

OPTION[®]

Version 5.0 (replaces: Version 4.0) Revision Date 08.12.2014

Ref. 130000013486

This Safety Data Sheet adheres to the standards and regulatory requirements of the Republic of Ireland and may not meet the regulatory requirements of other countries.

SECTION 1: Identification	of the substance/mixture and of the company/unde	rtaking

1.1. Product identifier

Product name	:	OPTION®
Synonyms	:	B10923139 DPX-T3217 60WG

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

Use of the Substance/Mixture : Fungicide

1.3. Details of the supplier of the safety data sheet

Company	: Du Pont (UK) Limited Wedgwood Way Stevenage, Herts. SG1 4QN United Kingdom
Telephone	: +44 (0) 1438 734 000
E-mail address	: sds-support@che.dupont.com
1.4. Emergency telephone nu Emergency telephone number	mber : +44 (0) 8456 006 645 : +(353)-19014670

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Acute toxicity, Category 4 Skin sensitisation, Category 1 Reproductive toxicity, Category 2 Specific target organ toxicity - repeated exposure, Category 2	H302: Harmful if swallowed. H317: May cause an allergic skin reaction. H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child. H373: May cause damage to organs through prolonged or repeated exposure. (Blood, Thymus)
Chronic aquatic toxicity, Category 1	H410: Very toxic to aquatic life with long lasting effects.
Harmful	R22: Harmful if swallowed.
Harmful	R48/22: Harmful: danger of serious damage to health by prolonged exposure if swallowed.
Harmful	R62: Possible risk of impaired fertility.
Harmful	R63: Possible risk of harm to the unborn child.
Dangerous for the	R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects



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environment

in the aquatic environment.

2.2. Label elements



Warning

H361fd H373 H302 H317 H410	Suspected of damaging fertility. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure. (Blood, thymus gland) Harmful if swallowed. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.
Special labelling of certain substances and mixtures	EUH401: To avoid risks to human health and the environment, comply with the instructions for use.,
P201 P260 P280 P308 + P313 P333 + P313 P363 P391 P501	Obtain special instructions before use. Do not breathe mist, vapours or spray. Wear protective gloves/ protective clothing. IF exposed or concerned: Get medical advice/ attention. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse. Collect spillage. Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

SP 1

Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).

2.3. Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

SECTION 3: Composition/information on ingredients

3.1. Substances



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Not applicable

3.2. Mixtures

Registration number	Classification	Classification according to	Concentration
_	according to	Regulation (EU) 1272/2008	(% w/w)
	Directive 67/548/EEC	(CLP)	

Cymoxanil (CAS-No.57966-95-7) (EC-No.261-043-0) (M-Factor: 1/Acutel 1/Chronici)

(WI-Factor, I[Acute] [[Chron	C])		
F	Repr.Cat.3;R62	Acute Tox. 4; H302	60 %
F	Repr.Cat.3;R63	Skin Sens. 1; H317	
	Kn;R48/22	Repr. 2; H361fd	
>	Kn;R22	STOT RE 2; H373	
F	R43	Aquatic Acute 1; H400	
1	N:R50/53	Aquatic Chronic 1; H410	

Alkylnaphthalenesulfonic acid, sodium salt/formaldehyde polycondensate (CAS-No.68425-94-5) (EC-No.614-476-8)

Xi;R36/38	Skin Irrit. 2; H315	>= 1 - < 5 %
	Eye Irrit. 2; H319	

Fumaric acid (CAS-No.110-17-8) (EC-No.203-743-0)

	Xi;R36	Eye Irrit. 2; H319	>= 1 - < 5 %

The above products are REACH compliant; Registration number(s) may not be provided because substance(s) are exempted, not yet registered under REACH or are registered under another regulatory process (biocide uses, plant protection products), etc.

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.

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	 Never give anything by mouth to an unconscious person. For specialist advice contact the National Poisons Information Service. Healthcare Professionals: (01) 809 2566 or (01) 837 9964 (24h per day – 365 days per year). Public Poisons Information Line: (01) 809 2166 (8am-10pm).
Inhalation	Move to fresh air. Consult a physician after significant exposure. Artificial respiration and/or oxygen may be necessary.
Skin contact	The material is not likely to be hazardous by skin contact, but cleaning the skin after use is advisable.
Eye contact	 If easy to do, remove contact lens, if worn. Hold eye open and rinse slowly and gently with water for 15-20 minutes. If eye irritation persists, consult a specialist.
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Ingestion	Constraint medical attention. DO NOT induce vomiting unless directed to do so be a physician or poison control center. If victim is conscious: Rinse mouth with water.
4.2. Most important sympton	ns and effects, both acute and delayed
Symptoms	Eye contact may provoke the following symptoms:, Conjunctivitis.
	: Skin contact may provoke the following symptoms:, Local irritation
	: Inhalation may provoke the following symptoms:, Rhinitis
	: Ingestion may provoke the following symptoms:, Gastrointestinal disturbance Nausea, Diarrhoea, Vomiting
4.3. Indication of any immed	iate medical attention and special treatment needed
Treatment	: Treat symptomatically.
TION 5: Firefighting measure	
5.1. Extinguishing media	
5.1. Extinguishing media Suitable extinguishing media	: Water spray, Foam, Dry chemical, Carbon dioxide (CO2)
	Water spray, Foam, Dry chemical, Carbon dioxide (CO2)High volume water jet, (contamination risk)
Suitable extinguishing media Extinguishing media which shall not be used for safety reasons	
Suitable extinguishing media Extinguishing media which shall not be used for safety reasons	: High volume water jet, (contamination risk)
Suitable extinguishing media Extinguishing media which shall not be used for safety reasons 5.2. Special hazards arising Specific hazards during	 High volume water jet, (contamination risk) from the substance or mixture Hazardous decomposition products formed under fire conditions. Carbon
Suitable extinguishing media Extinguishing media which shall not be used for safety reasons 5.2. Special hazards arising Specific hazards during firefighting 5.3. Advice for firefighters	 High volume water jet, (contamination risk) from the substance or mixture Hazardous decomposition products formed under fire conditions. Carbon
Suitable extinguishing media Extinguishing media which shall not be used for safety reasons 5.2. Special hazards arising for Specific hazards during firefighting 5.3. Advice for firefighters Special protective equipment	 High volume water jet, (contamination risk) from the substance or mixture Hazardous decomposition products formed under fire conditions. Carbon dioxide (CO2) Nitrogen oxides (NOx)

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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Personal precautions	: Control access to area. Keep people away from and upwind of spill/leak. Avoid
	dust formation. Avoid breathing dust. Use personal protective equipment. Refer
	to protective measures listed in sections 7 and 8.

6.2. Environmental precautions

Environmental precautions : Prevent further leakage or spillage if safe to do so. Use appropriate container to avoid environmental contamination. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. If the spill area is porous, the contaminated material must be collected for subsequent treatment or disposal. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up	 Clean-up methods - small spillage Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean-up methods - large spillage Avoid dust formation. Knock down dust with water spray jet. Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13). If spill area is on ground near valuable plants or trees, remove 5 cm of top soil after initial clean-up.
Other information	: Never return spills in original containers for re-use. Dispose of in accordance with local regulations.

6.4. Reference to other sections

For personal protection see section 8., For disposal instructions see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling :	Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.		
	Use only according to our recommendations. Use only clean equipment. Avoid contact with skin, eyes and clothing. Do not breathe dust or spray mist. Wear personal protective equipment. For personal protection see section 8. Prepare the working solution as given on the label(s) and/or the user instructions. Use prepared working solution as soon as possible - Do not store. Provide appropriate exhaust ventilation at places where dust is formed.		
Advice on protection : against fire and explosion	Keep away from heat and sources of ignition. Avoid dust formation in confined areas. During processing, dust may form explosive mixture in air.		
7.2. Conditions for safe storage, including any incompatibilities			
Requirements for storage :	Store in a place accessible by authorized persons only. Store in original		

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areas and containers	container. Keep in properly labelled containers. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.
Advice on common storage :	No special restrictions on storage with other products.
Other data :	Stable under recommended storage conditions.
7.3. Specific end use(s)	

Plant protection products subject to Regulation (EC) No 1107/2009.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

If sub-section is empty then no values are applicable.

Components with workplace control parameters

|--|

Sucrose (CAS-No. 57-50-1)

TWA	10 mg/m3	2010	ELV (IE)	
STEL	20 mg/m3	2010	ELV (IE)	

8.2. Exposure controls

Engineering measures	:	Contains no substances with occupational exposure limit values.
		Ensure adequate ventilation, especially in confined areas. Provide for appropriate exhaust ventilation and dust collection at machinery. Use sufficient ventilation to keep employee exposure below recommended limits.
Eye protection	:	Safety glasses with side-shields conforming to EN166
Hand protection	:	Material: Nitrile rubber Glove thickness: 0.4 - 0.7 mm Glove length: Gauntlets of 35 cm long or longer. Protection index: Class 6 Wearing time: 8 h The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The suitability for a specific workplace should be discussed with the producers of the protective gloves. Gloves should be
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	breakthrough. Gauntlets shorter than 35 cm long shall be worn under the combination sleeve. Gauntlets of 35 cm long or longer shall be worn over the combination sleeve.
Skin and body protection :	Manufacturing and processing work: Full protective clothing Type 5 + 6 (EN ISO 13982-2 / EN 13034)
	Mixer and loaders must wear: Full protective clothing Type 5 + 6 (EN ISO 13982-2 / EN 13034) Rubber apron Nitrile rubber boots (EN 13832-3 / EN ISO 20345).
	Spray application - outdoor: Tractor / sprayer with hood: No personal body protection normally required.
	Tractor / sprayer without hood: Full protective clothing Type 4 (EN 14605) Nitrile rubber boots (EN 13832-3 / EN ISO 20345).
	Backpack / knapsack sprayer: Full protective clothing Type 4 (EN 14605) Nitrile rubber boots (EN 13832-3 / EN ISO 20345).
	Spray application - indoor: Motorized greenhouse sprayer: Full protective clothing Type 4 (EN 14605) Nitrile rubber boots (EN 13832-3 / EN ISO 20345).
	Backpack / knapsack sprayer: Full protective clothing Type 4 (EN 14605) Nitrile rubber boots (EN 13832-3 / EN ISO 20345).
	Mechanical automatized spray application in closed tunnel: No personal body protection normally required.
	When exceptional circumstances would require an access to the treated area before the end of re-entry periods, wear full protective clothing Type 6 (EN 13034), nitrile rubber gloves class 2 (EN 374) and nitrile rubber boots (EN 13832-3 / EN ISO 20345).
	To optimize the ergonomy it may be recommended to use cotton underwear when wearing some fabrics. Take advice from supplier. Garment materials that are resistant to both water vapour and air will maximise wearing comfort. Materials should be robust to maintain the integrity and barrier in use.
	The permeation resistance of the fabric must be verified independently of the « type » protection recommended, to ensure an appropriate performance level of the material adequate to the corresponding agent and type of exposure.
Protective measures :	The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. All chemical protective clothing should be visually inspected prior to use. Clothing and gloves should be replaced in case of chemical or physical damage or if contaminated. Only protected handlers may be in the area during application.
Hygiene measures :	Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing. Keep working clothes
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		separately. Contaminated work clothing should not be allowed out of the workplace. For environmental protection remove and wash all contaminated	
		protective equipment before re-use. Remove clothing/PPE immediately if material gets inside. Wash thoroughly and put on clean clothing. Dispose of rinse water in accordance with local and national regulations. Wash hands before breaks and at the end of workday.	
	Respiratory protection	Manufacturing and processing work: Half mask with a particle filter FFP1 (EN149)	
		Mixer and loaders must wear: Half mask with a particle filter FFP1 (EN149)	
		Spray application - outdoor: Tractor / sprayer with hood: No personal respiratory protective equipment normally required.	
		Tractor / sprayer without hood: Low application: Half mask with a particle filter FFP1 (EN149) Middle-height application: Half mask with a particle filter FFP2 (EN149)	
		Backpack / knapsack sprayer: Low application: Half mask with a particle filter FFP1 (EN149) Middle-height application: Half mask with a particle filter FFP2 (EN149)	
		Mechanical automatized spray application in closed tunnel: No personal respiratory protective equipment normally required.	
SECTION 9: Physical and chemical properties			
9.1. Information on basic physical and chemical properties			
	Form	: solid, granules	
	Colour	: brown	

Odour	: very faint
Odour Threshold	: not determined

Melting point/range	: not determined
Flash point	: Not applicable

- Flammability (solid, gas) : The product is not flammable.
- Ignition temperature : no data available
- Thermal decomposition : Not available for this mixture.
- Auto-ignition temperature : Test Type :Auto-ignition temperature, Not available for this mixture.
- Explosive properties : Not explosive
- Lower explosion limit/ lower : Not available for this mixture.
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 10.1. Reactivity : No hazards to be specially mentioned. 10.2. Chemical stability : The product is chemically stable under recommended conditions of storage, and temperature. 10.3. Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use. Polymerization will not occur. No decomposition if stored and applied as directed. 10.4. Conditions to avoid : Exposure to moisture. Decomposes slowly on exposure to water. To avoid thermal decomposition, do not overheat. Under severe dusting conditions, thermal may form explosive mixtures in air. 10.5. Incompatible materials : No materials to be especially mentioned. 10.6. Hazardous decomposition products : No materials to be especially mentioned. 		
flammability limit Vapour pressure : Not available for this mixture. Relative density : Not available for this mixture. Bulk density : 650 kg/m3 , packed Water solubility : dispersible Partition coefficient: n- octanol/water : Not applicable Viscosity, dynamic : no data available Relative vapour density : Not available for this mixture. Evaporation rate : Not available for this mixture. 9.2. Other information : No other data to be specially mentioned. Physchem./other information : No other data to be specially mentioned. CTION 10: Stability and react/vity : No hazards to be specially mentioned. 10.2. Chemical stability : The product is chemically stable under recommended conditions of storage, and temperature. 10.3. Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use. Polymerization will not occur. No decomposition if stored and applied as directed. 10.4. Conditions to avoid : Exposure to moisture. Decomposes slowly on exposure to water. To avoid thermal decomposition, do not overheat. Under severe dusting conditions, the material may form explosive mixtures in air. 10.5. Incompatible materials : No materials to be especially mentioned. 10.6. Hazardous gecomposition products : No mater	flammability limit	
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10.6. Hazardous : No materials to be especially mentioned. decomposition products ECTION 11: Toxicological information	10.4. Conditions to avoid	thermal decomposition, do not overheat. Under severe dusting conditions, this
decomposition products	10.5. Incompatible materials	: No materials to be especially mentioned.
		: No materials to be especially mentioned.
11.1. Information on toxicological effects	CTION 11: Toxicological inform	nation
	11.1. Information on toxicol	ogical effects
Acute oral toxicity		



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LD50 / Rat : 433 mg/kg Method: OECD Test Guideline 401 (Data on the product itself) Information source: Internal study report

 Cymoxanil LD50 / Rat : 960 mg/kg

Acute inhalation toxicity

LC50 / 4 h Rat : > 5.0 mg/l Method: OECD Test Guideline 403 (Data on the product itself) Information source: Internal study report

• Cymoxanil LC50 / 4 h Rat : > 5.06 mg/l

Acute dermal toxicity

LD50 / Rat : > 5,000 mg/kg Method: OECD Test Guideline 402 (Data on the product itself) Information source: Internal study report

 Cymoxanil LD50 / Rabbit : > 2,000 mg/kg

Skin irritation

Rabbit Result: No skin irritation Method: OECD Test Guideline 404 (Data on the product itself) Information source: Internal study report

 Cymoxanil Rabbit Classification: No skin irritation Result: No skin irritation

Eye irritation

Rabbit Result: No eye irritation Method: OECD Test Guideline 405 (Data on the product itself) Information source: Internal study report

 Cymoxanil Rabbit Classification: No eye irritation Result: No eye irritation

Sensitisation

Guinea pig Maximisation Test (GPMT) Result: Causes sensitisation.



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Method: OECD Test Guideline 406

(Data on the product itself) Information source: Internal study report

Cymoxanil

Guinea pig

Result: Did not cause sensitisation on laboratory animals.

Repeated dose toxicity

Cymoxanil

The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.

Oral multiple species altered blood chemistry, No effect to neurotoxicity.

Oral multiple species The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions., altered blood chemistry

Mutagenicity assessment

Cymoxanil

Animal testing did not show any mutagenic effects. Evidence suggests this substance does not cause genetic damage in cultured bacterial cells. Tests on mammalian cell cultures showed mutagenic effects.

Carcinogenicity assessment

Cymoxanil

Not classifiable as a human carcinogen. Did not show carcinogenic effects in animal experiments.

Toxicity to reproduction assessment

• Cymoxanil

Suspected human reproductive toxicant Some evidence of adverse effects on sexual function and fertility, based on animal experiments

Assessment teratogenicity

Cymoxanil

Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

STOT - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard



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The mixture does not have properties associated with aspiration hazard potential.

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish

LC50 / 96 h / Oncorhynchus mykiss (rainbow trout): 35 mg/l Method: OECD Test Guideline 203

Toxicity to aquatic plants

ErC50 / 72 h / Pseudokirchneriella subcapitata (green algae): > 10 mg/l Method: OECD Test Guideline 201 Toxicity to aquatic invertebrates

EC50 / 48 h / Daphnia magna (Water flea): 10.7 mg/l Method: OECD Test Guideline 202

Toxicity to other organisms

 Cymoxanil LD50 / Apis mellifera (bees): > 0.100 mg/kg Contact

Chronic toxicity to fish

 Cymoxanil NOEC / 21 d / Oncorhynchus mykiss (rainbow trout): 0.22 mg/l

Chronic toxicity to aquatic Invertebrates

 Cymoxanil NOEC / 21 d / Daphnia magna (Water flea): 0.067 mg/l

12.2. Persistence and degradability

Biodegradability

Not readily biodegradable. Estimation based on data obtained on active ingredient.

12.3. Bioaccumulative potential

Bioaccumulation

Does not bioaccumulate. Estimation based on data obtained on active ingredient.

12.4. Mobility in soil

Mobility in soil



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Under actual use conditions, there is no reasonable expectation of any movement of the product from the top soil layer.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). / This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

12.6. Other adverse effects

Additional ecological information

No other ecological effects to be specially mentioned See product label for additional application instructions relating to environmental precautions.

SECTION 13: Disposal considerations

Product	: In accordance with local and national regulations. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not contaminate ponds, waterways or ditches with chemical or used container.
Contaminated packaging	: Do not re-use empty containers.
CTION 14: Transport informat	on
ADR	
14.1. UN number:	3077
14.2. UN proper shipping nar	N.O.S. (Cymoxanil)
14.3. Transport hazard class	
14.4. Packing group:	
14.5. Environmental hazards:	
14.6. Special precautions for	
Tunnel restriction code:	(E)
IATA_C	
14.1. UN number:	3077
14.2. UN proper shipping nar	
14.3. Transport hazard class	
14.4. Packing group:	
14.5. Environmental hazards	
14.6. Special precautions for DuPont internal recomm	user: nendations and transport guidance: ICAO / IATA cargo aircraft only
IMDG	
14.1. UN number:	3077
14.2. UN proper shipping nar	N.O.S. (Cymoxanil)
14.3. Transport hazard class	es): 9
14.4. Packing group:	III



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14.5. Environmental hazards :

Marine pollutant

- 14.6. Special precautions for user: no data available
- 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

Other regulations : The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.Take note of Dir 94/33/EC on the protection of young people at work.Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.Take note of Directive 96/82/EC on the control of major-accident hazards involving dangerous substances.Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values.Take note of Dir 92/85/EEC on the safety and health at work of pregnant workers.

15.2. Chemical Safety Assessment

A Chemical Safety Assessment is not required for this/these products The mixture is evaluated within the frame of the provisions of Regulation (EC) No. 1107/2009. Refer to the label for exposure assessment information.

SECTION 16: Other information

Text of R-phrases mentioned in Section 3

R22	Harmful if swallowed.
R36	Irritating to eyes.
R36/38	Irritating to eyes and skin.
R43	May cause sensitisation by skin contact.
R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R62	Possible risk of impaired fertility.
R63	Possible risk of harm to the unborn child.

Full text of H-Statements referred to under section 3.

allowed.

Abbreviations and acronyms



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ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute toxicity estimate
CAS-No.	Chemical Abstracts Service number
CLP	Classification, Labelling and Packaging
EbC50	Concentration at which 50% reduction of biomass is observed
EC50	Median effective concentration
EN	European Norm
EPA	Environmental Protection Agency
ErC50	Concentration at which a 50% inhibition of growth rate is observed
EyC50	Concentration at which 50 % inhibition of yield is observed
IATA_C	International Air Transport Association (Cargo)
IBC	International Bulk Chemical Code
ICAO	International Civil Aviation Organization
ISO	International Standard Organization
IMDG	International Maritime Dangerous Goods
LC50	Median Lethal Concentration
LD50	Median Lethal Dose
LOEC	Lowest Observed Effect Concentration
LOEL	Lowest observed effect level
MARPOL	International Convention for the Prevention of Marine Pollution from Ships
n.o.s.	Not Otherwise Specified
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No observed adverse effect level
NOEC	No Observed Effect Concentration
NOEL	No Observed Effect Level
OECD	Organisation for Economic Co-operation and Development
OPPTS	Office of Prevention, Pesticides and Toxic Substances
PBT	Persistent, Bioaccumulative and Toxic
STEL	Short term exposure limit
TWA	Time Weighted Average (TWA):
vPvB	very Persistent and very Bioaccumulative

Further information

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Significant change from previous version is denoted with a double bar.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The above information relates only to the specific material(s) designated herein and may not be valid for such material(s) used in combination with any other materials or in any process or if the material is altered or processed, unless specified in the text.