SAFETY DATA SHEET
PRODUCT NAME: EDM 244

Date of issue: 29/04/2016 Revision date: 29/04/2016 Supersedes: 11/04/2016 Version: 2.2

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

1.1. Product identifier

Product form:	Mixture
Trade name:	EDM 244™
Product code:	800/10237

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/preparation:	Dielectric machining fluid

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Erodex (UK) Ltd
Park Road, Halesowen,
West Midlands, B63 2RH

1.4. Emergency telephone number

Emergency number:	(613) 996-6666 (24 hours)(collect)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Carc. 1B	H350
Asp. Tox. 1	H304
Aquatic Chronic 3	H412

Full text of H-statements: see section 16

2.2. Label elements

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

Hazard pictograms (CLP)

Signal word (CLP):	Danger
Hazardous ingredients:	Alkanes, C14-16, Distillates (petroleum), hydrotreated middle
Hazard statements (CLP):	H304- May be fatal if swallowed and enters airways H350- May cause cancer H412- Harmful to aquatic life with long lasting effects
Precautionary statements (CLP):	P201- Obtain special instructions before use P281- Use personal protective equipment as required P301+P310- IF SWALLOWED: Immediately call a doctor, a POISON CENTER P308+P313- IF exposed or concerned: Get medical advice/ attention P331- Do NOT induce vomiting P501- Dispose of contents/container to comply with applicable local, national and international regulation.

2.3. Other hazards

No additional information available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product Identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), hydrotreated middle	(CAS No.) 64742-46-7 (EC no) 265-148-2 (EC index no) 649-221-00-X REACH No.: 01-2119489867-12-xxxx	1-5	Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Carc. 1B, H350 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Alkanes, C14- 16	(CAS No) 90622-46-1 (EC no) 292-448-0	90-100	Asp. Tox. 1, H304

Full text of R-, H- and EUH-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

First-aid measures general:	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation:	Allow victim to breathe fresh air. Allow the victim to rest. Seek medical attention immediately.
First-aid measures after skin contact:	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation persists, seek medical attention.
First-aid measures after eye contact:	Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion:	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries after inhalation:	High concentration of vapours may induce: headache, dizziness, drowsiness, nausea and vomiting.
Symptoms/injuries after skin contact:	May cause skin irritation.
Symptoms/injuries after eye contact:	May cause eye irritation.
Symptoms/injuries after ingestion:	May be fatal if swallowed and enters airways.

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

Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:	Foam. Dry powder. Water spray. Carbon dioxide.
Unsuitable extinguishing media:	Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard:	Combustion generates : carbon oxides (CO and CO2). Fumes. Flammable in presence of open flames, sparks and static discharge.
Reactivity in case of fire:	Stable under normal conditions.

5.3. Advice for fire-fighters

Fire-fighting instructions:	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protective equipment for fire-fighters:	Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

General measures:	Evacuate personnel to a safe area. Provide adequate ventilation to minimize dust and/or vapour concentrations. Do not allow the product to be released into the environment. Relevant water authorities should be notified of any large spillage to water course or drain.

6.1.1. For non-emergency personnel

Protective equipment:	Wear suitable protective clothing gloves, and eye/face protection.
Emergency procedures:	Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment:	Equip clean up crew with proper protection.
Emergency procedures:	Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up:	Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Thoroughly wash the area with water after a spill or leak clean-up. Do not allow to enter into surface water or drains. Consult the appropriate authorities about waste disposal. Collect all waste in suitable and labelled containers and dispose according to local legislation.

6.4. Reference to other sections

For further information refer to section 8: Exposure-controls/personal protection.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Precautions for safe handling:	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to flames, sparks, heat, or other potential ignition sources.
Hygiene measures:	Handle in accordance with good industrial hygiene and safety practices. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Remove all contaminated clothing and footwear. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage condition(s):	Keep only in the original container in a cool, well ventilated place away from: Incompatible materials. Keep away from open flames, hot surfaces and sources of ignition. Keep container closed when not in use.
Incompatible products:	Strong oxidizing agents.
Incompatible materials:	Sources of ignition. Direct sunlight.
Storage temperature:	9 °C
Packaging materials:	Carbon steel. stainless steel. PE (polyethylene). polypropylene. Polyester. Teflon. This material may attack some forms of plastics, rubbers and coatings.

7.3. Specific end use(s)

No additional information available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

2,6-di-tert-butyl-p-cresol (128-37-0)		
Ireland	OEL (8 hours ref) (mg/m³)	10 mg/m³
Ireland	OEL (15 min ref) (mg/m3)	30 mg/m³ (calculated)
United Kingdom	WEL TWA (mg/m³)	10 mg/m³
United Kingdom	WEL STEL (mg/m³)	30 mg/m³ (calculated)

8.2. Exposure controls

Appropriate engineering controls:	Either local exhaust or general room ventilation is usually required. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Personal protective equipment:	Protective goggles. Gloves. Protective clothing. Avoid all unnecessary exposure.
Hand protection:	Wear protective gloves. nitrile. rubber gloves.
Eye protection:	Chemical goggles or safety glasses.
Skin and body protection:	Chemical resistant safety shoes. Wear suitable protective clothing.
Respiratory protection:	An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits.

Other information:	When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Appearance:	Clear.
Colour:	Colourless.
Odour:	Odourless.
Odour threshold:	No data available
pH:	No data available
Relative evaporation rate (butyl acetate=1):	< 0.1
Melting point:	No data available
Freezing point:	<-10 °C
Boiling point:	> 270 °C
Flash point:	> 110 °C
Auto-ignition temperature:	> 220 °C
Decomposition temperature:	No data available
Flammability (solid, gas):	Non flammable
Vapour pressure:	< 1 mm Hg (20°C)
Relative vapour density at 20 °C:	> 1 (Air = 1)
Relative density:	0.73 (water =1)
Solubility:	insoluble. Water: < 0.0022 mg/l (20°C)
Log Pow:	No data available

Viscosity, kinematic:	3 cSt (40°C)
Viscosity, dynamic:	No data available
Explosive properties:	No data available
Oxidising properties:	No data available
Explosive limits:	0.6- 7 vol %

9.2. Other information
No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
Stable under normal conditions of use.

10.2. Chemical stability
Stable under normal conditions of use.

10.3. Possibility of hazardous reactions
Not established.

10.4. Conditions to avoid
Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials
Strong oxidizing agents.

10.6. Hazardous decomposition products
On incomplete combustion releases: fume. Carbon monoxide. Carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects
Acute toxicity: Not classified

Distillates (petroleum), hydrotreated middle (64742-46-7)	
LD50 oral rat	7400 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	1.78 mg/l/4h

Skin corrosion/irritation: Not classified (none of the components is classified for skin corrosion&irritation)

Serious eye damage/irritation:	Not classified (none of the components is classified for eye damage/ irritation)
Respiratory or skin sensitisation:	Not classified (none of the components is classified for respiratory or skin sensitization)
Germ cell mutagenicity:	Not classified (No classification for mutagenicity as none of the components is classified for mutagenicity)
Carcinogenicity:	May cause cancer
Reproductive toxicity:	Not classified (No classification for reproduction as none of the components is toxic for reproduction)
Specific target organ toxicity (single exposure):	Not classified (None of the components shows specific effects in acute toxicity studies requiring classification for Specific Target Organ Systemic Toxicity single exposure)
Specific target organ toxicity (repeated exposure):	Not classified (None of the components show specific effects in acute toxicity studies requiring classification for Specific Target Organ Systemic Toxicity repeated exposure)
Aspiration hazard:	May be fatal if swallowed and enters airways.

EDM 244™	
Viscosity, kinematic	3 mm^2/s (40°C)

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Ecology- general: The product contains environmentally hazardous components and is expected to be toxic to aquatic organisms. Water polluting material. May be harmful to he environment if released in large quantities.

Distillates (petroleum), hydrotreated middle (64742-46-7)	
LC50 fish 1	1.13- 65 mg/l
LC50 fish 2	> 10000 mg/l (Exposure time: 96 h- Species: Pimephales promelas [static])
NOEC chronic fish	0.069 mg/l (Exposure time: 14 days- Species: fish)
NOEC chronic crustacea	0.163 mg/l (Exposure time: 21 days- Species: aquatic invertebrates)

12.2. Persistence and degradability

EDM 244™	
Persistence and degradability	Not readily biodegradable. Inherently biodegradable.

12.3. Bioaccumulative potential

EDM 244™	
Bioaccumulative potential	Expected to have bioaccumulative potential.

12.4. Mobility in soil

EDM 244™	
Ecology- soil	Floats on water.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.
Dispose of contents/container to industrial incineration plant.

Ecology- waste materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (ADR): Not applicable
Proper Shipping Name (IMDG): Not applicable
Proper Shipping Name (IATA): Not applicable
Proper Shipping Name (ADN): Not applicable
Proper Shipping Name (RID): Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR): Not applicable

IMDG

Transport hazard class(es) (IMDG): Not applicable

IATA
Transport hazard class(es) (IATA): Not applicable
ADN
Transport hazard class(es) (ADN): Not applicable
RID
Transport hazard class(es) (RID): Not applicable

14.4. Packing group

Packing group (ADR): Not applicable
Packing group (IMDG): Not applicable
Packing group (IATA): Not applicable
Packing group (ADN): Not applicable
Packing group (RID): Not applicable

14.5. Environmental hazards

Dangerous for the environment: No
Marine pollutant: No
Other information: No supplementary information available

14.6. Special precautions for user

- Overland transport
No data available
- Transport by sea
No data available
- Air transport
No data available
- Inland waterway transport
Not subject to ADN: No
- Rail transport
Carriage prohibited (RID): No

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 environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances
Other information, restriction and prohibition regulations: Compliance with following regulations: Regulation (EC) 1272/2008 as amended. Regulation (EC) 1907/2006 as amended.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

The following sections were revised: 2.1. Classification of the substance or mixture. 3. Composition/ information on ingredients. OR detail contact information is revised . 15. Regulatory information.

Abbreviations and acronyms:

ATE	Acute toxicity estimate
BCF	Bioconcentration factor
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CSR	Chemical Safety Report
GHS	Globally Harmonised System
MSDS	Material Safety Data Sheet
	Overland transport (ADR)
PBT	Persistent, Bioaccumulative and Toxic substance
PEL	Permissible Exposure Level
STEL	Short-Term Exposure Limit
SDS	Safety Data Sheet
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
TLV	Threshold Limit Value
TWA	Time Weighted Average
vPvB	Very Persistent and Very Bioaccumulative
UVCB	Substances of Unknown or Variable composition, Complex reaction products or Biological materials

Other information: None.

Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 1B	Carcinogenicity, Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H332	Harmful if inhaled
H350	May cause cancer
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.