

RAMCLEAN 801

Version: 1.0

Validation Date: 06/05/2015

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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

- 1.1 Trade name** : RAMCLEAN 801
- 1.2 Use of the Substance/Preparation** : Blend of additive in polyethylene resin
Purging agents for high heat for plastic injection molding machines and extruders.
- 1.3 Details of supplier of the safety data sheet**
- Company : Polyram Ram-On Industries
Ram On 19205
Israel
- Telephone : ++ (972) 4 6599900
- Prepared by : Research and Development Department REACH@POLYRAM-GROUP.COM
- 1.4 Emergency number** : ++ (972) 4 6599999 8:00 A.M- 16:00 P.M

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

2.1.1 Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.1.2 Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS] :

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3 Other hazards

May form combustible dust concentrations in air (during processing/handling). Spilled pellets present a slipping hazard on hard surfaces. Material can accumulate static charges which may cause an ignition.

At elevated temperature, vapor may cause allergic respiratory reaction, irritation of eyes, skin and respiratory tract.

Contact with molten material may cause thermal burns

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Product definition (REACH)** : Preparation
- 3.1.2 Substances** : Polyethylene [9002-88-4]
- 3.2 Mixture**

Chemical Name	CAS No.	Concentration	OSHA PEL
Trade secret minerals	Proprietary	25-50%	No PEL established

3.3 Additional information

The product may contain varying levels of additives such as slip and anti-blocking agents, carbon black, antioxidants and stabilizers. Within the present knowledge of the supplier this does not contain product no dangerous ingredients in quantities requiring reporting according to Regulation (EC) No. 1907/2006 or national regulations

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SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice	: Remove from exposure, lie down. Never give anything by mouth to an unconscious person. No hazards which require special first aid measures. If a person vomits when lying on his back, place him in the recovery position.
Skin contact	: Cool skin rapidly with cold water after contact with molten material. Do not peel polymer from the skin. Obtain medical attention.
Eye contact	: Flush eyes with plenty of water. Get medical attention if irritation develops.
Inhalation	: Move to fresh air. Get medical attention if irritation develops or persists.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	: No information available
Risks	: No information available

4.3 Indication of any immediate medical attention and special treatment needed

Treatment	: No information available
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SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media	: Carbon dioxide (CO ₂), dry powder, foam, water mist.
Unsuitable extinguishing media	: Water spray, do not use straight streams of water.

5.2 Specific hazards arising from the substance or mixture

Specific hazards during fire fighting	: Fire may cause evolution of hazardous gases produced may consist of: Organics, Flammable hydrocarbons, Carbon monoxide, nitrogen oxides.
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5.3 Advice for fire-fighters

: Wear self-contained breathing apparatus (SCBA) and protective clothing.

5.4 Further information

: Assure an extended cooling down period to prevent re-ignition. Evacuate area. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Do not allow run-off from fire fighting to enter drains or water courses.

Special Conditions to Avoid	: Dust may form explosive mixtures with air. Prevent an exposure to open flames.
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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	: Wear suitable protective equipment, ventilate the area. Refer to protective measures listed in sections 7 and 8.
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6.2 Environmental precautions

: Try to prevent the material from entering drains or water courses. Do not contaminate surface water or sanitary sewer system.

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6.3 Methods for and materials for containment and cleaning up

- Methods for cleaning up : Clean up promptly by sweeping or vacuum. Arrange disposal in suitable container without creating dust.
- Water Spill : Stop leak if you can do so without risk. Confine the spill immediately with booms. Warn other shipping. Skim from surface

6.4 Reference to other sections : Refer to protective measures listed in sections 7 and 8.

SECTION 7: HANDLING AND STORAGE

7.1 Precaution for safe handling

- Advice on safe handling : Provide appropriate exhaust ventilation at dryers, machinery and at places where dust or volatiles can be generated. In case of insufficient ventilation, wear suitable respiratory equipment. When opening containers, avoid breathing vapors that may be emanating. Protect from contamination. For personal protection see section 8.
- Advice on protection against fire and explosion : Take necessary action to avoid static electricity discharge Minimize dust generation and accumulation, Keep from contact with oxidizing materials

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Protect from contamination. Avoid excessive heat.

7.3 Specific end uses

- : Section 1 informs about identified end-uses. No industrial or sector specific guidance available.

SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

- Occupational exposure limits:** : OSHA PEL
5 mg/m³ respirable dust
5 mg/m³ total dust

8.2 Exposure control

- Appropriate Engineering Control** : The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Use adequate ventilation during heating processes, or if dusty conditions prevail when handling powdered materials. For storage and ordinary handling, general ventilation is adequate.

Personal protective equipment

- Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Consult respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH or the manufacturer
- Hand protection : Protective heat resistant gloves
- Eye protection : Safety glasses with side-shields
- Skin and body protection : Minimize skin contamination by following good industrial hygiene practice. If there is potential contact with hot/molten material, wear heat resistant clothing and

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	footwear. Regular cleaning of equipment, work area and clothing.
Hygiene measures	: Do not eat or drink while processing the product; wash hands before breaks. Keep away from food and drink General precaution for all plastics and elastomers: Do not breathe fumes evolved from hot polymer.
Environmental Control	: Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions. Do not flush into surface water or sanitary sewer system

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Important health, safety and environmental information

Appearance

Physical State	: Solid
Color	: Natural pellets
Odor	: Odorless

9.2 Other Safety Information

pH	: NA
Melting point / range	: 130-140°C
Initial Boiling point/ range	: NA
Thermal decomposition	: > 160 °C
Flash Point	: NA
Ignition Temperature	: NA
Vapour pressure (hPa)	: NA
Vapour density (air=1)	: NA
Specific Gravity / Density (20 °C)	: 1.20-1.50(g/cm ³)
Bulk Density	: NA
Solubility in Water (20 °C)	: Negligible
Partition coefficient: noctanol/ water	: NA
Solubility in other solvents	: NA
Relative vapour density	: NA
Evaporation rate	: NA

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	: No dangerous reaction known under conditions of normal use.
10.2 Chemical Stability	: Stable under normal conditions.
10.3 Possibility of hazardous reaction	: Hazardous polymerization does not occur

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| 10.4 Conditions to avoid | : Avoid heating for prolonged periods above the recommended upper processing limit. Heat, flames and sparks. Avoid dust formation and electrical charging |
| 10.5 Incompatible materials | : Strong acids and oxidizing agents. |
| 10.6 Hazardous decomposition products | : Carbon monoxide, Carbon dioxide other organic acids, Degradation products of the polymers and their additives may also be formed. |

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

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|---------------------------------|---|
| Acute toxicity (Component) | : Not classified due to lack of data |
| Acute toxicity (material) | : Not classified due to lack of data |
| Carcinogenicity Assessment | : Not classified due to lack of data |
| Mutagenicity Assessment | : Not classified due to lack of data |
| Sensitization | : Contact with the skin may result in mechanical irritation |
| Chronic effects for the product | : Dust may be irritating to the eyes and respiratory tract. Generation of vapors at during processing or elevated temperatures might be irritating to the eyes and respiratory tract.
Information on: Glass, oxide, chemicals
IARC (International Agency for Research on Cancer) has classified this substance as group. 2B (The agent is possibly carcinogenic to humans). |
| Other information | : Additives are encapsulated in the polymer. Under the normal conditions for processing and use of this polymer the encapsulated additives are not expected to pose any health hazard. However, grinding of the polymer is not recommended without the use of appropriate measures to control exposure (see Section 8 - Engineering Controls). |

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

- | | |
|--|---|
| Ecotoxicological effects | : No data available |
| 12.2 Persistence and degradability | : Not considered biodegradable |
| 12.3 Bioaccumulative potential | : Potential to bio-accumulate is low |
| 12.4 Mobility in soil | : No data available |
| 12.5 Results of PBT and vPvP assessment | : This mixture contains no substance considered to be persistent, bioaccumulation nor toxic (PBT) |
| 12.6 Others adverse effect | : No data available |
| 12.7 Additional information | : This product does not contain heavy metals |

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SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

- Product : In accordance with local and national regulations
- Packaging : Empty containers should be taken for local recycling or waste disposal.
- Waste disposal consideration : Like most thermoplastic plastics the product can be recycled. Where possible recycling is preferred to disposal or incineration. Do not contaminate ponds, waterways or ditches with chemical or used container. If recycling is not practicable, dispose of in compliance with local regulations. Can be landfilled, when in compliance with local regulations.
- Other Disposal considerations : The information offered here is for the product as shipped. Use and/or alteration to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

SECTION 14: TRANSPORT INFORMATION

- 14.1 Land transport ADR/ RID : Not dangerous goods
- 14.2 Air transport IATA : Not dangerous goods
- 14.3 Sea transport IMDG : Not dangerous goods

SECTION 15: REGULATORY INFORMATION

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

15.1.1 EU regulation

Not a hazardous substance or preparation according to EC-directives 67/548/EEC or 1999/45/EC.
Regulation (EC) No. 1907/2006 -Not applicable.

Labeling according to EC regulations : The product does not require a hazard warning label in accordance with Regulation (EC) No. 1272/2008

15.1.2 U.S regulation

TSCA SCA (Toxic Substance Control Act) : The components of this product are either on the TSCA Inventory or exempt.

SARA Hazard Notification:

Section 302 Extremely Hazardous Substances : None

Section 313 Toxic Chemical(s) : This Material is not subject to SARA 313 reporting requirements

15.2 Chemical safety assessment : No data is available

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SECTION 16: OTHER INFORMATION

Abbreviations

NA = not applicable, ND = not determined, NE = not established.

Caution do not use Polyram materials in applications involving implantation within the body; direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid or blood; or prolonged contact with mucous membranes. Polyram materials are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. Polyram will not provide to customers making devices for such applications any notice, certification or information necessary for such medical device use required by FDA regulation or any other statute.

Polyram makes no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues or fluids.

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Preparation date of MSDS

Prepared by : Product steward ship (Research and Development Department)

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