



## PALRAM Industries Ltd.

Ramat Yohanan 30035, Israel  
Tel ► 972-4-8459900 Fax ► 972-4-8444012  
E-Mail ► palram@palram.com  
Website ► www.palram.com

# PSDS – Product Safety Data Sheet

## P.E.T.G Sheets

Date of issue: April 2004

Updated: February 2008

### Compliance with EU Regulation 1907/2006 (REACH)

The sheets manufactured by PALRAM are exempted from the requirement of the REACH regulation to provide customers with a Safety Data Sheet (EU No. 1907/2006, article 31) since they are defined as “articles.” The information herein is provided by PALRAM as courtesy to its customers and a part of its service efforts. **The sheets do not contain any substances on the candidate list for inclusion in Annex XIV of REACH above the threshold level of 0.1% by weight of the article.**

## 1. Identification of the Article and the Company

### 1.1. Identification of the Article

Trade Names	:	<b>PAL-G™, PAL-G™ UV</b>
Product Name	:	Rigid Copolyester sheets
Material Name	:	Copolyester
CAS number	:	Not available
UN number	:	None
ACX number	:	Not available
RTECS	:	Not listed
Material Synonyms	:	Polyethylene Terephthalate Glycol
NFPA Ratings	:	Health=0, Fire=1, Reactivity=0

### 1.2. Company Identification & Contact

#### Israel - PALRAM Paltough

**Address:** Ramat Yohanan, 30035, ISRAEL  
**Tel:** +972 4 8459 900  
**Fax:** +972 4 8444 012

#### UK - PALRAM Polycarb

**Address:** Unit 2, Doncaster Carr  
Industrial Estate, White Rose Way  
Doncaster DN4 5JH, UK  
**Tel:** +44 1302 380738  
**Fax:** +44 1302 380739

#### Americas - PALRAM 2000

**Address:** 9735 Commerce Circle  
Kutztown, PA 19530, USA  
**Tel:** +610-285-9918  
**Fax:** +484-647-8210

**Local:** Call your nearest poison control center

## 2. Composition / Information of Ingredients

Main polymer: Copolyester – approximately 100 wt%.

Pigments and additives used to enhance specific properties are encapsulated in the polymer resin matter.

**No cadmium or other heavy metals based pigments or stabilizers used.**

**This product does not contain reportable hazardous ingredients as defined by OSHA Hazard Communication Standard.**

**This product isn't classified as dangerous according to EC directives.**

## 3. Hazards Identification

No particular hazards known.

### 3.1. Health Hazard Data

#### 3.1.1 Effects Of A Single Overexposure

<b>Swallowing</b>	:	non-relevant
<b>Skin absorption</b>	:	non-relevant
<b>Inhalation</b>	:	non-relevant
<b>Skin contact</b>	:	exposure is not expected to cause adverse health effects
<b>Eye contact</b>	:	non-relevant

3.1.2 Effects of a Repeated Overexposure - None currently known

3.1.3 Medical Conditions Aggravated by Overexposure - None currently known

3.1.4 Other Effects of Overexposure - None currently known

## 4. First Aid Measures

In general handling the material will not cause accidents.

### 4.1. Inhalation

Route of entry – inhalation: No

If exposed to combustion fumes in high concentration - bring victim to fresh air. Medical attention needed.



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### **4.2. Ingestion**

Route of entry – ingestion: No

### **4.3. Skin Contact**

Burns resulting from accidental contact with molten material must be flushed immediately with cold water. Do not remove the polymer from the skin. Do not use solvent for removal. Medical attention needed.

### **4.4. Skin Absorption**

Route of entry – skin: No

### **4.5. Eye Contact**

Like any foreign body, can cause mechanical irritation. Remove contact lenses at once. Flush eyes well with copious quantities of water or normal saline for at least 20-30 minutes. If irritation persists, consult physician.

### **4.6. Notes for Physician**

There are no specific notes.

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## **5. Fire Fighting Measures**

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Low fire hazard. Combustion may evolve irritant vapors. Main products of combustion are carbon dioxide and carbon monoxide.

### **5.1. Extinguishing Media**

Water spray, dry chemical.

### **5.2. Extinguishing Media to Avoid**

No information currently available.

### **5.3. Special Fire Fighting Procedures**

Personnel without suitable respiratory apparatus should leave the affected area to prevent exposure to toxic or combustible gases.

### **5.4. SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS**

Positive-pressure self-contained breathing apparatus, protective clothing, gas mask approved for acid vapors.

### **5.5. Unusual Fire and Explosion Hazards**

Hazardous combustion products may include intense heat, dense black smoke, carbon dioxide, and carbon monoxide. Soot emitted when copolyester is forced to burn may obscure visibility. Powdered material may form explosive dust air mixtures. The material is not sensitive to static discharge.

Static electricity discharge sparks possible at handling – avoid vicinity of static discharge sensitive materials.

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## **6. Accidental Release Measures**

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No special personal protective equipment needed. Collect mechanically for disposal or recovery.

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## **7. Handling and Storage**

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### **7.1. Handling**

#### **General handling precautions**

Avoid mechanical contact with eyes. Use good industrial hygiene practices. Provide adequate ventilation. Secondary operations such as grinding, sanding or sawing may produce a dust explosion hazard. Use aggressive housekeeping activities to prevent dust accumulation; employ bonding, grounding, venting and explosion relief provisions in accordance with accepted engineering practices.

#### **Ventilation**

General (mechanical) room ventilation is expected to be satisfactory where this product is stored and handled.

#### **Other precautions**

No explosion hazard. Not sensitive to static discharge. In the event of fire, cool and overlap product with water. Static electricity discharge sparks possible during handling. Avoid vicinity of flammable materials.

### **7.2. STORAGE**

Store in a cool shady area. No special technical protective measures required.

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## **8. Exposure Controls / Personal Protection**

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### **8.1. Exposure Limits**

No occupational exposure limits established by OSHA, ACGIH, or NIOSH.

### **8.2. Personal Protection**

<b>Respiratory protection</b>	:	No special protection needed
<b>Hand protection / protection gloves</b>	:	No special protection needed
<b>Eye protection</b>	:	No special protection needed
<b>Other protective equipment/measures</b>	:	No special protection needed

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**9. Physical Properties**

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Appearance	:	Flat plastic sheets
Physical State	:	Solid
Color	:	Clear or colored
Odor	:	None
Density	:	1.27 gr/cm <sup>3</sup>
Melting Point	:	>100°C, DSC according to ASTM D 792
Boiling Point, 760 Hg	:	Not available
Solubility in Water	:	Negligible
pH Value	:	Not applicable
Flash Point	:	Not applicable
Autoignition Temp. :	>454°C	ASTM D 1921
Flammability Limit :	Not available	
Explosion Limits	:	Not established
Evaporation Rate	:	Not relevant
Percent Volatiles	:	Not relevant

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**10. Stability and Reactivity**

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**10.1. Stability**

Stable.

**Conditions to avoid**

Excessive heat, or open flame.

**Incompatible materials**

Oxidizing agents can cause reaction.

**Thermal decomposition**

Caused by fire or overheating during improper processing. Fumes damaging to health may be released.

**Hazardous decomposition products**

Carbon monoxide (CO)	-	is highly toxic if inhaled, present in combustion fumes of all organic materials;
Carbon dioxide (CO <sub>2</sub> )	-	in sufficient concentrations can act as an asphyxiant, present in combustion fumes of all organic materials;

**10.2. Reactivity**

**Hazardous polymerization** : Will not occur

**Hazardous reactions** : None.

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**11. Toxicological Information**

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Independent testing confirms that this material has very low toxicity.

**11.1. Acute Toxicological Information**

**Acute oral toxicity** : oral LD<sub>50</sub> (rat) > 3200 mg/kg; oral LD<sub>50</sub> (mouse) > 3200 mg/kg

**Acute vapor exposure** : processing fumes from similar products are not considered toxic.

**Primary skin irritation** : product not considered primary skin irritant.

Skin irritation (guinea pig): slight.

Repeated skin application (guinea pig) no irritation. Skin sensitivity: none.

**Eye irritation** : product not considered primary irritant. When similar products, in finely divided form, were placed into the eyes of rabbits, slight transient redness or discharge occurred – consistent with the expected slightly abrasive nature of product.

**Sensitization** : not expected to be a skin sensitized.

Dermal LD<sub>50</sub>(guinea pig) > 1000mg/kg.

**Chronic effects** : in sub-chronic testing, oral study (11 days, male rat): no-observed-effect level = 730 mg/kg/day (highest dose tested)

**Carcinogenicity** - NTP : not tested

- IARC : not listed

- OSHA : not regulated

-ACGIH : not listed

**11.2. Other Toxicological Information**

No known toxicological effects with normal use. For heating see section 10.

**11.3. Additional Information**

No additional toxicity information currently available.



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## 12. Ecological Information

### 12.1. Persistence and Degradability

Detailed studies have not been conducted concerning the environmental fate of the product. According to present knowledge no unfavorable ecological effects are to be expected. Not generally hazardous to water. Insoluble in water, non-toxic solid.

**Mobility** : No information currently available  
**Persistence and biodegradability** : Biodegradation period - tens of years.  
**Bioaccumulative potential** : No information currently available.

### 12.2. Environmental Risks

No hazard expectation to terrestrial or aquatic flora and fauna.

**Ecotoxicity** : LD<sub>50</sub> (rats) > 3.2 gr/kg  
: IC<sub>50</sub> (bacterial inhibition) - no data available  
**Aquatic toxicity** : 96-h LC<sub>50</sub> (daphnia magna) > 100 mg/L (highest dose tested)  
: 96-h LC<sub>50</sub> (fathead minnow – fish) > 100 mg/L (highest dose tested)  
: 96-h LC<sub>50</sub> (ramshorn snail) > 100 mg/L (highest dose tested)  
: 96-h LC<sub>50</sub> (flatworm) > 100 mg/L (highest dose tested)

### 7-Day Plant Germination Effects – No-adverse-effect concentration

: Ryegrass > 100 mg/L (highest dose tested)  
: Radish > 100 mg/L (highest dose tested)  
: Lettuce > 100 mg/L (highest dose tested)

### 7-Day Plant Seeding Effects – No-adverse-effect concentration

: Ryegrass > 100 mg/L (highest dose tested)  
: Radish > 100 mg/L (highest dose tested)  
: Lettuce > 100 mg/L (highest dose tested)

### 12.3. OTHER INFORMATION

All available ecological data have been taken into account for the development of the hazard and precautionary information contained in this safety data.

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## 13. Disposal Considerations

The product is not considered hazardous under current EPA hazardous waste regulations.

Recycling is the preferred method of disposal.

Alternatively, the product may be disposed of in an approved landfill.

Incineration in accordance with federal, state and local regulations – collected processing fume condensates and incinerator ash should be tested to determine waste classification.

All wastes should be evaluated in conjunction with applicable solid and hazardous waste regulations, Toxicity Characteristic Leaching Procedures (TCLP), and disposed of as appropriate.

**This product does not contain any cadmium or other heavy metal pigments or stabilizers.**

It is the user's responsibility to dispose of all wastes in accordance with all national and local regulations at properly permitted or authorized facilities.

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## 14. Transport Information

**DOT PSN Code** : ZZZ  
**DOT Proper Shipping Name** : Not regulated by this mode of transportation  
**IMO PSN Code** : ZZZ  
**IMO Proper Shipping Name** : Not regulated by this mode of transportation  
**IATA PSN Code** : ZZZ  
**IATA Proper Shipping Name**: Not regulated by this mode of transportation  
**AFI PSN Code** : ZZZ  
**AFI Proper Shipping Name** : Not regulated by this mode of transportation  
**Additional transportation data** : Not currently regulated under Department of Transportation regulations  
**Labeling** : No labeling is required in accordance with the EEC directives  
**Placarding** : No placarding is required in accordance with the EEC directives  
**Special transport requirements** : None  
**Packaging** : Avoid dark-colored packaging to prevent heat distortion

The product is classified as a non-hazardous material in the meaning of transport regulations.

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## 15. Regulatory Information

With regards to dust formed as a consequence of mechanical treatments, the appropriate regulations value limits for fine dust must be observed: MAC value (fine dust) – 5mg/m<sup>3</sup>.



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**16. Other Information**

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**Recommended Uses And Restrictions**

Please consult the relevant product and/or application information for this product.

**Further Information**

Additional information on this product may be obtained by calling your PALRAM Sales or Customer Service Contact.

**Disclaimer:**

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