Date: September 25, 2006

MATERIAL SAFETY DATA SHEET.

1. Chemical product and company identification.

Chemical product name: – **RAMSHINE PW300G7**

Manufacturer: Polyram Ram-On Industries
m.p. Megido
19205
Israel

Emergency number: +++972-4-6599900

2. Composition/information on ingredients.

Glass fibers reinforced polymer blend, based on Acrylonitrile-Styrene copolymer (SAN).

3. Hazard identification.

Hazard warning not required.

4. First aid measures.

Burns by molten material must recieve medical attention.

5. Fire fighting measures.

Exinguishing media: Water spray, extinguishing powder, CO2, foam, dry powder.

In case of fire toxic gases may develop. Firemen must wear self contained breathing appartus.

6. Accidental release measures.

Granules: Take up mechanically: avoid dust formation.

Melt: If there is a risk of exothermal decomposition due to overheating)increase in temperature, generation of smoke or fumes(cool melt off in water bath.

7. Handling and storage.

Make provision for sufficient ventilation and local exhaust at vent, nozzle and ejected melt
Prevent dust formation during machining of finished parts.
During regranulation avoid formation of dust.
VCI storage class: 11
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8. Exposure control / personal protection.

For exposure controls see chapter 15.
Wear dust protection mask and eye protection if there is a risk of dust formation.
Avoid inhaling vapours. Avoid inhaling dust.

9. Physical and chemical properties.

form	granules	
Colour	colourless or according to pigmentation	
Odour	nearly oudorless	
Melting rage	200 Celsius	DIN-ISO 1218
Density	approx. 1.13-1.6 g/cm³.	DIN53 479
Bulk density	600-700kg/cubic meter	
Vapour pressure	not applicable	
Viscosity	not applicable	
Solubility in water	insoluble	
pH value	not applicable	
Flash ignition temp.	<320c	
Self ignition temp.	<390c	
Explosive limits	not applicable	

10. Stability and reactivity.

Thermal decomposition: Decomposition begins at approx. 300c.
Hazardous decomposition products: caused by smouldering and incomplete combustiontoxic fumes mainly consisting of CO and CO2 may be developed. Formation of traces of acrylonitrile, styrene, aliphatic and aromatic hydrocarbons, aldehydes, acids, phenol and phenol-derivatives may occur.
Hazardous reactions: If overheated, the melt may undergo exothermal decomposition in the air)increase in temperature, generation of smoke or fumes.

11. Toxicological information.

Careful treatment ensures that only traces)in the ppm range(of acrylonitrile and butadiene are present in SAN.
Under recommended processing conditions small amounts of chlorobenzene, phenol, substituted phenols, acrylonitrile and styrene may be emitted.
Provided good ventilation and/or local exhaust systems are available, the limits values cited under pt.15 should not be exceeded.

12. Ecological information:

Water pollution class)WGK(: 0 - not generally hazardous to water .
WGK = Classification in accordance with the German Water Resources Act.

13. Disposal considerations.

The product is suitable for mechanical recycling, After appropriate treatment it can be remelted and processed into new mould articles.
Mechanical recyceling is only possible if the material has been selectively retrieved and carefully segregated according to type.
May only be transproted to suitable in incinerator with reduced non-air emissions observing local official regulations.
May be disposed of together with houshold refuse if local official regulations are observed.

14. Transport information.

GGVSee/IMDG Code: -- UN No.: -- MFAG: -- EmS: --
PG: -- MPO: --
GGVE/GGVS: Class -- No.: -- RID/ADR: Class -- No. --
ADNR: Class -- No.: -- Cat: -- ICAO / IATA - DGR: Not restr
Declaration for land shipment: --
Declaration for sea shipment: --
Declaration of shipment by air: --
Other information: Not dangerous cargo, keep dry.

15. Regulatory information

No labeling is required in accordance with the EEC directives.

During processing this product the threshold limit values for acrylonitrile, butadiene, phenol, chlorobenzene, 4-tert-butylphenol and styrene should be observed.
acrylonitrile, butadiene, phenol, chlorobenzene, 4-tert-butylphenol and styrene are substances which come under TRGS 900 technical regulation for dangerous substances
Butadiene is classified as cancerogenic, category 2 in the published list of dangerous substances and preparations accoring to § 4a of the regulations on dangerous substances GefStoffV
Acrylonitrile is classified as cancerogenic, category 2 in the published list of dangerous substances and preparations according to § 4a of the regulations on dangerous substances GefStoffV
Styrene is classified as pregnancy group C in the German MAK-value. That means, a risk of damage of the foetus is not expected, if the MAK-value and the German BAT-valueBiological Industrial Material Tolerance Limit(are observed.)Compare also TLVs and Biological Exposure Indices(

TRK-value technical guide concentration for acrylonitrile: 3 ppm.
TRK-value technical guide concentration for butadiene: 5 ppm.
MAK-value highest concentration permissible at the worplacestyrene: 20 ppm
85 mg/m.
MAK-value chlorobenzene: 10 ppm 46 mg/m.
MAK-value phenol: 5 ppm 19 mg/m.
MAK-value 4-tert-butylphenol: 0.08 ppm 0.5 mg/m.

In connection with dusts formed in consequences of mechanical treatment, e.g grinding, the appropriate regulation/maxima values for fine dusts must be observed:
MAK-value measured as the alveolar aerosol content: 1.5 mg/m
measured as the respirable aerosol content: 4 mg/m

16. Other information

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The given here is based on current knowledge and experience. the purpose of this safety data sheet is to describe the product in terms of it's safety requirement. The data does not signify any warranty with regard to the product's properties.