



Safety Data Sheet

Redlegor

Preparation Date 19-Mar-2013

Revision date 21-Feb-2017

Revision Number: 3

1. Identification of the substance/mixture and of the company/undertaking

1.1 Identification of the product

Product code HDI01
Product Description: Redlegor
Pure substance/preparation Preparation

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Recommended use Herbicide

1.3 Details of the Supplier of the Safety Data Sheet

Supplier UPL Europe Ltd
The Centre
Birchwood Park
Warrington
WA3 6YN Cheshire
UK
Tel. : +44 (0) 1925 819999
Fax : +44 (0) 1925 856075
E-mail address info.uk@uniphos.com

1.4 Emergency Telephone Number

Emergency telephone number (CARECHEM 24): +44 (0) 1235 239670

United Kingdom NHS no. 111

2. Hazards Identification

2.1 Classification of the mixture

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

Acute oral toxicity	Category 4 -H302
Serious Eye Damage/Irritation	Category 1 - H318
Chronic aquatic toxicity	Category 2 - H411

For the full text of the H-Statements mentioned in this Section, see Section 16

2.2 Label elements

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



Signal Word

DANGER

Hazard Statements

H302 - Harmful if swallowed

H318 - Causes serious eye damage

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P270 - Do not eat, drink or smoke when using this product

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P280 - Wear protective gloves/ eye protection/ face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P273 - Avoid release to the environment

P501 - Dispose of contents/ container in accordance with national regulation

EU Specific Hazard Statements

EUH401 - To avoid risks to human health and the environment, comply with the instructions for use

2.3 Other Hazards

No information available

3. Composition/information on Ingredients

3.2. MIXTURES

Chemical name	EC No	CAS-No	Weight %	Classification (Dir.67/548)	EU - GHS Substance Classification	REACH No.
2,4-DB (2,4-Dichloro-phenoxybutyric acid)	202-366-9	94-82-6	20 - 30	-	Acute Tox. 4 (H302) Aquatic Chronic 2 (H411)	no data available
MCPA (4-Chloro-o-toloxycetic acid)	202-360-6	94-74-6	1 - 5	-	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 2 (H411)	no data available
Sodium hydroxide	215-185-5	1310-73-2	1 - 5	-	Skin Corr. 1A (H314) Eye Dam. 1 (H318) Met. Corr. 1 (H290)	01-2119457892-27
Potassium hydroxide	215-181-3	1310-58-3	5 - 10	-	Acute Tox. 4 (H302) Skin Corr. 1A (H314)	01-2119487136-33

For the full text of the H-Statements mentioned in this Section, see Section 16

4. First aid measures

4.1 Description of first-aid measures

General advice	Show this safety data sheet to the doctor in attendance Immediate medical attention is required
Eye contact	Keep eye wide open while rinsing Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes Immediate medical attention is required
Skin contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes
Ingestion	Do NOT induce vomiting Never give anything by mouth to an unconscious person Seek immediate medical attention/advice Remove from exposure, lie down Clean mouth with water and drink afterwards plenty of water afterwards Call a physician or poison control center immediately
Inhalation	Move to fresh air Call a physician or poison control center immediately If not breathing, give artificial respiration If breathing is difficult, give oxygen
Protection of First-aiders	Use personal protective equipment Avoid contact with skin, eyes and clothing

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

No information available

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	Carbon dioxide (CO ₂) Dry chemical Water spray alcohol-resistant foam
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Unsuitable extinguishing media	High volume water jet
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5.2 Special hazards arising from the substance or mixture

Special Hazard	Hydrogen chloride Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke)
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5.3 Advice for Firefighters

Wear self-contained breathing apparatus and protective suit

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas
Use personal protective equipment
Keep people away from and upwind of spill/leak

6.2 Environmental Precautions

Prevent further leakage or spillage if safe to do so
Prevent product from entering drains

6.3 Methods and material for containment and cleaning up

Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal

7. Handling and Storage

7.1 Precautions for Safe Handling

Handling

Wear personal protective equipment
Do not breathe vapours or spray mist
Keep out of reach of children

Hygiene Measures

Use only outdoors or in a well-ventilated area

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place
Keep in properly labelled containers
Keep away from direct sunlight
Store away from frost.
Keep away from heat and sources of ignition

7.3 Specific end uses

No information available.

8. Exposure Controls/Personal Protection

8.1 Control Parameters

Exposure Limits

Apply technical measures to comply with the occupational exposure limits

Chemical name	Eu	United Kingdom	France	Spain	Germany
Sodium hydroxide		STEL: 2 mg/m ³	TWA: 2 mg/m ³	STEL: 2 mg/m ³	
Potassium hydroxide		STEL: 2 mg/m ³	STEL: 2 mg/m ³	STEL: 2 mg/m ³	
Component	Italy	Portugal	Netherlands	Finland	Denmark
Sodium hydroxide 1310-73-2 (1 - 5)		Ceiling: 2 mg/m ³		STEL: 2 mg/m ³ Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³
Potassium hydroxide 1310-58-3 (5 - 10)		Ceiling: 2 mg/m ³		STEL: 2 mg/m ³ Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
MCPA (4-Chloro-o-tolyloxyacetic acid)			STEL: 5 mg/m ³ TWA: 1 mg/m ³		
Sodium hydroxide	STEL 4 mg/m ³ TWA: 2 mg/m ³	STEL: 2 mg/m ³ TWA: 2 mg/m ³	STEL: 1 mg/m ³ TWA: 0.5 mg/m ³	Ceiling: 2 mg/m ³	STEL: 2 mg/m ³
Potassium hydroxide	TWA: 2 mg/m ³	TWA: 2 mg/m ³	STEL: 1 mg/m ³ TWA: 0.5 mg/m ³	Ceiling: 2 mg/m ³	STEL: 2 mg/m ³

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

8.2 Exposure Controls

Engineering controls

Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment

Eye protection

Safety glasses with side-shields.

Skin protection

Long sleeved clothing. Chemical resistant apron. Boots. Impervious clothing. Impervious gloves. Neoprene gloves.

Hand protection

Protective gloves.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators
In case of insufficient ventilation wear suitable respiratory equipment

Environmental exposure controls Do not allow material to contaminate ground water system

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	dark brown
Physical state	Liquid
Odor	Phenolic

Property	VALUES	Remarks/ Method
pH	10	(1% aq)
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash Point	> 100 °C	
Flammability (solid, gas)	Not applied	
Relative Density	1.14 g/cm ³	
Solubility in Other Solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity	6.8 mPa.s	
Oxidizing properties	No information available	
Explosive properties	No information available	

9.2 OTHER INFORMATION

VOC Content	No information available
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10. Stability and Reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur. None under normal processing.

10.4 Conditions to avoid

Heat, flames and sparks
To avoid thermal decomposition, do not overheat

10.5 Incompatible Materials

Incompatible with strong acids and bases

10.6 Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapours
Hydrogen chloride
Carbon oxides

11. Toxicological Information

11.1 Information on Toxicological Effects

Acute toxicity

Local effects

Inhalation

There is no data available for this product.

Eye contact

There is no data available for this product.

Skin contact

There is no data available for this product.

Ingestion

There is no data available for this product.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
2,4-DB (2,4-Dichloro-phenoxybutyric acid) 94-82-6	> 667 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 5.75 mg/l
MCPA (4-Chloro-o-tolyloxyacetic acid) 94-74-6		> 2 g/kg (Rabbit)	= 1370 mg/m ³ (Rat) 4 h
Sodium hydroxide 1310-73-2		= 1350 mg/kg (Rabbit)	
Potassium hydroxide 1310-58-3	= 214 mg/kg (Rat)		

Chronic toxicity

Skin Corrosion/Irritation

No skin irritation.

Eye damage/irritation

No eye irritation.

Sensitization

May cause sensitization of susceptible persons.

Carcinogenic effects

No information available

Mutagenic effects

No information available

Reproductive effects

No information available

STOT - Single Exposure

No information available.

STOT - Repeated Exposure

No information available.

Target organ effects

EYES. Respiratory System. skin.

12. Ecological Information

12.1 Toxicity

Chemical name	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
MCPA (4-Chloro-o-tolylxyacetic acid)	EC50 72 h: = 19 mg/L (Pseudokirchneriella subcapitata) EC50 96 h: = 1.9 mg/L (Pseudokirchneriella subcapitata)	LC50 96 h: = 59 mg/L (Cyprinus carpio) LC50 96 h: 72.02 - 110.39 mg/L static (Oncorhynchus mykiss) LC50 96 h: 79.74 - 117.99 mg/L static (Lepomis macrochirus)		EC50 48 h: = 180 mg/L Static (Daphnia magna)
Sodium hydroxide		LC50 96 h: = 45.4 mg/L static (Oncorhynchus mykiss)		
Potassium hydroxide		LC50 96 h: = 80 mg/L static (Gambusia affinis)		

12.2 Persistence and Degradability

Readily biodegradable

12.3 Bioaccumulative Potential

Does not bioaccumulate

Chemical name	Log Pow
MCPA (4-Chloro-o-tolylxyacetic acid)	2.86
Potassium hydroxide	0.65 0.83

12.4 Mobility in Soil

Not expected to adsorb on soil.

12.5 Results of PBT and vPvB Assessment

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)

12.6 Other Adverse Effects

No information available.

Chemical name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances
2,4-DB (2,4-Dichloro-phenoxybutyric acid)	Group III Chemical	

13. Disposal Considerations

13.1 Waste Treatment Methods

Waste from Residues/Unused Products

Dispose of in accordance with local regulations.

Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

EWC waste disposal No

020108 - agrochemical waste containing dangerous substances.

OTHER INFORMATION

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

14. Transport Information**ADR/RID**

14.1 UN-No	UN3082
14.2 Proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (2,4-DB (2,4-Dichloro-phenoxybutyric acid) + MCPA (4-Chloro-o-tolyloxyacetic acid))
14.3 Hazard class	9
14.4 Packing group	III
14.5 Environmental Hazard	DANGEROUS FOR THE ENVIRONMENT
14.6 Special Provisions	274, 335, 375, 601

IMDG/IMO

14.1 UN-No	UN3082
14.2 Proper shipping name	Environmentally hazardous substance, liquid, n.o.s (2,4-DB (2,4-Dichloro-phenoxybutyric acid) + MCPA (4-Chloro-o-tolyloxyacetic acid))
14.3 Hazard class	9
14.4 Packing group	III
14.5 Environmental Hazard	Marine Pollutant
14.6 Special Provisions	274, 335, 969

IATA/ICAO

14.1 UN-No	UN3082
14.2 Proper shipping name	Environmentally hazardous substance, liquid, n.o.s (2,4-DB (2,4-Dichloro-phenoxybutyric acid) + MCPA (4-Chloro-o-tolyloxyacetic acid))
14.3 Hazard class	9
14.4 Packing group	III
14.5 Environmental Hazard	DANGEROUS FOR THE ENVIRONMENT
14.6 Special Provisions	A97, A158, A197

15. Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Registration n° MAPP 15783

- To avoid risks to man and the environment, comply with the instructions for use

International Inventories

TSCA	Complies
EINECS/ ELINCS	Complies
DSL/NDSL	Complies
PICCS	Complies
ENCS	Complies
China	Complies
AICS	Complies
KECL	Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

16. Other Information**Full text of H-Statements referred to under sections 2 and 3**

H290 - May be corrosive to metals

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H411 - Toxic to aquatic life with long lasting effects

Revision date 21-Feb-2017

Revision note Sections updated: 2 Classification according to Regulation (EC) No. 1272/2008 [CLP]

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information contained is based on our knowledge of the product at the date of publishing.

It applies to the PRODUCT AS SUCH. In case of formulation or mixture, make sure that a new danger will not appear.

Users are advised of possible additional hazards when the product is used in applications for which it was not intended.

This sheet shall only be used and duplicated for prevention and Safety purposes.

For rates and use recommendations, refer to the information displayed on the packaging.

It is the responsibility of the handlers of the product to pass on this safety data sheet to any subsequent persons who will come into contact with the product.

End of Safety Data Sheet