDLING PRACTICES.

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SECTION XIII OTHER REGULATION CONTROLS

THE COMPONENTS OF THIS PRODUCT ARE LISTED ON THE IPA / TSCA INVENTORY OF CHEMICAL SUBSTANCES

PROTECTION OF STRATOSPHERIC OZONE (PURSUANT TO SECTION 611 OF THE CLEAN AIR ACT AMENDMENTS OF 1990; PER 40 CFR PART 82, THIS PRODUCT DOES NOT CONTAIN NOR WAS IT DIRECTLY MANUFACTURED WITH ANY CLASS I OR CLASS II OZONE DEPLETING SUBSTANCES.

CALIFORNIA PROPOSITION 65 (SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986): MATERIAL(S) KNOWN TO THE STATE TO CAUSE CANCER OR MATERIAL(S) KNOWN TO THE STATE TO CAUSE ADVERSE REPRODUCTIVE EFFECTS: NONE

THIS DOCUMENT HAS BEEN PREPARED IN ACCORDANCE WITH THE MSDS REQUIREMENTS OF THE OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200.

SECTION XIV OTHER INFORMATION

FOR OTHER INFORMATION, CALL AT Tel: +370 46 300 684, +370 46 300 686

\_ THE INFORMATION CONTAINED HEREIN IS BASED ON CURRENT KNOWLEDGE AND EXPERIENCE; NO RESPONSIBILITY IS ACCEPTED THAT THE INFORMATION IS SUFFICIENT OR CORRECT IN ALL CASES.

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\_ NO STATEMENT MADE IN THIS DATA SHEET SHALL BE CONSTRUCTED AS A PERMISSION OR RECOMMENDATION FOR THE USE ANY PRODUCT IN A MANNER THAT MIGHT INFRINGE EXISTING PATENTS. NO WARRANTY IS MADE EITHER EXPRESS OR IMPLIED.

DATE REVISED: MAY 2007