

# AXONHENTZEN

## MATERIAL SAFETY DATA SHEET

**24-hour Emergency Phone:** 1-800-424-9300

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**PRODUCT CODE:** PG-6-MGN4

### 1. IDENTIFICATION OF THE PREPARATION AND COMPANY

<b>PRODUCT NAME:</b>	HS GREEN METALLIC PU TC	<b>HMIS CODES:</b>	<b>H</b>	<b>C</b>	<b>F</b>	<b>R</b>	<b>P</b>
<b>PRODUCT CODE:</b>	PG-6-MGN4		2	3	1	G	
 <b>MANUFACTURER'S NAME:</b>	<b>AXONHENTZEN Aerospace</b>						
<b>ADDRESS</b>	: 307 Echelon Rd Greenville, SC 29605						
<b>INFORMATION PHONE</b>	: 864.299.2819	<b>DATE GENERATED:</b>	7/19/2010				

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg	@ TEMP	WEIGHT PERCENT
*TERT BUTYL ACETATE ACGIH - 200ppm	540-88-5	34	77 F	10% to 25%
*METHYL NORMAL AMYL KETONE ACGIH TLV: 50 PPM SSHA 100 PPM TWA	110-43-0	2.80	68 F	10% to 25%
INORGANIC PIGMENT OSHA PEL 8 HR TWA - 15 mg/m3 (TOTAL DUST)	13463-67-7	N/A	N/A	1% to 10%
SILICON DIOXIDE	112945-52-5	N/A	N/A	1% to 10%
*XYLENE OSHA PEL: 100 PPM ACGIH TLV: 100 PPM	1330-20-7	2.4	68 F	1% to 10%
PROPRIETARY POLYMER SOLUTION ORGANIC GREEN PIGMENT		4.5	68 F	0% to 1%
*PROPRIETARY HETEROCYCLE		N/A	N/A	0% to 1%
ETHYL ACETATE OSHA PEL: 400 PPM, ACGIH TLV: 400 PPM	141-78-6	76	68 F	0% to 1%
*TOLUENE OSHA PEL: 100 PPM -TWA OSHA PEL: 150 PPM - STEL ACGIH TLV: 50 PPM - TWA (SKIN) ACGIH TLV 150 PPM - STEL (SKIN)	108-88-3	22.00	68 F	0% to 1%
GLYCOL ETHER PM ACETATE	108-65-6	3.7	68	0% to 1%
*METHYL ISOBUTYL KETONE OSHA VPPEL: 50 PPM - IWA OSHA VPPEL: 75 PPM - STEL ,ACGIH TLV: 50 PPM - IWA ,ACGIH TLV: 75 PPM - STEL	108-10-1	16	68 F	0% to 1%
PROPRIETARY POLYMER SOLUTION TLV (ACGIH); 1 MG/M3; 50 PPM; 100 PPM STEL (ACGIH); 3 MG/M3 PEL (OSHA); 1 MG/M3		4	68 F	0% to 1%
*PROPRIETARY POLYMER SOLUTION 100 PPM - 8HRS TWA 150 PPM - STEL 100 PPM - 8 HRS TWA		N/A	N/A	0% to 1%
*PROPRIETARY POLYMER SOLUTION		9	68 F	0% to 1%
*FLUROSILICONE		N/A	N/A	0% to 1%

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OSHA PEL AND ACGIH TLV: TWA 50 PPM, STEL 75 PPM

*ETHYL BENZENE	100-41-4	7.1	68 F	0% to 1%
OSHA - 125ppm, ACGIH - 125ppm				
DIBK	108-83-8	1.7	68 F	0% to 1%
OSHA PEL: 25 PPM, ACGIH TLV: 25 PPM				
POLYALKYLENE GLYCOL		> 7	68 F	0% to 1%
TLV (ACGIH); 100 PPM				
STEL (ACGIH); 150 PPM				
PEL (OSHA): 100 PPM				

\* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

### 3. HAZARD IDENTIFICATION OF THE PRODUCT

May impair fertility. May cause harm to the unborn child. Flammable. Harmful by inhalation, in contact with skin and if swallowed.

Further information is given in section 11.

### 4. FIRST AID MEASURES

#### **EMERGENCY AND FIRST AID PROCEDURES**

Eye Contact: Flush with water for 15 minutes. Consult a physician. Skin Contact: Wash affected area with soap and water. Remove contaminated clothing. Consult a physician. Inhalation: Remove to fresh air. Consult a physician. Ingestion: Drink water to dilute. Do not induce vomiting. Consult a physician.

### 5. FIRE-FIGHTING MEASURES

**EXTINGUISHING MEDIA:** FOAM, CO<sub>2</sub>, DRY CHEMICAL, WATER FOG

#### **SPECIAL FIREFIGHTING PROCEDURES**

Water spray may be ineffective. If water is used, fog nozzles are preferred. Water may be used to cool closed containers to prevent pressure build-up and possible auto-ignition or explosion when exposed to extreme heat.

#### **UNUSUAL FIRE AND EXPLOSION HAZARDS**

Keep containers tightly closed. Isolate from heat, sparks, electrical equipment and open flames. Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. Self-contained breathing apparatus should be worn by firefighters.

### 6. ACCIDENTAL RELEASE MEASURES

#### **STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

Evacuate non-essential personnel. Remove all sources of ignition. Ventilate the area. Equip clean-up crew with self-contained breathing apparatus. Dike spill. Cover with sawdust, vermiculite or Fuller's earth. Collect in open containers.

### 7. HANDLING AND STORAGE

#### **PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING**

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PRODUCT CODE: PG-6-MGN4

Do not store above 100 degrees F. Store in large quantities only in buildings designed to comply with OSHA 1910.106. Keep containers closed and upright to prevent leakage. Do not store or use near heat, sparks or flames.

#### **OTHER PRECAUTIONS**

Avoid prolonged or repeated contact with vapor or spray mist during application or curing.

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### **8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

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#### **Engineering Measures**

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapour below occupational exposure limits suitable respiratory protection must be worn.

#### **Personal Protection**

##### **Respiratory Protection**

Where overspray is present, a positive pressure air supplied respirator (TC19C NIOSH/MSHA approved) should be worn. If unavailable, a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2 may be effective. Follow respirator manufacturer's directions for use. Wear the respirator for the entire time of spraying and until all vapors and mists are gone. NO PERSONS SHOULD BE ALLOWED IN THE AREA WHERE THIS PRODUCT IS BEING USED UNLESS EQUIPPED WITH THE SAME RESPIRATOR PROTECTION RECOMMENDED FOR THE PAINTERS. When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

##### **Eye Protection**

Wear safety eyewear, e.g. safety spectacles, goggles or visors to protect against the splash of liquids.

##### **Hand Protection**

Nitrile rubber gloves should be worn during mixing and application.

##### **Skin Protection**

Overalls which cover the body, arms and legs should be worn. Skin should not be exposed. Barrier creams may help to protect areas which are difficult to cover such as the face and neck. They should however not be applied once exposure has occurred. Petroleum jelly based types such as Vaseline should not be used. All parts of the body should be washed after contact.

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### **9. PHYSICAL AND CHEMICAL PROPERTIES**

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<b>BOILING POINT:</b> 168.0 F	<b>BOILING RANGE:</b> 168.0 F TO 344.0 F
<b>FLASH POINT °F:</b> 26.00	<b>METHOD USED:</b> TCC
<b>COATING V.O.C.:</b> 289.79 G/L	<b>MATERIAL V.O.C.:</b> 234.63 G/L
<b>SPECIFIC GRAVITY (H2O=1):</b> 1.1141	
<b>VAPOR DENSITY:</b> HEAVIER THAN AIR	
<b>EVAPORATION RATE:</b> SLOWER THAN ETHER	
<b>SOLUBILITY IN WATER:</b> INSOLUBLE	
<b>APPEARANCE AND ODOR:</b> OPAQUE WITH ODOR OF SOLVENT	

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### **10. STABILITY AND REACTIVITY**

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**STABILITY:** STABLE

#### **CONDITIONS TO AVOID**

Temperatures above maximum storage temperature. Avoid exposure to heat, sparks, or open flames.

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#### **INCOMPATIBILITY (MATERIALS TO AVOID)**

Avoid contact with strong oxidizing agents.

#### **HAZARDOUS DECOMPOSITION OR BYPRODUCTS**

By fire - CO, CO<sub>2</sub>, nitrogen oxides.

#### **HAZARDOUS POLYMERIZATION:**

WILL NOT OCCUR

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### **11. TOXICOLOGICAL INFORMATION**

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There are no data available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See Sections 2 and 15 for details.

Exposure to solvent vapour concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

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### **12. ECOLOGICAL INFORMATION**

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There are no data available on the product itself.

The product should not be allowed to enter drains or water courses.

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 199/45/EC and is not classified as dangerous for the environment.

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### **13. DISPOSAL CONSIDERATIONS**

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Do not allow into drains or water courses. Wastes and empty containers should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act.

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### **14. TRANSPORT INFORMATION**

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Transport only in accordance with the following regulations:

ADR/RID            UN1263 Paint, 3, II

IMDG	Class	3	Subsidiary Class
	Proper Shipping Name	PAINT	
	UN No	1263	
	Ems	F-E, S-E	
	Packaging Group	II	
	Marine Pollutant	No	

ICAO/IATA	Shipping Name	PAINT
	Class	3
	UN No	1263
	Packaging Group	II

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### **15. REGULATORY INFORMATION**

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**PRODUCT CODE:** PG-6-MGN4

In accordance with EC Directive 88/379/EEC and the Chemicals (Hazard Information and Packaging for Supply) Regulations SI /3247/1994 this product is labeled as follows:

**Symbol(s)**

Toxic

**Contains:**

**R. Phrases:**

May impair fertility.

May cause harm to the unborn child.

Flammable.

Harmful by inhalation, in contact with skin and if swallowed.

**S. Phrases:**

Attention - Avoid Exposure - obtain special instructions before use.

Do not breathe vapour/spray.

Wear suitable protective clothing, gloves and eye/face protection.

Use only in well-ventilated areas.

**P. Phrases:**

Restricted to professional users.

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### 16. OTHER INFORMATION

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The information contained herein is based on data considered accurate, but no warranty is expressed or implied. Users assume all responsibility and liability for loss or damage arising from the handling and use of our products, whether used alone or in combinations. Although hazardous materials are listed, we cannot guarantee these are the only ones that exist.

# AXONHENTZEN Aerospace

## MATERIAL SAFETY DATA SHEET

24-hour Emergency Phone: 1-800-424-9300

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PRODUCT CODE: PH-34

### 1. IDENTIFICATION OF THE PREPARATION AND COMPANY

PRODUCT NAME: POLYURETHANE CURING SOLUTION  
PRODUCT CODE: PH-34

HMIS CODES: H C F R P  
2 3 1 G

MANUFACTURER'S NAME: AXONHENTZEN Aerospace

ADDRESS : 307 Echelon Rd  
Greenville, SC 29605

INFORMATION PHONE : 864.299.2819

DATE GENERATED: 6/30/2010

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg	@ TEMP	WEIGHT PERCENT
ALIPHATIC POLYISOCYANATE	28182-81-2	7.5 E-5	68 F	40% to 60%
TERT BUTYL ACETATE ACGIH - 200ppm	540-88-5	34	77 F	10% to 25%
METHYL ETHYL KETONE ACGIH TLV: 300 PPM - STEL OSHA PEL: 300 PPM - STEL OSHA PEL: 200 PPM - TWA	78-93-3	70	68	10% to 25%
N-BUTYL ACETATE OSHA PEL: 150 PPM, ACGIH TLV: 150 PPM	123-86-4	1.25	68 F	1% to 10%
*METHYL NORMAL AMYL KETONE ACGIH TLV: 50 PPM SSHA 100 PPM TWA	110-43-0	2.80	68 F	1% to 10%
*CYCLOHEXANONE OSHA VPEL: 25 PPM TWA ACGIH TLV: 25 PPM TWA	108-94-1	2	68 F	1% to 10%
*METHYL ISOBUTYL KETONE OSHA VPEL: 50 PPM - TWA OSHA VPEL: 75 PPM - STEL ,ACGIH TLV: 50 PPM - TWA ,ACGIH TLV: 75 PPM - STEL	108-10-1	16	68 F	1% to 10%
2,4 PENTANEDIONE ACGIH TLV: 20 PPM	123-54-6	6.86	68 F	1% to 10%
*TOLUENE OSHA PEL: 100 PPM -TWA OSHA PEL: 150 PPM - STEL ACGIH TLV: 50 PPM - TWA (SKIN) ACGIH TLV 150 PPM - STEL (SKIN)	108-68-3	22.00	68 F	1% to 10%
TRADE SECRET INGREDIENT		1	212 F	0% to 1%

\* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

### 3. HAZARD IDENTIFICATION OF THE PRODUCT

May impair fertility. May cause harm to the unborn child. Flammable. Harmful by inhalation, in contact with skin and if swallowed.

Further information is given in section 11.

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#### 4. FIRST AID MEASURES

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##### EMERGENCY AND FIRST AID PROCEDURES

Eye Contact: Flush with water for 15 minutes. Consult a physician. Skin Contact: Wash affected area with soap and water. Remove contaminated clothing. Consult a physician. Inhalation: Remove to fresh air. Consult a physician. Ingestion: Drink water to dilute. Do not induce vomiting. Consult a physician.

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#### 5. FIRE-FIGHTING MEASURES

---

**EXTINGUISHING MEDIA:** FOAM, CO2, DRY CHEMICAL, WATER FOG

##### SPECIAL FIREFIGHTING PROCEDURES

Water spray may be ineffective. If water is used, fog nozzles are preferred. Water may be used to cool closed containers to prevent pressure build-up and possible auto-ignition or explosion when exposed to extreme heat.

##### UNUSUAL FIRE AND EXPLOSION HAZARDS

Keep containers tightly closed. Isolate from heat, sparks, electrical equipment and open flames. Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. Self-contained breathing apparatus should be worn by firefighters.

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#### 6. ACCIDENTAL RELEASE MEASURES

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##### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Evacuate non-essential personnel. Remove all sources of ignition. Ventilate the area. Equip clean-up crew with self-contained breathing apparatus. Dike spill. Cover with sawdust, vermiculite or Fuller's earth. Collect in open containers.

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#### 7. HANDLING AND STORAGE

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##### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Do not store above 100 degrees F. Store in large quantities only in buildings designed to comply with OSHA 1910.106. Keep containers closed and upright to prevent leakage. Do not store or use near heat, sparks or flames.

##### OTHER PRECAUTIONS

Avoid prolonged or repeated contact with vapor or spray mist during application or curing.

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#### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

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##### Engineering Measures

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapour below occupational exposure limits suitable respiratory protection must be worn.

##### Personal Protection

##### Respiratory Protection

Where overspray is present, a positive pressure air supplied respirator (TC19C NIOSH/MSHA approved) should be worn. If unavailable, a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2 may be effective. Follow respirator manufacturer's directions for use. Wear the respirator for the entire time of spraying and until all vapors and mists are gone. NO PERSONS SHOULD BE ALLOWED IN THE AREA WHERE THIS

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PRODUCT IS BEING USED UNLESS EQUIPPED WITH THE SAME RESPIRATOR PROTECTION RECOMMENDED FOR THE PAINTERS. When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

### **Eye Protection**

Wear safety eyewear, e.g. safety spectacles, goggles or visors to protect against the splash of liquids.

### **Hand Protection**

Nitrile rubber gloves should be worn during mixing and application.

### **Skin Protection**

Overalls which cover the body, arms and legs should be worn. Skin should not be exposed. Barrier creams may help to protect areas which are difficult to cover such as the face and neck. They should however not be applied once exposure has occurred. Petroleum jelly based types such as Vaseline should not be used. All parts of the body should be washed after contact.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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**BOILING POINT:** 175.0 F

**BOILING RANGE:** 175.0 F TO 446.0 F

**FLASH POINT °F:** 15.80

**METHOD USED:** TCC

**COATING V.O.C.:** 364.03 G/L

**MATERIAL V.O.C.:** 309.38 G/L

**SPECIFIC GRAVITY (H<sub>2</sub>O=1):** 1.0069

**VAPOR DENSITY:** HEAVIER THAN AIR

**EVAPORATION RATE:** SLOWER THAN ETHER

**SOLUBILITY IN WATER:** INSOLUBLE

**APPEARANCE AND ODOR:** OPAQUE WITH ODOR OF SOLVENT

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## 10. STABILITY AND REACTIVITY

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**STABILITY:** STABLE

### **CONDITIONS TO AVOID**

Temperatures above maximum storage temperature. Avoid exposure to heat, sparks, or open flames.

### **INCOMPATIBILITY (MATERIALS TO AVOID)**

Avoid contact with strong oxidizing agents.

### **HAZARDOUS DECOMPOSITION OR BYPRODUCTS**

By fire - CO, CO<sub>2</sub>, nitrogen oxides and traces of HCN, TDI and HDI.

### **HAZARDOUS POLYMERIZATION:**

WILL NOT OCCUR

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## 11. TOXICOLOGICAL INFORMATION

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There are no data available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See Sections 2 and 15 for details.

Exposure to solvent vapour concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.



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### 12. ECOLOGICAL INFORMATION

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There are no data available on the product itself.  
The product should not be allowed to enter drains or water courses.  
The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 199/45/EC and is not classified as dangerous for the environment.

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### 13. DISPOSAL CONSIDERATIONS

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Do not allow into drains or water courses. Wastes and empty containers should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act.

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### 14. TRANSPORT INFORMATION

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Transport only in accordance with the following regulations:  
ADR/RID            UN1263 Paint, 3, II

IMDG	Class	3	Subsidiary Class
	Proper Shipping Name	PAINT	
	UN No	1263	
	Ems	F-E, S-E	
	Packaging Group	II	
	Marine Pollutant	No	
ICAO/IATA	Shipping Name	PAINT	
	Class	3	
	UN No	1263	
	Packaging Group	II	

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### 15. REGULATORY INFORMATION

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In accordance with EC Directive 88/379/EEC and the Chemicals (Hazard Information and Packaging for Supply) Regulations SI /3247/1994 this product is labeled as follows:

**Symbol(s)**

Toxic

**Contains:**

**R. Phrases:**

May impair fertility.  
May cause harm to the unborn child.  
Flammable.  
Harmful by inhalation, in contact with skin and if swallowed.

**S. Phrases:**

Attention - Avoid Exposure - obtain special instructions before use.  
Do not breathe vapour/spray.  
Wear suitable protective clothing, gloves and eye/face protection.  
Use only in well-ventilated areas.

**P. Phrases:**

Restricted to professional users.

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### 16. OTHER INFORMATION

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Aerospace

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The information contained herein is based on data considered accurate, but no warranty is expressed or implied. Users assume all responsibility and liability for loss or damage arising from the handling and use of our products, whether used alone or in combinations. Although hazardous materials are listed, we cannot guarantee these are the only ones that exist.