

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Trade name : OCEAL®
Product Code FH-048 - Dicamba 700g/kg SG -

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Main use category : Professional use
Use of the substance/preparation : Agriculture herbicide

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ROTAM EUROPE LTD
Hamilton House, Mabledon Place
London WC1H 9BB
Tel: +44 20 7953 0447
msds@rotam.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	NHS Direct (England and Wales)		111	
United Kingdom	NHS 24 (Scotland)		111	

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Aquatic Chronic 2, H411

Full text of H-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard symbols :



Signal word (CLP) : -

Hazard statements (CLP) : H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P273 - Avoid release to the environment.
P391 - Collect spillage.

P501 - 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.

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

PPP safety precautions : 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

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]
Dicamba	CAS No.) 1918-00-9 (EC no) 217-635-6	70	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Aquatic Chronic 3, H412
mixture based on Sodium diisopropylnaphtalene sulphonate	(CAS No.) 1322-93-6 (EC no) 215-343-3	1 - 5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Eye Irrit. 2, H319 STOT SE 3, H335

Full text of 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	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Rinse immediately with plenty of water. In case of an skin reaction, consult a physician.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

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

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

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

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide, nitrogen oxides (NOx).
Explosion hazard	: Product is not explosive.
Reactivity	: The product is stable at normal handling- and storage conditions.

5.3. Advice for firefighters**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****6.1.1. For non-emergency personnel**

Emergency procedures : Evacuate unnecessary personnel. Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment	: Wear a self-contained breathing apparatus and appropriate personal protective equipment (PPE).
Emergency procedures	: Ventilate area.

6.2. Environmental precautions

Do not allow material to contaminate ground water system. Prevent entry to sewers, drains and public waters. Notify authorities if product enters drains, sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Sweep or shovel spills into appropriate container for disposal.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Precautions for safe handling	: Use personal protective equipment as required.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.
Incompatible products	: Strong bases. strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

No additional information available

8.2. Exposure controls

Personal protective equipment	: Avoid any unnecessary exposure. Use personal protective equipment that is clean and has been properly maintained. Store personal protective equipment in a clean place, away from the work area. Remove and wash contaminated clothing before re-using.
Hand protection	: Wear suitable protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Respiratory protection	: Ensure that there is adequate ventilation, especially in confined areas.
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	: Solid – SG (Soluble granules)
Colour	: Brown
Odour	: No data available
Odour threshold	: No data available
pH	: 7.33 1% solution (CIPAC MT 75)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Dicamba: 114 – 116 °C(DAR Volume 1, November 2007)
Freezing point	: No data available
Boiling point	: Dicamba: > 230 °C(DAR Volume 1, November 2007)
Flash point	: Not applicable
Self ignition temperature	: No data available
Decomposition temperature	: Dicamba: 230°C (DAR Volume 1, November 2007)
Flammability (solid, gas)	: Not highly flammable(EEC A10)
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: Tap Density: 0.625g/mL(CIPAC MT 169)
Solubility	: Soluble in water
Log Pow	: No data available
Log Kow	: Dicamba: -1.88 pH 6.8(DAR Volume 1, November 2007)
Viscosity, kinematic	: No data available
Viscosity, dynamic	: Not applicable
Explosive properties	: Product is not explosive (EEC A14)
Oxidising properties	: Not an oxidizer (EEC A17)
Explosive limits	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity**10.1. Reactivity**

The product is stable at normal handling- and storage conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

All heat sources, including direct sunlight.

10.5. Incompatible materials

Strong acids, strong bases and oxidation agents.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

OCEAL®	
LD50 oral rat	> 2000 mg/kg (OECD Guidelines n°423)
LD50 dermal rat	> 2000 mg/kg (OECD Guidelines n°402)
LC50 inhalation rat (mg/l)	> 4.44 mg/l/4h (OECD Guidelines n°403)

Skin corrosion/irritation	: Not irritant to skin (OECD Guideline n°404)
Serious eye damage/irritation	: Not irritant to eyes (OECD Guideline n°405)
Respiratory or skin sensitisation	: Not skin sensitizing (OECD Guideline n°406)
Repeated dose toxicity	: Not classified
Carcinogenicity	: No indication of a carcinogenicity effect for the active substance dicamba (DAR Volumne 1, November 2007)
Mutagenicity	: No genotoxic concern for the active substance dicamba (DAR Volumne 1, November 2007)
Toxicity for reproduction	: No reproductive toxicity parameters observed for the active substance dicamba (DAR Volumne 1, November 2007)
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified

SECTION 12: Ecological information**12.1. Toxicity**

OCEAL®	
EC50(Fish) 96h	>138.7 mg/L (<i>Oncorhynchus mykiss</i>) OECD Guidelines n°203
EC50 (Daphnia) 48h	182.5 mg/L (<i>Daphnia magna</i>) OECD Guidelines n°202
EC50 (Algae) 72h	>144 mg/L (<i>Pseudokirchneriella subcapitata</i>) OECD Guidelines n°201
EyC50-14 day (other aquatic plant)	2.58mg/L (<i>Myriophyllum spicatum</i>) OECD Guidelines n°201 and 221
NOEC-14 day (other aquatic plant)	2.22mg/L (<i>Myriophyllum spicatum</i>) OECD Guidelines n°201 and 221

12.2. Persistence and degradability

Dicamba is not persistent. Dicamba is not readily biodegradable.

12.3. Bioaccumulative potential

Dicamba	
Log Kow	< 3 (DAR Volumne 1, November 2007)

12.4. Mobility in soilK_{oc} 242–2930, depending on soil.**12.5. Results of PBT and vPvB assessment**

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Regional legislation (waste) : Disposal must be done according to official regulations.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

UN-No. (ADR)	: 3077
UN-No. (IMDG)	: 3077

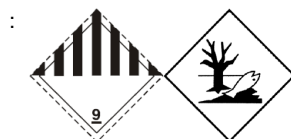
UN-No. (IATA) : 3077
 UN-No. (ADN) : 3077
 UN-No. (RID) : 3077

14.2. UN proper shipping name

Proper Shipping Name (ADR) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 Proper Shipping Name (IATA) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 Proper Shipping Name (ADN) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 Proper Shipping Name (RID) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 Transport document description (ADR) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dicamba), 9, III, (E)
 Transport document description (IMDG) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dicamba), 9, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
 Transport document description (IATA) : UN 3077 Environmentally hazardous substance, SOLID, n.o.s. (Dicamba), 9, III, ENVIRONMENTALLY HAZARDOUS
 Transport document description (ADN) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dicamba), 9, III, ENVIRONMENTALLY HAZARDOUS
 Transport document description (RID) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dicamba), 9, III, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)**ADR**

Transport hazard class(es) (ADR) : 9
 Danger labels (ADR) : 9

**IMDG**

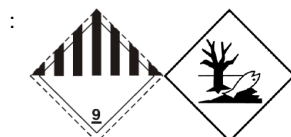
Transport hazard class(es) (IMDG) : 9
 Danger labels (IMDG) : 9

**IATA**

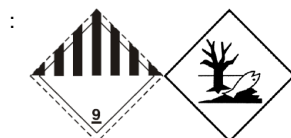
Transport hazard class(es) (IATA) : 9
 Hazard labels (IATA) : 9

**ADN**

Transport hazard class(es) (ADN) : 9
 Danger labels (ADN) : 9

**RID**

Transport hazard class(es) (RID) : 9
 Danger labels (RID) : 9



14.4. Packing group

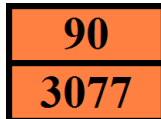
Packing group (ADR)	: III
Packing group (IMDG)	: III
Packing group (IATA)	: III
Packing group (ADN)	: III
Packing group (RID)	: III

14.5. Environmental hazards

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

14.6. Special precautions for user**- Overland transport**

Classification code (ADR)	: M7
Special provisions (ADR)	: 274, 335, 601, 375
Limited quantities (ADR)	: 5kg
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P002, IBC08, LP02, R001
Special packing provisions (ADR)	: PP12, B3
Mixed packing provisions (ADR)	: MP10
Portable tank and bulk container instructions (ADR)	: T1, BK1, BK2
Portable tank and bulk container special provisions (ADR)	: TP33
Tank code (ADR)	: SGAV, LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V13
Special provisions for carriage - Bulk (ADR)	: VC1, VC2
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90
Orange plates	:



EAC code	: 2Z
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- Transport by sea

Special provisions (IMDG)	: 274, 335, 966, 967, 969
Limited quantities (IMDG)	: 5 kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P002, LP02
Special packing provisions (IMDG)	: PP12
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: T1, BK1, BK2, BK3
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW23

- Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y956
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 956

PCA max net quantity (IATA)	: 400kg
CAO packing instructions (IATA)	: 956
CAO max net quantity (IATA)	: 400kg
Special provisions (IATA)	: A97, A158, A179, A197
ERG code (IATA)	: 9L

- Inland waterway transport

Classification code (ADN)	: M7
Special provisions (ADN)	: 274, 335, 375, 601
Limited quantities (ADN)	: 5 kg
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T* B**
Equipment required (ADN)	: PP, A
Number of blue cones/lights (ADN)	: 0

- Rail transport

Classification code (RID)	: M7
Special provisions (RID)	: 274, 335, 375, 601
Limited quantities (RID)	: 5kg
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P002, IBC08, LP02, R001
Special packing provisions (RID)	: PP12, B3
Mixed packing provisions (RID)	: MP10
Portable tank and bulk container instructions (RID)	: T1, BK1, BK2
Portable tank and bulk container special provisions (RID)	: TP33
Tank codes for RID tanks (RID)	: SGAV, LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W13
Special provisions for carriage – Bulk (RID)	: VC1, VC2
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW31
Colis express (express parcels) (RID)	: CE11
Hazard identification number (RID)	: 90

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**

No REACH Annex XVII restrictions

Contains no REACH candidate substance

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

The mixture is registered as a plant protection product according to Regulation (EC) No.1107 / 2009.

SECTION 16: Other information

OCEAL® is a registered trademark of ROTAM.

This MSDS supersedes all previous editions.

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Safety Data Sheet

according to Regulation No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Full text of H- and EUH-phrases:

Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Acute Tox. 4 (inhal)	Acute toxicity (inhal) Category 4
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H302	Harmful if swallowed
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation

SDS EU (REACH Annex II)

Disclaimer: The information provided by Rotam contained herein is given in good faith and correct to the best of our knowledge. However, the information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.