

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

Trade name : KALTOR®
 Product code : FH-053 - Nicosulfuron 150g/kg + Dicamba 600g/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 : +44 020 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 Acute 1 H400
 Aquatic Chronic 1 H410
 Eye Dam. 1 H318

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 pictograms (CLP) :



GHS05

GHS09

Signal word (CLP) : Danger
 Hazard statements (CLP) : H318 - Causes serious eye damage.
 H410 - Very toxic to aquatic life with long lasting effects.
 Precautionary statements (CLP) : P280 - Wear eye 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.
 P310 - Call a poison centre or doctor.
 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)
 SPe3 - To protect aquatic organisms respect an unsprayed buffer zone to surface water bodies in line with LERAP requirements

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	60	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Aquatic Chronic 3, H412
Nicosulfuron	(CAS No.) 111991-09-4	15	Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)
Lignosulfonic acid, sodium salt, sulfomethylated	(CAS No.) 68512-34-5	5 - 10	Eye Irrit. 2, H319
Sodium diisopropyl-naphthalenesulphonate	(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 Dam.1, H318 STOT SE 3, H335
Sodium carbonate	(CAS No.) 497-19-8 (EC No.) 207-838-8 (index No.) 011-005-00-2	1 - 5	Eye Irrit. 2, H319

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	: Call a physician or poison control center in case of doubt or if symptoms appear. 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	: If symptoms appear: go into open air and ventilate suspected area. Assure fresh air breathing. Allow the victim to rest. Call a POISON CENTER/doctor/physician, in case of doubt or if symptoms persist.
First-aid measures after skin contact	: If symptoms appear: rinse immediately with plenty of water. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Call a POISON CENTER/doctor/physician, in case of doubt or if symptoms persist.
First-aid measures after eye contact	: Rinse first cautiously with plenty of water for several minutes and if necessary take medical advice. Remove contact lenses, if present and easy to do. Continue rinsing. In case of doubt or if symptoms appear, call a POISON CENTER or doctor/physician.
First-aid measures after ingestion	: Rinse mouth with water, do not induce vomiting. Obtain emergency medical attention, call a POISON CENTER/doctor/physician if you feel unwell.

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

No additional information available

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

No additional information available

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

Suitable extinguishing media	: Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO ₂). Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: High volume water jet. 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 (NO _x), sulphur oxides (SO _x).
Explosion hazard	: Product is not explosive.
Reactivity	: The product is stable at normal handling- and storage conditions.

5.3. Advice for firefighters

Fire precautionary measures	: Wear suitable protective clothing, gloves, eye/face protection and self-contained breathing apparatus.
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- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid rejecting fire-fighting water in the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6 : Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Wear appropriate personal protective equipment (PPE).

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper personal protective protection.
- 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.
- Methods for cleaning up : Large spills: scoop solid spill into closing containers. On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

See section 8: Exposure controls and personal protection.

SECTION 7 : Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Do NOT get in eyes, on skin or on clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of dust.
- Hygiene measures : Wash skin thoroughly after handling. No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store tightly closed in a dry, cool and well-ventilated place. Keep only in the original container. Keep container closed when not in use.
- Incompatible products : Strong bases. Strong acids. Oxidising agents.
- Incompatible conditions : Avoid contact with sources of ignition. Avoid 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 : Avoid contact with eyes. Chemical goggles or safety glasses. Before handling powders or dust emission, wear mask goggles in accordance with standard EN166.
- 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, granule (OPPTS 830.6303)
- Colour : Brown (OPPTS 830.6302)
- Odour : Characteristic odor (OPPTS 830.6304)
- pH : 5.84 at 25.0°C (1% aqueous dilution) (CIPAC (J) MT 75.3)
- Melting point : No data available
- Freezing point : No data available

Boiling point	: No data available
Flash point	: Not relevant as it is a solid
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not highly flammable at 25.1 °C (EEC A.10)
Auto-flammability	: The test substance is auto-flammable at 240°C (EEC A.16)
Relative vapour density at 20 °C	: No data available
Bulk (Tap) density	: 0.651 g/mL at 25°C (CIPAC (F) MT 169)
Density	: Not relevant as it is a solid
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: Not relevant as it is a solid
Viscosity, dynamic	: Not relevant as it is a solid
Explosive properties	: Not explosive. (EEC A.14)
Oxidising properties	: Not oxidising (EEC A.17)
Explosive limits	: No data available

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 / ignition sources, including direct sunlight.

10.5. Incompatible materials

Strong acids, strong bases and oxidising agents.

10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide.

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

KALTOR®	
LD ₅₀ oral rat	> 2000 mg/kg (OECD Guideline n°425)
LD ₅₀ dermal rat	> 2000 mg/kg (OECD Guideline n°402)
LC ₅₀ inhalation rat (mg/L)	> 1.01 mg/L/4h (OECD Guideline n°403)

Irritation	: Not irritant to skin (OECD Guideline n°404), not irritant to eyes (OECD Guideline n°405)
Sensitisation	: Not a skin sensitiser (OECD Guideline n°429)
Mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

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

KALTOR®	
E _y C50 (14 days)	466 µg/L, (<i>Myriophyllum Spicatum</i>) Draft AMRAP Method (MALTBY et al. 2010)

KALTOR®	
E ₅₀ (14 days)	778 µg/L, (<i>Myriophyllum Spicatum</i>) Draft AMRAP Method (MALTBY et al. 2010)
NOEC (14 days)	97.7 µg/L, (<i>Myriophyllum Spicatum</i>) Draft AMRAP Method (MALTBY et al. 2010)
LD ₅₀ oral (48h) bee	> 210.8 µg / bee, (<i>Apis mellifera</i>) OECD Guidelines n°213
LD ₅₀ contact (48h) bee	> 200 µg / bee, (<i>Apis mellifera</i>) OECD Guidelines n°214

12.2. Persistence and degradability

Nicosulfuron is not readily biodegradable.
Dicamba is not readily biodegradable.

12.3. Bioaccumulative potential

Nicosulfuron (CAS n°111991-09-4)	
Log Pow	0.61 (EFSA Scientific Report (2007))

Dicamba (CAS n°1918-00-9)	
Log Pow	0.55~1.9 (EFSA Scientific Report (2011))

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other information : Avoid release to the environment.

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

No additional information available

SECTION 14: Transport information

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

14.1. UN number

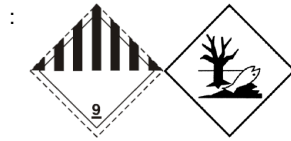
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UN-No. (IMDG)	: 3077
UN-No. (IATA)	: 3077
UN-No. (ADN)	: 3077
UN-No. (RID)	: 3077

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

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

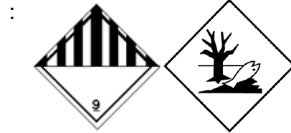
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Danger labels (ADR)	: 9



IMDG

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

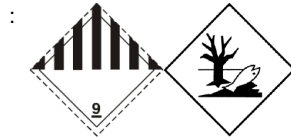
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IATA

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

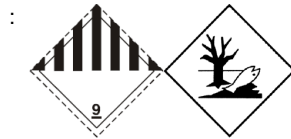
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ADN

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

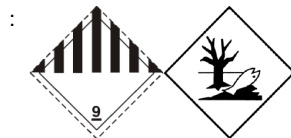
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RID

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

: 9
: 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 :



Tunnel restriction code (ADR) : E
EAC code : 2Z

- 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 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

KALTOR® is a registered trademark of ROTAM.

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

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
Aquatic Acute 1	Hazardous to the aquatic environment — AcuteHazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
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

SDS EU (REACH Annex II)

Disclaimer: The information provided by Rotam Europe Ltd 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.