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**EURAM CHEMICALS LTD  
SAFETY DATA SHEET (EEC)**

**REFERENCE: SD 00257/14  
PRODUCT: K-FLEX PG**

Revision date - Supercedes

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY**

<b>Product / trade name:</b>	<b>K-FLEX PG</b>
<b>Chemical Description:</b>	<b>Not applicable</b>
<b>Supplier</b>	<b>Euram Chemicals Ltd PO Box 346 Marlow SL7 1WH</b>
<b>Tel</b>	<b>44 (0) 1628 472848</b>
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<b>Emergency information</b>	<b>44 (0) 7785 267921</b>

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture:**

Product classification according to Regulation (EC) 1272/2008 (CLP) as amended:

Not classified as hazardous under any GHS hazard class.

Product classification according to Directive 67/548/EEC or 1999/45/EC as amended:

Not a hazardous substance or preparation according to EC Directives 67/548/EEC or 1999/45/EC.

**2.2. Label elements:**

Product labeling according to Regulation (EC) 1272/2008 (CLP) as

amended: Hazard pictogram(s): Not Applicable

Signal word: Not Applicable

Hazard statements: Not Applicable

Precautionary statements: Not Applicable

Supplemental information: No Additional Information

**2.3. Other hazards:**

PBT/vPvB criteria: Not Available  
Other hazards: No Additional Information

See Section 11 for toxicological information.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Weight%</u>	<u>EC Number</u>	<u>Symbols</u> <u>(67/548/EEC)</u>	<u>EU R Phrases</u> <u>(67/548/EEC)</u>
0019224-26-1	1,2-Propanediol dibenzoate	75-100	242-894-7		
<u>CAS-No.</u>	<u>Chemical Name</u>	<u>REACH Registration No.</u>	<u>Classification</u> <u>(EC 1272/2008)</u>	<u>H Statements</u> <u>(EC 1272/2008)</u>	
0019224-26-1	1,2-Propanediol dibenzoate	Not Available	Not classified		

See Section 16 for full text of R (Risk) phrases and H (Hazard) statements.

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non-hazardous, and/or present at amounts below reportable limits.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures:

General: If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

Eye contact: Any material that contacts the eye should be washed out immediately with water. Get medical attention if symptoms occur.

Skin contact: Wash the affected area thoroughly with plenty of soap and water. Get medical attention if symptoms occur.

Inhalation: If affected, remove to fresh air. Get medical attention if symptoms occur.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse out the mouth with water. Get medical attention immediately.

Protection of first aid responders: Wear proper personal protective clothing and equipment.

#### 4.2. Most important symptoms and effects, both acute and delayed:

Irritation. Pre-existing skin problems may be aggravated by prolonged or repeated contact. See section 11 for additional information.

#### 4.3. Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media:

Suitable: Use water spray, ABC dry chemical, foam or carbon dioxide. Water or foam may cause frothing. Use water to keep fire-exposed containers cool. Water spray may be used to flush spills away from exposures.

Unsuitable: None known.

#### 5.2. Special hazards arising from substance or mixture:

Unusual fire/explosion hazards: Product is not considered a fire hazard, but will burn if ignited. Closed container may rupture (due to build up in pressure) when exposed to extreme heat.

Hazardous combustion products: Irritating or toxic substances will be emitted upon burning, combustion or decomposition. See section 10 (10.6 Hazardous decomposition products) for additional information.

#### 5.3. Advice for fire-fighters:

Wear self-contained breathing apparatus (SCBA) equipped with a full facepiece and operated in a pressure-demand mode (or other positive pressure mode) and approved protective clothing. Personnel without suitable respiratory protection must leave the area to prevent significant exposure to hazardous gases from combustion, burning or decomposition. In an enclosed or

poorly ventilated area, wear SCBA during cleanup immediately after a fire as well as during the attack phase of firefighting operations.

See section 9 for additional information.

### SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures:

See Section 8 for recommendations on the use of personal protective equipment. If spilled in an enclosed area, ventilate. Eliminate ignition sources.

6.2. Environmental precautions:

Do not flush liquid into public sewer, water systems or surface waters.

6.3. Methods and material for containment and cleaning up:

Contain by diking with sand, earth or other non-combustible material. Wear proper personal protective clothing and equipment. Absorb spill with an inert material. Place into labeled, closed container; store in safe location to await disposal. Change contaminated clothing and launder before reuse.

6.4. References to other sections:

See Section 8 for recommendations on the use of personal protection and Section 13 for waste disposal.

### SECTION 7: Handling and storage

7.1. Precautions for safe handling:

As with any chemical product, use good laboratory/workplace procedures. Do not cut, puncture, or weld on or near the container. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well-ventilated conditions. Avoid eye contact. Avoid repeated or prolonged skin contact. Avoid inhalation of aerosol, mist, spray, fume or vapor. Avoid drinking, tasting, swallowing or ingesting this product. Wash contaminated clothing before reuse. Provide eyewash fountains and safety showers in the work area.

7.2. Conditions for safe storage, including any compatibilities:

Keep away from heat, sparks and open flames. Store cool and dry, under well-ventilated conditions. Store this material away from incompatible substances (see section 10). Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use. Empty container contains residual product which may exhibit hazards of product. Do not reuse empty container without commercial cleaning or reconditioning. Plasticizer products will soften plastic materials and as a result they should not be transported in piping systems constructed from these materials.

7.3. Specific end use(s) :

No Additional Information.

### SECTION 8: Exposure controls / personal protection

8.1. Control parameters:

Occupational exposure limits

<u>Chemical Name</u>	<u>EU OELV</u>	<u>EU IOELV</u>	<u>ACGIH - TWA</u>	<u>ACGIH - STEL</u>
1,2-Propanediol dibenzoate	N/E	N/E	N/E	N/E
<u>Chemical Name</u>	<u>UK WEL</u>	<u>Ireland OEL</u>		
1,2-Propanediol dibenzoate	N/E	N/E		

N/E=Not established (no exposure limits established for the listed substances for listed country/region/organization).

Derived No Effect Levels (DNELs) – Workers:

<u>Chemical Name</u>	<u>Inhalation-Acute (local)</u>	<u>Inhalation-Acute (systemic)</u>	<u>Inhalation-Long Term (local)</u>	<u>Inhalation-Long Term (systemic)</u>
1,2-Propanediol dibenzoate	N/E	N/E	N/E	N/E
<u>Chemical Name</u>	<u>Dermal-Acute (local)</u>	<u>Dermal-Acute (systemic)</u>	<u>Dermal-Long Term (local)</u>	<u>Dermal-Long Term (systemic)</u>
1,2-Propanediol dibenzoate	N/E	N/E	N/E	N/E

Predicted No Effect Concentration (PNECs):

SDS Name: Kalama\* K-FLEX\* PG

<u>Chemical Name</u>	<u>Freshwater</u>	<u>Marine water</u>	<u>Intermittent releases</u>	<u>Soil</u>
1,2-Propanediol dibenzoate	N/E	N/E	N/E	N/E
<u>Chemical Name</u>	<u>Sediment (freshwater)</u>	<u>Sediment (marine)</u>	<u>STP</u>	<u>Oral</u>
1,2-Propanediol dibenzoate	N/E	N/E	N/E	N/E

N/E=Not established; N/A=Not applicable (not required); bw=body weight; dw=dry weight; ww=wet weight.

8.2. Exposure controls:

Appropriate engineering controls: Always provide effective general and, when necessary, local exhaust ventilation to draw spray, aerosol, fume, mist and vapor away from workers to prevent routine inhalation. Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS.

Individual protection measures, such as personal protective equipment: Eye/face protection: Wear eye protection.

Hand protection: Avoid skin contact when mixing or handling the material by wearing impervious and chemical resistant gloves. In case of prolonged immersion or frequently repeated contact, gloves with breakthrough times greater than 240 minutes (protection class 5 or greater) are recommended. For brief contact or splash applications, gloves with breakthrough times of 10 minutes or greater are recommended (protection class 1 or greater). The protective gloves to be used must comply with the specifications of the EC directive 89/686/EEC and the resultant standard EN 374. Suitability and durability of a glove is dependent on usage (e.g. frequency and duration of contact, other chemicals which may be handled, chemical resistance of glove material and dexterity). Always seek advice of the glove supplier as to the most suitable glove material.

Skin and body protection: Use good laboratory/workplace procedures including personal protective clothing: labcoat, safety glasses and protective gloves.

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Further information: Eyewash fountains and safety showers are recommended in the work area.

Environmental exposure controls: See Sections 6 and 12.

**SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties:

Form:	Liquid	pH:	Not Available
Appearance:	Colorless to pale yellow	Relative density:	1.14
Odour:	Slight aromatic	Partition coefficient (n-octanol/water):	3.73 (calculated)
Odour threshold:	Not Available	% Volatile by weight:	5.8%
Solubility in water:	Slight	VOC:	5.8%
Evaporation rate:	Slower than n-butyl acetate	<b>Boiling point °C:</b>	ASTM D2369 157°C @ 5 mm Hg
<b>Vapour pressure:</b>	<0.1 mm Hg @ 20°C	<b>Boiling point °F:</b>	315°F @ 5 mm Hg
<b>Vapour density:</b>	Heavier than air	<b>Flash point:</b>	193°C (379°F) ASTM D-92
<b>Viscosity:</b>	71 cSt @ 25°C	<b>Autoignition temperature:</b>	Not Available
<b>Melting point/Freezing point:</b>	Not Available	<b>Flammability (solid, gas):</b>	Not Applicable (liquid)
<b>Oxidising properties:</b>	Not oxidizing	<b>Flammability or explosive limits:</b>	<b>LFL/LEL</b> Not Available <b>UFL/UEL</b> Not Available
<b>Explosive properties:</b>	Not explosive	<b>Surface tension:</b>	43.5 dynes/cm @25°C (ASTM D1331)
<b>Decomposition temperature:</b>	Not Available		

9.2. Other information:

Amounts specified are typical and do not represent a specification.

**SECTION 10: Stability and reactivity**

10.1. Reactivity:

SDS Name: Kalama\* K-FLEX\* PG

None known.

**10.2. Chemical stability:**

This product is stable.

**10.3. Possibility of hazardous reactions:**

Hazardous polymerization will not occur.

**10.4. Conditions to avoid:**

Excessive heat and ignition sources.

**10.5. Incompatible materials:**

Avoid contact with strong oxidizing agents.

**10.6. Hazardous decomposition products:**

Carbon dioxide, carbon monoxide and hydrocarbons.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects:**

**Information on likely routes of exposure:**

**General:** Caution must be exercised through the prudent use of protective equipment and handling procedures to minimize exposure.

**Eyes:** May cause eye irritation.

**Skin:** May cause skin irritation.

**Inhalation:** High airborne concentrations of vapors resulting from heating, misting or spraying may cause irritation of the respiratory tract and mucous membranes.

**Ingestion:** May be harmful if swallowed. Ingestion may cause irritation.

**Acute toxicity information:** Not classified (based on available data, the classification criteria are not met).

<u>Chemical Name</u>	<u>Inhalation LC50</u>	<u>Species</u>	<u>Oral LD50</u>	<u>Species</u>	<u>Dermal LD50</u>	<u>Species</u>
1,2-Propanediol dibenzoate	>200 mg/L (4 hours, similar materials)	Rat/ adult	3616 mg/kg (similar materials)	Rat/ adult	>2000 mg/kg (similar materials)	Rabbit/ adult

**Skin corrosion/irritation:** Not classified (based on available data, the classification criteria are not met).

<u>Chemical Name</u>	<u>Skin irritation</u>	<u>Species</u>
1,2-Propanediol dibenzoate	Non-irritant	Similar materials

**Serious eye damage/irritation:** Not classified (based on available data, the classification criteria are not met).

<u>Chemical Name</u>	<u>Eye irritation</u>	<u>Species</u>
1,2-Propanediol dibenzoate	Non-irritant	Similar materials

**Respiratory or skin sensitization:** Not classified (based on available data, the classification criteria are not met).

<u>Chemical Name</u>	<u>Skin sensitisation</u>	<u>Species</u>
1,2-Propanediol dibenzoate	Non-sensitizer	Similar material(s)

**Carcinogenicity:** Not classified.

**Germ cell mutagenicity:** Not classified.

**Reproductive toxicity:** Not classified.

**Specific target organ toxicity (STOT) - single exposure:** Not classified.

**Specific target organ toxicity (STOT) - repeated exposure:** Not classified.

**Aspiration hazard:** Not classified.

**Other toxicity information:** No additional information available.

## SECTION 12: Ecological information

### 12.1. Toxicity:

No ecological testing has been conducted on this product.

<u>Chemical Name</u> 1,2-Propanediol dibenzoate	<u>Fish 96 hour LC50</u> N/E	<u>Fish 96 hour LC50</u> N/E	<u>Fish Chronic NOEC</u> N/E
<u>Chemical Name</u> 1,2-Propanediol dibenzoate	<u>Invertebrates 48 hour EC50</u> N/E	<u>Invertebrates 24 hour EC50</u> N/E	<u>Invertebrates Chronic NOEC</u> N/E
<u>Chemical Name</u> 1,2-Propanediol dibenzoate	<u>Algae 96 hour EC50</u> N/E	<u>Algae 72 hour EC50</u> N/E	<u>Algae Chronic NOEC</u> N/E

### 12.2. Persistence and degradability:

Expected to readily biodegrade, based on similar material(s).

<u>Chemical Name</u> 1,2-Propanediol dibenzoate	<u>Biodegradation</u> Expected to be readily biodegradable
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### 12.3. Bioaccumulative potential:

Not expected to bioaccumulate.

<u>Chemical Name</u> 1,2-Propanediol dibenzoate	<u>Bioconcentration Factor (BCF)</u> N/E	<u>Log Kow</u> 3.73 (calculated)
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### 12.4. Mobility in soil:

No specific information available.

<u>Chemical Name</u> 1,2-Propanediol dibenzoate	<u>Mobility in soil (Koc/Kow)</u> N/E
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### 12.5. Results of PBT and vPvB assessment:

Not Available

### 12.6. Other adverse effects:

No additional information available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods:

Dispose of unused contents (incineration) in accordance with national and local regulations. Dispose of container in accordance with national and local regulations. Ensure the use of properly authorized waste management companies, where appropriate.

See Section 8 for recommendations on the use of personal protective equipment.

## SECTION 14: Transport information

The information below is provided to assist in documentation. It may supplement the information on the package. The package in your possession may carry a different version of the label depending on the date of manufacture. Depending on inner packaging quantities and packaging instructions, it may be subject to specific regulatory exceptions.

**14.1. UN number:** N/A

**14.2. UN proper shipping name:**

Not regulated - See Bill of Lading for Details

**14.3. Transport hazard class(es):**

**U.S. DOT hazard class:** N/A

**Canada TDG hazard class:** N/A

**Europe ADR/RID hazard class:** N/A

**IMDG Code (ocean) hazard class:** N/A

**ICAO/IATA (air) hazard class:** N/A

A "N/A" listing for the hazard class indicates the product is not regulated for transport by that regulation.

**14.4. Packing group:** N/A

**14.5. Environmental hazards:**

SDS Name: Kalama\* K-FLEX\* PG

**Marine pollutant:** Not Applicable

**Hazardous substance (USA):** Not Applicable

**14.6. Special precautions for user:**

Not Applicable

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:**

Not Applicable

**SECTION 15: Regulatory information**

**15.1. Safety, health and environment regulations/legislation specific for the substance or mixture:**

**Europe REACH (EC) 1907/2006:** Applicable components are pre-registered, exempt or otherwise compliant.

**EU Authorizations and/or restrictions on use:** Not Applicable

**Other EU information:** No Additional Information

**National regulations:** No Additional Information

**Chemical inventories:**

<u>Regulation</u>	<u>Status</u>
European Inventory of Existing Chemical Substances (EINECS):	Y
European List of Notified Chemical Substances (ELINCS):	N
U.S. Toxic Substances Control Act (TSCA):	Y

A "Y" listing indicates all intentionally added components are either listed or are otherwise compliant with the regulation. A "N" listing indicates that for one or more components: 1) there is no listing on the public inventory; 2) no information is available; or 3) the component has not been reviewed.

**15.2. Chemical safety assessment:**

Not Applicable

**SECTION 16: Other information**

**Reason for revision:** Changes in Section(s): Not Applicable

**Evaluation method for classification of mixtures:** Not Applicable (substance)

**Legend:**

\* : Trademark owned by Emerald Performance Materials, LLC.

ACGIH: American Conference of Governmental Industrial Hygienists

EU OELV: European Union Occupational Exposure Limit Value

EU IOELV: European Union Indicative Occupational Exposure Limit Value

N/A: Not Applicable

N/E: None Established

STEL: Short Term Exposure Limit

TWA: Time Weighted Average (exposure for 8-hour workday)

**Users Responsibility/Disclaimer of Liability:**

The information set forth herein is based on our current knowledge, and is intended to describe the product solely with respect to health, safety and the environment. As such, it must not be interpreted as a guarantee of any specific property of the product. As a result, the customer shall be solely responsible for deciding whether said information is suitable and beneficial.

**Annex**

Not Applicable

Euram Chemicals Ltd  
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