



Preparation Date 17-Jan-2014

Revision date 12-Dec-2014

Revision Number: 1

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

1.1 Identification of the product

Doing Things Better

Product code	HCO03
Product Description:	Sempra
Synonyms	Diflufenican 500 g/L SC
Pure substance/preparation	Preparation

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

Recommended use

1.3 Details of the Supplier of the Safety Data Sheet

Herbicide

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

1.4 Emergency Telephone Number

(CARECHEM 24): +44 (0) 1235 239670 Emergency telephone number NHS no. 111

United Kingdom

2. Hazards Identification

2.1 Classification of the mixture

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Symbol(s) N - Dangerous for the environment

R-code(s) R50/53

For the full text of the R phrases mentioned in this Section, see Section 16

Classification according to regulation (EC) No 1272/2008 (CLP)

Acute aquatic toxicity	Category 1 - H400
Chronic aquatic toxicity	Category 1 - H410

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

2.2 Label elements

Labelling according to EU Directives 67/548/EEC or 1999/45/EC



Symbol(s) N - Dangerous for the environment

R -phrase(s)

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S -phrase(s)

S 2 - Keep out of the reach of children

S13 - Keep away from food, drink and animal feedingstuffs

S20/21 - When using, do not eat, drink or smoke

S35 - This material and its container must be disposed of in a safe way

S49 - Keep only in the original container

S61 - Avoid release to the environment. Refer to special instructions/Safety data sheets

Labelling according Regulation (EC) No 1272/2008 (CLP)



signal word

WARNING

hazard statements H410 - Very toxic to aquatic life with long lasting effects

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

P273 - Avoid release to the environment

P391 - Collect spillage

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.
Diflufenican	-	83164-33-4	40 - 50	N;R52/53	Aquatic Chronic 3 (H412)	no data available
Preservative	Listed	-	< 1	C;R34 Carc. Cat.3;R40 R43 T;R23/24/25		no data available

For the full text of the R phrases mentioned in this Section, see Section 16

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	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists, consult a specialist
Skin contact	Wash off immediately with plenty of water If symptoms persist, call a physician
Ingestion	Rinse mouth with water Call a POISON CENTER or doctor/physician if exposed or you feel unwell
Inhalation	Move to fresh air Call a POISON CENTER or doctor/physician if you feel unwell

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

No information available.

4.3 Indication of immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	Water spray
0 0	Foam
	Carbon dioxide (CO2)
	Dry powder

Unsuitable extinguishing media No information available.

5.2 Special hazards arising from the substance or mixture

Special Hazard Burning produces obnoxious and toxic fumes: Carbon oxides, Nitrogen oxides (NOx)

5.3 Advice for Firefighters

Wear self-contained breathing apparatus and protective suit

This material is very toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas Avoid contact with the skin and the eyes Use personal protective equipment

6.2 Environmental Precautions

Prevent further leakage or spillage if safe to do so Do not allow material to contaminate ground water system Do not flush into surface water or sanitary sewer system

6.3 Methods and materials for containment and cleaning up

Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container

7. Handling and Storage

7.1 Precautions for Safe Handling

Handling

Provide adequate ventilation Ensure that eyewash stations and safety showers are close to the workstation location

Hygiene Measures

Use only outdoors or in a well-ventilated area

7.2 Conditions for safe storage, including any incompatibilities

Keep tightly closed in a dry and cool place Store in original packagings. 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 http://limitvalue.ifa.dguv.de/Webform_gw.aspx

Chemical name	Eu	United Kingdom	France	Spain	Germany
Preservative		STEL: 2 ppm STEL: 2.5 mg/m ³ TWA: 2 ppm TWA: 2.5 mg/m ³	TWA: 0.5 ppm STEL: 1 ppm	STEL: 0.3 ppm STEL: 0.37 mg/m ³	MAK: 0.3 ppm MAK: 0.37 mg/m ³ Ceiling / Peak: 0.6 ppm Ceiling / Peak: 0.74 mg/m ³
Component	Italy	Portugal	Netherlands	Finland	Denmark
Preservative (<1)		Ceiling: 0.3 ppm	STEL: 0.5 mg/m ³ TWA: 0.15 mg/m ³	TWA: 0.3 ppm TWA: 0.37 mg/m ³ STEL: 1 ppm STEL: 1.2 mg/m ³ Ceiling: 1 ppm Ceiling: 1.2 mg/m ³	Ceiling: 0.3 ppm Ceiling: 0.4 mg/m ³
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Preservative	Skin STEL 0.5 ppm STEL 0.6 mg/m ³ TWA: 0.5 ppm TWA: 0.6 mg/m ³ Ceiling 0.5 ppm Ceiling 0.6 mg/m ³	STEL: 0.6 ppm STEL: 0.74 mg/m ³ TWA: 0.3 ppm TWA: 0.37 mg/m ³	STEL: 1 mg/m³ TWA: 0.5 mg/m³	TWA: 0.5 ppm TWA: 0.6 mg/m ³ Ceiling: 1 ppm Ceiling: 1.2 mg/m ³ STEL: 1.5 ppm STEL: 1.8 mg/m ³	TWA: 2 ppm TWA: 2.5 mg/m ³ STEL: 2 ppm STEL: 2.5 mg/m ³

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration No information available (PNEC)

8.2 Exposure Controls

Engineering controls

Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment

Eye protection Skin protection Hand protection Respiratory protection	Safety glasses with side-shields. Long sleeved clothing. Protective gloves. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators
	No information evolution

Environmental exposure controls No information available.

Remarks/ Method (1% solution)

Dynamic viscosity

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

appearance Physical state Odor	white liquid suspension concentrate Mild chemical
Property pH Melting point/freezing point Boiling Point/Range flash point flammability (solid, gas) Surface tension Relative Density Water solubility Solubility in Other Solvents Partition coefficient: n-octanol/wate Autoignition temperature decomposition temperature	No information available No information available
viscosity Oxidizing properties Explosive properties	123.0 - 173.3 mPa.s Non oxidizing No

9.2 OTHER INFORMATION

VOC Content

No information available

10. Stability and Reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition

10.5 Incompatible Materials

Acids Oxidizing agents.

10.6 Hazardous Decomposition Products

Carbon oxides Nitrogen oxides (NOx)

11. Toxicological Information

11.1 Information on Toxicological Effects

Acute toxicity

Local effects Inhalation Eye contact Skin contact Ingestion	There is no data available for this product. No eye irritation. No skin irritation. There is no data available for this product.
LD50 Oral	> 2000 mg/kg
LD50 Dermal	> 2000 mg/kg
LC50 Inhalation:	> 5.12 mg/l (4-hr)

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Diflufenican 83164-33-4	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rat)	>5.12 mg/l
Anti-freezing agent	= 20000 mg/kg (Rat)	= 20800 mg/kg (Rabbit)	
Preservative	= 500 mg/kg (Rat)	= 270 mg/kg (Rabbit)	= 0.578 mg/L(Rat)4 h

Chronic toxicity

Skin Corrosion/Irritation	No information available.
sensitization	skin: Did not cause sensitization.
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.

12. Ecological Information

12.1 Toxicity

EC50/72h/algae = 0,0009 mg/L EC50/48h/daphnia = > 0,4881 mg/L LC50/fish/96 h = > 0.1065 mg/L

12.2 Persistence and Degradability

No information available

12.3 Bioaccumulative Potential

No information available

Chemical name	Log Pow
Preservative	0.35

12.4 Mobility in Soil

No information available.

12.5 Results of PBT and vPvB Assessment

No information available

12.6 Other Adverse Effects

No information available.

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. (Diflufenican)
14.3 Hazard class	9
14.4 Packing group	
14.5 Environmental Hazard	Yes
14.6 Special Provisions	274, 335, 601
Tunnel restriction code	(E)
IMDG/IMO	
14.1 UN-No	UN3082
14.2 Proper shipping name	Environmentally hazardous substance, liquid, n.o.s (Diflufenican)
14.3 Hazard class	9
14.4 Packing group	
14.5 Environmental Hazard	Marine pollutant
14.6 Special Provisions	274, 335
IATA/ICAO	
14.1 UN-No	UN3082
14.2 Proper shipping name	Environmentally hazardous substance, liquid, n.o.s (Diflufenican)
14.3 Hazard class	9
14.4 Packing group	
14.5 Environmental Hazard	Yes
14.6 Special Provisions	A97, A158
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15. Regulatory Information

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

Registration n°

MAPP 13525

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

International Inventories

TSCA EINECS/ ELINCS	Complies Complies
DSL/NDSL	Complies
PICCS	Complies
ENCS	Complies
China	-
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 R-phrases referred to under sections 2 and 3

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Full text of H-Statements referred to under sections 2 and 3

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects H412 - Harmful to aquatic life with long lasting effects

Revision date 12-Dec-2014

Revision note

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 responsability 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