



EURAM CHEMICALS LTD

SAFETY DATA SHEET (EEC)

Reference: SD 00227/08

Revised: 24/01/13

Product: K-FLEX DP

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

PRODUCT NAME / TRADENAME: K-FLEX DP

CHEMICAL DESCRIPTION: dipropylene glycol dibenzoate

SUPPLIER	Euram Chemicals Ltd
Street/PO Box no	P O Box 346
Post code/city	Marlow SL7 1WH
Telephone	44 (0) 1628 472848
Fax no	44 (0) 1628 890095
Emergency information	44 (0) 7785 267921

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

Product Classification according to regulation (EC) 1272/2008 (CLP)

Hazardous to the aquatic environment – Chronic category 3, H412

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

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CLASSIFICATION R51/53

2.2 Label elements:

Product labelling according to Regulation (EC) 1272/2008 (CLP):

Hazard Pictogram: not applicable

Signal word: not applicable

Hazard statements: H412 Harmful to aquatic life with long lasting effects

Precautionary statements: P273 Avoid release to the environment

P501 Dispose of contents/container in accordance with local, regional and international regulations

Product labelling according to Directive 67/548/EEC or 1999/45/EC



Risk phrases: R51/53 Toxic to the aquatic environment, may cause long-term adverse effects in the aquatic environment

Safety phrases: S61 Avoid release to the environment

2.3 Other hazards:

PBT/vPvB criteria: This product does not meet these classification criteria

3. COMPOSITION / INFORMATION ON INGREDIENTS

Name	EC No	CAS No	Content	Classification
Dipropylene glycol monobenzoate		32686-95-6	10-30%	-
Dipropylene glycol dibenzoate	248-258-5	27138-31-4	70-90%	N;R51/53

The full text for all R-Phrases is displayed in Section 16. the above figures are typical values and do not represent a specification

4. FIRST AID MEASURES

4.1 Description of first aid measures:

GENERAL INFORMATION

Remove affected person from source of contamination.

INHALATION

General first aid, rest, warmth and fresh air.

INGESTION

If swallowed, do not induce vomiting.

Never give anything by mouth to an unconscious person. Rinse mouth thoroughly and seek medical attention if discomfort persists.

SKIN CONTACT

Wash skin thoroughly with soap and water. Remove contaminated clothing and shoes. Get medical attention if irritation continues.

Launder clothing and clean shoes thoroughly before re-use. Use appropriate skin cream to prevent drying of skin.

EYE CONTACT

Check for contact lenses, which must be removed before eyes are rinsed.

Promptly rinse eyes with plenty of clean water while lifting the eyelids.

Continue to rinse for 15 minutes and until the eyes are free of all contamination.

Get medical attention if any discomfort or irritation persists.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Foam, carbon dioxide or dry powder only

5.2 Special fire-fighting procedure

Do not use high-pressure water, as this will spread burning material.

SPECIFIC HAZARDS

Fire can emit clouds of smoke, which may contain toxic vapours, gases and fumes. Products of decomposition/combustion include carbon monoxide (CO) and carbon dioxide (CO₂).

5.3 Protective measures in fire

Self-contained breathing apparatus and fully protective clothing must be worn in case of fire. Keep all unnecessary personnel away.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions

Eliminate all naked flames or other sources of ignition. Do not smoke. Use protective gloves, goggles and suitable protective clothing. Keep unnecessary people at a safe distance. In case of spills, beware of slippery floors and surfaces.

6.2 Environmental precautions

Contain spillages with sand, earth or any suitable absorbent material. Prevent discharge into drains, water courses or onto the ground.

6.3 Spill Clean-up methods

Absorb in vermiculite, sand or other absorbent inert material. Place into clearly labelled container for recovery and disposal (see section 13). Rinse site with copious amounts of water, which should not be allowed into drains, sewers or water courses.

7. HANDLING AND STORAGE

7.1 Usage precautions

Avoid inhalation of vapours/spray and contact with skin and eyes. Avoid prolonged or repeated contact. Use suitable protective goggles, gloves and clothing (see section 8). Take care when handling and opening container.

7.2 Storage precautions

Store in tightly closed original container in a well-ventilated place. Store away from oxidising materials. Keep away from food, drink and animal feeding stuffs.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters:

Occupational Exposure limits:

Chemical name	EU OELV	EU IOULV	ACGIH – TWA	ACGIH –STEL	UKWELs
Dipropylene glycol dibenzoate	N/E	N/E	N/E	N/E	N/E

Derived No Effect Levels (DNELs) – Workers

Inhalation – Acute(Local)	Acute(Systemic)	Long-term(Local)	Long-term(Systemic)
---------------------------	-----------------	------------------	---------------------

Dipropylene glycol dibenzoate	N/E	35.08mg/m ³	N/E	8.8mg/m ³
-------------------------------	-----	------------------------	-----	----------------------

Dermal	Acute (Local)	Acute(Systemic)	Long-term(Local)	Long-term(Systemic)
--------	---------------	-----------------	------------------	---------------------

Dipropylene glycol dibenzoate	N/E	170mkg bw/day	N/E	10mg/kg bw/day
-------------------------------	-----	---------------	-----	----------------

Predicted No Effect Concentration (PNECs)

Dipropylene glycol dibenzoate

Freshwater	Marine water	Intermittent releases	Sediment(Freshwater)
3.7ug/L	0.37ug/L	37ug/L	1.49mg/kg sediment dw
Sediment(Marine)	Soil	STP	Oral
1.49mg/kg sediment dw	1mg/kg soil dw	10mg/L	333mg/kg food

N/E is not established; bw is bodyweight; dw is dryweight

8.2 Exposure Controls:

ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

RESPIRATORY EQUIPMENT

If ventilation is insufficient, suitable respiratory protection must be provided.

HAND PROTECTION

Protective gloves are recommended.

The actual level of protection provided by protective gloves can be difficult to assess. Effective breakthrough times should be used with care and a margin of safety should be applied. HSE guidance recommends a safety factor of 75% be applied to times obtained by laboratory tests.

Seek advice from manufacturer or supplier.

Personal hygiene is a factor in effective hand care. Gloves should only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly and a non-perfumed moisturiser applied.

EYE PROTECTION

Wear eye goggles / face shield. Provide eyewash station.

ENVIRONMENTAL EXPOSURE CONTROLS

Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

9. PHYSICAL AND CHEMICAL PROPERTIES

COLOUR	Light straw
ODOUR	Mild ester
SOLUBILITY IN WATER	negligible
EVAPORATION RATE	<1
VAPOUR PRESSURE	<0.1mm Hg@25 °C
VAPOUR DENSITY	11.6 (Air=1)
MELT POINT	-5°C
BOILING POINT (°C)	230°C @ 5mn HG
RELATIVE DENSITY	1.13
VISCOSITY	35 cSt 40°C
FLASH POINT (°C)	>210°C ASTM D-92
SURFACE TENSION	44.4dynes/cm@ 25°C (ASTM D1331)
PARTITION COEFFICIENT	>3 - >4
VOC	4.1% (ASTM D2369)
PH	N/A

10. STABILITY AND REACTIVITY

10.1 Reactivity

None

10.2 Stability

Stable under normal conditions of storage and use.

10.3 Hazardous polymerisation

Will not occur under normal conditions.

10.4 Conditions/Materials to avoid

Strong oxidising substances and excessive heat

10.5 Incompatible materials

Avoid strong acids, bases, phenols and oxidising agents.

10.6 Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO₂) and hydrocarbons

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Information on likely routes of exposure:

General: No additional information

Eyes: May cause eye irritation

Skin: May cause skin irritation

Inhalation: High airborne concentrations of vapours arising 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 were not met)

Chemical name	LC50 inhalation	Species	LD50 Oral	Species	LD50 Skin	Species
Diropylene glycol dibenzoate	>200mg/L(Aerosol 4hrs)	Rat/adult	3914mg/kg	Rat/adult	>2000mg/kg	Rat/adult
	LC50 Inhalation	Species	LD50 Oral	Species	LD50 Skin	Species
	N/E		4462mg/kg	Mouse	>2000mg/kg	Rabbit/adult

Corrosion/Irritation/Sensitization Information

Skin corrosion/irritation: Not classified (based on available data)

Serious eye damage/irritation: Not classified(based on available data)

Respiratory or skin sensitisation:Not classified (based on available data)

Carcinogenicity/Mutagenicity/Reproductive toxicity information:

Carcinogenicity: Not classified(based on available data)

Germ cell mutagenicity: Not classified(based on available data)

Reproductive toxicity: Not classified(based on available data)

Specific target organ toxicity (STOT):

STOT single exposure: Not classified(based on available data)

STOT repeated exposure: Not classified(based on available data)

Aspiration hazard: Not classified(based on available data)

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Dipropylene glycol dibenzoate

LC 50, 96 Hrs, FISH mg/l 3.7
EC 50, 48 Hrs, DAPHNIA, mg/l 19.
IC 50, 72 hrs, ALGAE, mg/l 1.1

DEGRADABILITY

Readily biodegradable. (OECD 301B)

BIOACCUMULATION POTENTIAL:

Bioaccumulation factor (BCF)

>200L/kg

Log Kow

3.9 (20°C)

WATER HAZARD CLASSIFICATION

WGK 2

13. DISPOSAL CONSIDERATIONS

GENERAL INFORMATION

Product is hazardous waste. Do not allow into drains, sewers or water courses.
Disposal must be by means of a licensed waste contractor.

DISPOSAL METHODS

Incinerate in suitable combustion chamber.

14. TRANSPORT INFORMATION

GENERAL This product is not Classified for transport under ADR road transport

Class:N/A UN :N/A Packing Group: N/A

ADR: N/A IATA: N/A IMDG: N/A

15. REGULATORY INFORMATION

EU Authorisations and/or restrictions on use: Not applicable

Other EU information: No additional information

Chemical inventories:

Regulation

European inventory of existing substances (EINECS)

European List of Notified Chemical Substances (ELINCS)

European REACH (EC) 1907/2006

Status

Yes

No

Yes

16. **OTHER INFORMATION**

Risk sections in full (section 3)

R51/53 Toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.

Hazard (H) Statements in full (section 3)

H412 Harmful to aquatic life with long-lasting effects

Evaluation method for classification of mixtures: Calculation method

This information is given as a guide only and are typical values for the product described

-----O-----