

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]
Nicosulfuron	(CAS No.) 111991-09-4	4.25	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of R-, 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 poison center or a doctor if you feel unwell.
- 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

No additional information available

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 : Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO₂).
- Unsuitable extinguishing media : High volume water jet.

5.2. Special hazards arising from the substance or mixture

- Hazardous decomposition products in case of fire : Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide, nitrogen oxides (NO_x).

5.3. Advice for firefighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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 : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Collect spillage.
- Methods for cleaning up : Take up liquid spill into absorbent material.

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 : Do not breathe spray, vapours. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Wear personal protective equipment.
- 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 : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

7.3. Specific end use(s)

Professional use. See the label.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Engineering control of operator exposure must be used where reasonably practicable.

Hand protection:

Protective gloves

Eye protection:

Face protection (faceshield)

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid – Oil Dispersion -
Colour	: Off-white
Odour	: Mild characteristic odor
Odour threshold	: No data available
pH	: 7.37 at 25°C (CIPAC MT 75.3)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Solidification point	: No data available
Boiling point	: No data available
Flash point	: No flash point below 100°C (liquid boils at this temperature) (CIPAC MT12.2)
Auto-flammability	: Auto-ignition temperature of 417 ± 6 °C (EEC Method A15)
Decomposition temperature	: No data available
Flammability (solid, gas)	: See flash point results
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 0.9502 (MT3.2.1)
Density	: No data available
Solubility	: No data available
Log Pow	: 0.61, pH=2.3~2.4 at 20~21°C (active ingredient)
Log Kow	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: Mean Viscosity = 584 cP with swirl speed of 50rpm at 25oC (non-Newtonian) (OECD 114)
Explosive properties	: Not explosive.
Oxidising properties	: Not an oxidiser. (Method A 21)
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

Not applicable.

10.4. Conditions to avoid

All heat sources.

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**

PRIMERO®	
LD ₅₀ oral rat	> 5000 mg/kg (OECD Guidelines n°425)
LD ₅₀ dermal rat	> 5050 mg/kg (OECD Guidelines n°402)
LC ₅₀ inhalation rat	> 2.15 mg/L (OECD Guidelines n°403)

Skin corrosion/irritation	: Non irritating for the skin (OECD Guidelines n°404)
Serious eye damage/irritation	: Non irritating for the eyes (OECD Guidelines n°405)
Respiratory or skin sensitisation	: Non sensitising for the skin (OECD Guidelines n°406)
Germ cell 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**

PRIMERO®	
LC ₅₀ fishes 96h	> 100 mg/l (Danio rerio) OECD Guidelines n°203
	7.2 mg/L (Oncorhynchus mykiss) OECD Guidelines n°203
NOEC fishes 96h	2.25 mg/L (Oncorhynchus mykiss) OECD Guidelines n°203
EC ₅₀ daphnia 48h	3.35 mg/L (Daphnia similis) OECD Guidelines n°204
NOEC daphnia 48h	1.56 mg/L (Daphnia similis) OECD Guidelines n°204
EC ₅₀ algae 72h	26.87 mg/L (Pseudokirchneriella subcapitata) OECD Guidelines n°201
NOEC algae 72h	<6.25mg/L (Pseudokirchneriella subcapitata) OECD Guidelines n°201
ErC ₅₀ other aquatic plant 7 days	0.060 mg/L (Lemna gibba L.) OECD Guidelines n°221
NOEC other aquatic plant 7 days	0.024 mg/L (Lemna gibba L.) OECD Guidelines n°221

12.2. Persistence and degradability

Nicosulfuron is not readily biodegradable.

12.3. Bioaccumulative potential

Log Pow = 0.61, pH=2.3~2.4 at 20~21°C (Active ingredient : Nicosulfuron)

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

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)	: 3082
UN-No. (IMDG)	: 3082
UN-No. (IATA)	: 3082
UN-No. (ADN)	: 3082
UN-No. (RID)	: 3082

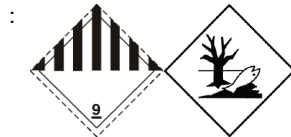
14.2. UN proper shipping name

Proper Shipping Name (ADR)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IMDG)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IATA)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (ADN)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (RID)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document description (ADR)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Nicosulfuron), 9, III, (E)
Transport document description (IMDG)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Nicosulfuron), 9, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA)	: UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Nicosulfuron), 9, III, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Nicosulfuron), 9, III, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Nicosulfuron), 9, III, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

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



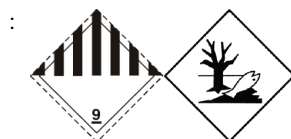
IMDG

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



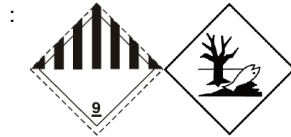
IATA

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



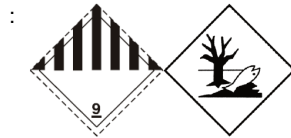
ADN

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

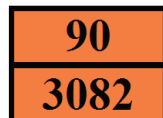
14.5. Environmental hazards

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) : M6
Special provisions (ADR) : 274, 335, 601, 375
Limited quantities (ADR) : 5I
Excepted quantities (ADR) : E1
Packing instructions (ADR) : P001, IBC03, LP01, R001
Special packing provisions (ADR) : PP1
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions (ADR) : TP1, TP29
Tank code (ADR) : LGBV
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
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 : •3Z

- Transport by sea

Special provisions (IMDG) : 274, 335, 969
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : P001, LP01

Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP2, TP29
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A

- Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
Special provisions (IATA)	: A97, A158, A197
ERG code (IATA)	: 9L

- Inland waterway transport

Classification code (ADN)	: M6
Special provisions (ADN)	: 274, 335, 375, 601
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP
Number of blue cones/lights (ADN)	: 0

- Rail transport

Classification code (RID)	: M6
Special provisions (RID)	: 274, 335, 375, 601
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Special packing provisions (RID)	: PP1
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions (RID)	: TP1, TP29
Tank codes for RID tanks (RID)	: LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW31
Colis express (express parcels) (RID)	: CE8
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

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

This MSDS supersedes all previous editions.

PRIMERO® is a registered trademark of ROTAM.

Full text of H- and EUH-phrases:

Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
H400	Very toxic to aquatic life
H410	Very toxic 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.