# SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006



# **DESTINY TURF**

Version 1/IRL 102000037576

1/11 Revision Date: 07.05.2019 Print Date: 07.05.2019

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

1.1 Product identifier	
Trade name	DESTINY TURF
Product code (UVP)	86710501

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

Use	Herbicide

1.3 Details of the supplier of the safety data sheet

Supplier	Bayer CropScience Ltd
	Bayer Ltd
	The Atrium, Blackthorn Road
	Sandyford
	Dublin 18
	Ireland
Telephone	+353-1-2999313

Responsible Department Email: ukcropsupport@bayer.com

1.4 Emergency telephone no.

Emergency telephone no. 00800 1020 3333 (24 hr)

# SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

# Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Aspiration hazard: Category 1 H304 May be fatal if swallowed and enters airways. Acute toxicity: Category 4 Harmful if swallowed. H302 Skin irritation: Category 2 Causes skin irritation. H315 Eye irritation: Category 2 H319 Causes serious eye irritation. Specific target organ toxicity - single exposure: Category 3 May cause drowsiness or dizziness. H336 Acute aquatic toxicity: Category 1 H400 Very toxic to aquatic life. Chronic aquatic toxicity: Category 1 H410 Very toxic to aquatic life with long lasting effects.

### 2.2 Label elements



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# Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Hazard label for supply/use required.

Hazardous components which must be listed on the label:

- 2,4-D 2-ethylhexyl ester
- Solvent Naphtha (petroleum), heavy aromatic, <1% Naphthalene
- Dicamba
- Amines, tallow alkyl, ethoxylated, 15 EO
- 2-Methylpropan-1-ol



#### Signal word: Danger

### Hazard statements

H304 H302	May be fatal if swallowed and enters airways. Harmful if swallowed.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H410	Very toxic to aquatic life with long lasting effects.
EUH208	Contains 2,4-D-2-ethylhexylester. May produce an allergic reaction.

### **Precautionary statements**

P270 P273 P280	Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor/physician if you feel unwell.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P362	Take off contaminated clothing.
P391	Collect spillage.
P403 + P233 P501	Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/container in accordance with local regulation.

### 2.3 Other hazards

No other hazards known.

# SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

#### **Chemical nature**

Emulsifiable concentrate (EC) 2,4-D Ethyl-Hexyl Ester/Dicamba/Fluroxypyr-Meptyl 429.8:52.5:151.2 g/l



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## Hazardous components

Hazard statements according to Regulation (EC) No. 1272/2008

Name	CAS-No. / EC-No. / REACH Reg. No.	Classification REGULATION (EC) No 1272/2008	Conc. [%]
2,4-D 2-ethylhexyl ester	1928-43-4 217-673-3	Acute Tox. 4, H302 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	30 - 60
Solvent Naphtha (petroleum), heavy aromatic,<1% Naphthalene	64742-94-5 265-198-5 01-2119463583-34-xxxx	Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Chronic 2, H411	10 – 30
Fluroxypyr-meptyl	81406-37-3 279-752-9	Aquatic Chronic 1, H410 Aquatic Acute 1, H400	10 – 30
Dicamba	1918-00-9 217-635-6	Eye Dam. 1, H318 Acute Tox. 4, H302 Acute Tox. 4, H332 Aquatic Chronic 3, H412	1 – 5
Amines, tallow alkyl, ethoxylated, 15 EO	61791-26-2 500-153-8	Acute Tox. 4, H302 Acute Tox. 2, H330 Eye Dam. 1, H318 Aquatic Chronic 2, H411	1 – 5
2-Methylpropan-1-ol	78-83-1 201-148-0 01-2119484609-23-XXXX	Flam. Liq. 3, H226 STOT SE 3, H335 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336	1 – 5

### **Further information**

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	Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.
Inhalation	Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.
Skin contact	Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.



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Ingestion	Do NOT induce vomiting. Risk of product entering the lungs on vomiting after ingestion. Call a physician or poison control center immediately. Rinse mouth.
4.2 Most important symptoms and effects, both acute and delayed	
Symptoms	Cough, Irritation, Redness
	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea., Aspiration may cause pulmonary oedema and pneumonitis.
4.3 Indication of any immediate medical attention and special treatment needed	
Risks	Contains hydrocarbon solvents. May pose an aspiration pneumonia hazard.
Treatment	Treat symptomatically. Gastric lavage is not normally required. However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate. In case of aspiration intubation and bronchial lavage should be considered. Monitor: kidney, liver and pancreas function. There is no specific antidote. Contraindication: derivatives of adrenaline.

# **SECTION 5: FIREFIGHTING MEASURES**

5.1 Extinguishing media	
Suitable	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable	High volume water jet
5.2 Special hazards arising from the substance or mixture	Dangerous gases are evolved in the event of a fire.
5.3 Advice for firefighters	
Special protective equipment for firefighters	In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.
Further information	Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.

# SECTION 6: ACCIDENTAL RELEASE MEASURES

# 6.1 Personal precautions, protective equipment and emergency procedures

Precautions	Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.
6.2 Environmental precautions	Do not allow to get into surface water, drains and ground water.



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### 6.3 Methods and materials for containment and cleaning up

Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal.
6.4 Reference to other sections	Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

# SECTION 7: HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

Advice on safe handling	Use only in area provided with appropriate exhaust ventilation.
Hygiene measures	Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands before breaks and immediately after handling the product. Wash hands immediately after work, if necessary take a shower. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).
7.2 Conditions for safe stora	age, including any incompatibilities
Poquiromento for ctorago	Koon containers tightly closed in a cool, well yentilated place. Store in

**Requirements for storage** areas and containers Keep containers tightly closed in a cool, well-ventilated place. Store in original container. Store in a place accessible by authorized persons only. Keep away from direct sunlight. Protect from freezing.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Components	CAS-No.	Control parameters	Update	Basis
2-Methylpropan-1-ol	78-83-1	225 mg/m3/75 ppm (STEL)	2011	ELV (IE)
2-Methylpropan-1-ol	78-83-1	150 mg/m3/50 ppm (TWA)	2011	ELV (IE)

# 8.2 Exposure controls

### Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection	Wear respirator with an organic vapours and gas filter mask (protection factor 10) conforming to EN140 type A or equivalent. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.
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	Also take into consideration the product is used, such as contact time. Wash gloves when contam- inside, when perforated or v	Nitrile rubber
Eye protection	Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).	
Skin and body protection	Wear standard coveralls and Category 3 Type 6 suit. If there is a risk of significant exposure, consider a higher protective type suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently. If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.	

# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Form	Liquid
Colour	red brown
Flash point	62 °C
Density	ca. 1.07 g/cm³ ( 20 °C)
Water solubility	miscible
Partition coefficient: n- octanol/water	2,4-D-2-ethylhexylester: log Pow: 5.78
	Fluroxypyr-meptyl: log Pow: 5.04
9.2 Other information	Further safety related physical-chemical data are not known.

# SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	
Thermal decomposition	Stable under normal conditions.
10.2 Chemical stability	Stable under recommended storage conditions.



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10.3 Possibility of hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions.
10.4 Conditions to avoid	freezing Extremes of temperature and direct sunlight.
10.5 Incompatible materials	Store only in the original container.
10.6 Hazardous decomposition products	No decomposition products expected under normal conditions of use.

# SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Acute oral toxicity	ATE (Mix) 1,427.34 mg/kg Calculation method
Acute inhalation toxicity	ATE (Mix) 10.0 mg/l Determined in the form of a respirable aerosol. Calculation method
Acute dermal toxicity	
	No data available
Skin corrosion/irritation	Irritating to skin.
Serious eye damage/eye irritation	Irritating to eyes.
Respiratory or skin sensitisation	Skin: Non-sensitizing. (Guinea pig)

### Assessment STOT Specific target organ toxicity – single exposure

2,4-D-2-ethylhexylester: Based on available data, the classification criteria are not met. Fluroxypyr-meptyl: This information is not available.

# Assessment STOT Specific target organ toxicity - repeated exposure

2,4-D-2-ethylhexylester did not cause specific target organ toxicity in experimental animal studies. Fluroxypyr-meptyl did not cause specific target organ toxicity in experimental animal studies.

### Assessment mutagenicity

2,4-D-2-ethylhexylester was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

Fluroxypyr-meptyl was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

### Assessment carcinogenicity

2,4-D-2-ethylhexylester was not carcinogenic in lifetime feeding studies in rats and mice. Fluroxypyr-meptyl was not carcinogenic in lifetime feeding studies in rats and mice.

## Assessment toxicity to reproduction

2,4-D-2-ethylhexylester caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals.

Fluroxypyr-meptyl did not cause reproductive toxicity in a two-generation study in rats.



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### Assessment developmental toxicity

2,4-D-2-ethylhexylester caused developmental toxicity only at dose levels toxic to the dams. Fluroxypyr-meptyl did not cause developmental toxicity in rats and rabbits.

## Aspiration hazard

May be fatal if swallowed and enters airways.

### Further information

May cause drowsiness or dizziness.

# SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	
Toxicity to fish	LC50 (Fish) 4.8 mg/l Exposure time: 96 h
Toxicity to aquatic invertebrates	LC50 (Daphnia magna (Water flea)) 33.6 mg/l Exposure time: 48 h
Toxicity to aquatic plants	EC50 (Algae) 2.1 mg/l Exposure time: 72 h
12.2 Persistence and degrad	ability
Biodegradability	2,4-D-2-ethylhexylester: Not rapidly biodegradable Fluroxypyr-meptyl: 32 %, Exposure time: 28 d Not rapidly biodegradable
Кос	2,4-D-2-ethylhexylester: Koc: 33000 Fluroxypyr-meptyl: Koc: 6200 - 43000
12.3 Bioaccumulative potent	ial
Bioaccumulation	2,4-D-2-ethylhexylester: Bioconcentration factor (BCF) 10 Does not bioaccumulate. Fluroxypyr-meptyl: Bioconcentration factor (BCF) 26
12.4 Mobility in soil	
Mobility in soil	2,4-D-2-ethylhexylester: Slightly mobile in soils Fluroxypyr-meptyl: Immobile in soil
12.5 Results of PBT and vPv	Bassessment
PBT and vPvB assessment	2,4-D-2-ethylhexylester: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB). Fluroxypyr-meptyl: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).
12.6 Other adverse effects	
Additional ecological information	No other effects to be mentioned.



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# SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

Product	In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.
Contaminated packaging	Not completely emptied packagings should be disposed of as hazardous waste.
Waste key for the unused product	02 01 08* agrochemical waste containing hazardous substances

# SECTION 14: TRANSPORT INFORMATION

#### ADR/RID/ADN

14.1 UN number 14.2 Proper shipping name	<b>3082</b> ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D ETHYLHEXYL ESTER, HYDROCARBONS, C10, AROMATICS, <1% NAPHTHALENE SOLUTION)
14.3 Transport hazard class(es)	9
14.4 Packaging Group	III
14.5 Environm. Hazardous Mark	YES
Hazard no.	90

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

IMDG 14.1 UN number 14.2 Proper shipping name 14.3 Transport hazard class(es) 14.4 Packaging Group 14.5 Marine pollutant	<b>3082</b> ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D ETHYLHEXYL ESTER, HYDROCARBONS, C10, AROMATICS, <1% NAPHTHALENE SOLUTION) 9 III YES
IATA 14.1 UN number 14.2 Proper shipping name 14.3 Transport hazard class(es) 14.4 Packaging Group 14.5 Environm. Hazardous Mark	<b>3082</b> ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D ETHYLHEXYL ESTER, HYDROCARBONS, C10, AROMATICS, <1% NAPHTHALENE SOLUTION ) 9 III YES

### 14.6 Special precautions for user



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See sections 6 to 8 of this Safety Data Sheet.

#### **14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code** No transport in bulk according to the IBC Code.

# **SECTION 15: REGULATORY INFORMATION**

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

## Republic of Ireland Regulations

This material may be subject to some or all of the following regulations (and any subsequent ammendments). Users must ensure that any uses and restrictions as indicated on the label and/or leaflet are followed.

## Supply and Use

European Communities (Prohibition of Certain Active Substances in Plant Protection Products) Regulations 1981 (SI No 320/1981)

European Communities (Authorization, Placing on the Market, Use and Control of Plant Protection Products) Regulations 2003 (SI No 83/2003)

European Communities (Classification, Packaging and Labelling of Plant Protection Products and Biocide Products) Regulations 2001 (SI No 624/2001

2010 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations, 2001 (SI No 619/2001)

# Waste Treatment

Landfill Directive Regulation on Substances That Deplete the Ozone Layer 1994 (EEC/3093/94)

### **Further information**

WHO-classification: II (Moderately hazardous)

# 15.2 Chemical safety assessment

A chemical safety assessment is not required.

# **SECTION 16: OTHER INFORMATION**

### Text of the hazard statements mentioned in Section 3

- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H330 Fatal if inhaled.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.



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- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

This data sheet has been generated according to the safety data sheet supplied by the manufacturer of the product.

# Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
Conc.	Concentration
EC-No.	European community number
ECx	Effective concentration to x %
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
ELV	Exposure Limit Value
EN	European Standard
EU	European Union
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships Carrying Dangerous
	Chemicals in Bulk (IBC Code)
ICx	Inhibition concentration to x %
IMDG	International Maritime Dangerous Goods
LCx	Lethal concentration to x %
LDx	Lethal dose to x %
LOEC/LOEL	Lowest observed effect concentration/level
MARPOL	MARPOL: International Convention for the prevention of marine pollution from ships
N.O.S.	Not otherwise specified
NOEC/NOEL	No observed effect concentration/level
OECD	Organization for Economic Co-operation and Development
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SI	Statutory Instrument
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

Changes since the last version are highlighted in the margin. This version replaces all previous versions.