SAFETY DATA SHEET According to Annex II of Regulation (EC) № 1907/2006 and Regulation (EC) №	Issue date: 10.12.2008
1272/2008 [CLP] STRETCH	Edition № 6
	Date of edition: 24.07.2019

1. IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND OF THE COMPANY/ UNDERTAKING

 1.1. <u>Product identifiers</u> Name of the substance EC № Registration № (REACH) CAS № 	: : : :	Nicosulfuron 40 g/l OD - -
1.2. <u>Relevant identified uses of the substance</u> or mixture and uses advised against Identified uses	:	Herbicide
1.3. <u>Details of the supplier of the safety data</u> <u>sheet</u> Manufacture/ Supplier Street/ Zip Code Phone Fax E-mail	:	Zenith Crop Sciences Bulgaria Ltd 75-83 Dimitar Manov Str. 1408 Sofia, Bulgaria +359 2 91 50 500 The phone number is available only during office hours.
1.4. <u>Emergency telephone number</u> Available Language telephone line	: :	+44 (0)800 246 1274 (dangerous goods safety advisor) 24/7 English
2. HAZARD IDENTIFICATION		

2.1. Classification of the substance or mixture

Classification According Regulation (EC) No 1272/2008 (CLP)

2.2. Label elements

Labeling according to Regulation (EC) No 1272/2008 (CLP) Hazard pictograms : Skin Sens. 1B; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410



Signal words

Hazard statements

WARNING

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H317 – My cause an allergic skin reaction H410 – Very toxic to aquatic life with long lasting effects

SAFETY DATA SHEET OF STRETCH

Precautionary Statements	:	Prevention P280 – Wear protective gloves/ protective clothing
		ResponseP302 + P352 - IF ON SKIN: Wash with plenty of soap and waterP333 - If skin irritation or rash occurs: Get medical advice/ attentionP391 - Collect spillage
		Disposal P501 – Dispose of content/ container to accordance with national legislations
Additional Precautionary Statements	:	EUH 401 – To avoid risks to human health and the environment, comply with the instructions for use
2.3. Other hazards	:	Not known

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1. Substances

: Refers to a mixture

3.2. Mixtures

Description of the mixture

Name	CAS №	EC №	Index №	REACH Reg. №	Concentration (% w/v)	Classification according Regulation (EC) № 1272/2008 (CLP)
Nicosulfuron, 2-[(4,6-dimethoxypyrimidin- 2-ylcarbamoyl)sulfamoyl]- N,N-dimethylnicotinamide (IUPAC)	11199 1-09-4	-	-	-	4 ± 0.4	Aquatic Acute 1; H400 Aquatic Chronic 1; H410

For full text of Hazard categories and Hazard statements: see SECTION 16 (v).

4. FIRST AID MEASURES

4.1. Description of first aid measures

Following inhalation :	Remove from exposure area to fresh air. Provide artificial breathing if the breathing has stopped. Seek medical attention immediately.
Following skin contact :	Remove contaminated clothing and shoes. Wash affected area with plenty of water. Seek medical attention if necessary. Wash contaminated clothing before next use.
Following eye contact :	Immediately rinse for at least 15 minutes with large quantity of drinking water while holding eyes open. Remove contact lenses, if present and rinse eyes with plenty of drinking water for 5 minutes. Remove contact lenses and continue rinsing for 15 more minutes. Immediately seek gualified medical advice.
Following ingestion :	Never give anything by mouth to an unconscious person! Seek medical attention immediately. Don't induce vomiting. If the patient is conscious, rinse out mouth thoroughly and have the patient drink a glass of water.

Self-protection of the first-aiders	:	No information
4.2. <u>Most important symptoms and effects,</u> both acute and delayed	:	The most important known symptoms and/ or effects are described in Section 11.
4.3. Indication of any immediate medical attention and special treatment needed	:	Not available
5. FIREFIGHTING MEASURES		
5.1. Extinguishing media		Dry powder, carbon diovide fire extinguishers. In case of
Unsuitable extinguishing media 5.2. Special hazards arising from the	:	large fires use water spray, foam extinguisher No available information
substance or mixture		
Hazardous combustion products	:	In case of fire, along with other products of combustion, the smoke contains toxic gases – sulphur dioxide, nitrogen oxides, carbon monoxide and hydrogen sulphide.
5.3. <u>Advice for firefighters</u>	:	Full impervious coverall clothing. Self-containing breathing apparatus.
6. ACCIDENTAL RELEASE MEASURES		
6.1. <u>Personal precautions, protective</u> <u>equipment and emergency procedures</u> For those staff which does not meet for emergency For the persons responsible for emergency	: :	Remove immediately. Eliminate all ignition sources (flame or spark). Provide local and general exhaust ventilation. Use protective clothing and gloves, respiratory mask with an effective particulate filter, chemical goggles for eye protection.
6.2. <u>Environmental precautions</u>	:	In case of accidental release take precautions to protect the surface and underground water, soil and sewage from contamination. Remove the sources of heat and flames. In case of spill into the sewage, surface water, ground water or soil notify the competent authorities immediately.
6.3. Methods and material for containment and		
Cleaning up For containment and cleaning	:	Absorb with an inert material – sand, zeolite. Use vacuum cleaning. Do not dispose the product and/ or contaminated materials into the sewage systems, water sources or water bodies. Collect into an appropriate, labelled tightly sealed waste container. Store the container at an appropriate place for further treatment or disposal according to the national legislation.
Other Information 6.4. <u>Reference to other sections</u>	:	The collected product and/or contaminated materials should be treated as a waste according to section 13.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Precautionary measures	:	Use process enclosures, local exhaust ventilation and other suitable engineering controls to keep airborne levels below recommended exposure limits. If user operations generate aerosol, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. (See section 8).
Measures to prevent fire	:	Keep away from sources of ignition (open flames, sparkles)
Measures to prevent aerosol and dust	:	Regularly clean the premises and facilities wearing personal protective equipment and using professional fire-safe cleaning tools. Keep within the workspace only the quantities necessary for the normal working process. Containers/ packaging must not be left open
Measures for environmental protection Advice on general occupational hygiene	:	No available information. Do not eat, drink or smoke when handling the product. In case of contamination change the work clothing. Avoid inhalation, ingestion and contact with eyes and skin. Do not handle this product without wearing the recommended personal protective clothing and equipment.
7.2. <u>Conditions for safe storage, including any</u> incompatibilities		
Technical measures and storage conditions	:	Keep in cool, dry, well-ventilated place far from sources of ignition. Prevent static electricity generation. Keep out of reach of children. Storage temperature: + 5 °C to + 35 °C.
Packing materials	:	Keep in unopened original packing.
Requirements for storage rooms and vessels	:	 Keep away from: medicinal products, food, forage, fertilizers and seed hazardous infectious substances, radioactive substances, explosive substances highly reactive oxidizing substances
Class of storage	:	Not available
Additional information on storage conditions	:	Not available
7.3. <u>Specific end use(s)</u>		
Recommendations	:	See point 7.1, 7.2 and the label/ leaflet for relevant uses of this product.

8. EXPOSURE CONTROL/ PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limit values in air according to national (Bulgarian) legislation None established

Occupational exposure limit values in air according to EU legislation None established

Consult the relevant national limit values currently applicable in the EU Member State/ Non-EU country in which this safety data sheet is being provided.

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Structural, organizational and technical measures :

Ensure adequate local and overall ventilation in the workplace.

8.2.2. Individual protection measures, such as personal protective equipment

Respiratory	protection
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Skin protection

Eye protection

Hand protection



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Thermal hazards

8.2.3. Environmental exposure controls

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties		
(a) Appearance	:	Grey to light brown liquid
Method: Observation of colour, physical state, odour		
Reference: Own GLP study – "Physical State, Appearance	e an	d Color"
(b) Odor	:	Mild odor
Method: Observation of colour, physical state, odour		
Reference: Own GLP study – "Physical State, Appearance	e an	d Color"
(c) Odor threshold	:	Not available
(d) pH	:	4.0 – 7.0
Method: CIPAC MT 75.3		
Reference: Own GLP study – "pH determination"		
(e) Melting point/ Freezing point	:	No available information
(f) Initial boiling point and boiling range	:	No available information
(g) Flash point	:	> 100 °C
Method: EEC A9		
Reference: Own GLP study – "Flash point"		
(h) Evaporation rate	:	Not available
(i) Flammability (solid, gas)	:	Not flammable
(j) Upper lower flammability or explosive		
limits	:	Not available
(k) Vapor pressure	:	No available information
(I) Vapor density	÷	No available information
(<i>m</i>) Relative density	:	$D^{20}4 = 0.9897 \pm 0.0013$

In case of mist or aerosol formation use respirator with an approved filter. Half mask with a particle filter FFP2 (EN 149).

In case of prolonged and repeated exposure

Wear body-covering chemical resistant protective clothing.

Use safety glasses with side shields (according to EN 166).

- In case of short-term exposure: Single-use vinyl gloves. In case of prolonged or frequently repeated exposure nitrile-rubber gloves with a protection class of 5 or higher breakthrough time > 240 minutes thickness > 0.4 mm. No available information.
- : Emissions from the ventilation system and working equipment should be checked for conformity with environment safety legislations.

Method: CIPAC MT 3.2 Reference: Own GLP study – "Determination of relative density"

 (n) Solubility(ies) (o) Partition coefficient: n-octanol/water (p) Auto – ignition temperature Method: EEC A15 Reference: Own GLP study – "Auto – ignition temper 	 No available information No available information 428.5 °C ± 8.6 °C at 755.01 mmHg rature"
(q) Decomposition temperature	: No available information

(r) Viscosity :	The viscosity varied with time so is no-Newtonian fluid. The test item presents a pseudoplastic behavior, the viscosity decreases when the rotation speed increases. The viscosity range measured at 20 °C was $359.92 - 407.91 \text{ cP}$ The viscosity range measured at 40 °C was $254.95 - 306.79 \text{ cP}$
Method: OECD 114	
Reference: Own GLP study – "Determination of Viscosity"	
(s) Explosive properties:(t) Oxidizing properties:	Predicted negative Predicted negative

9.2. Other information

Corrosion	: No available information
10. STABILITY AND REACTIVITY	
10.1. <u>Reactivity</u>	: No available information

TU.T. <u>Reactivity</u>		
10.2. Chemical stability	: Stable under normal conditions	
10.3. Possibility of hazardous reactions	: No available information	
10.4. Conditions to avoid	: Avoid storage at temperature > 35 °C in a confined place.	
10.5. Incompatible materials	: Avoid contact with strong oxidizing agents and strong	
	alkalis and acids.	
10.6. Hazardous decomposition products	: No available information. In case of fire, see section 5	

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Data on formulated product

Acute toxicity effects based on own studies:

Acute oral toxicity

LD₅₀ > 2000 mg/kg bw (*rats*) Method: EC B.1 and OECD 423 Reference: Own GLP study "Acute oral toxicity in rats"

Acute dermal toxicity

LD₅₀ > 2000 mg/kg bw *(rats)* Method: EC B.3 and OECD 402 Reference: Own GLP study "Acute dermal toxicity in rats"

Acute inhalation toxicity (mist)

LC₅₀ > 5.06 mg/L (*rats*) Method: EC B.2 and OECD 403 Reference: Own GLP study "Acute inhalation toxicity in rats" **Skin corrosion/ irritation:** Not classified as skin irritant Method: EC B.4 and OECD 404 Reference: Own GLP study "Acute Dermal Irritation/Corrosion"

Serious eye damage/ irritation: The test item Nicosulfuron 40 g/L OD, applied to rabbit eye mucosa, caused conjunctival redness and transient discharge. The effects were fully reversible within 24 hours. According to Regulation (EC) No 1272/2008, Nicosulfuron 40 g/L OD does not require classification as an eye irritant. Method: EC B.5 and OECD 405

Reference: Own GLP study "Acute Eye Irritation/ Corrosion"

Respiratory or skin sensitization: Mice

The appearance of the lymph nodes was normal in the negative (vehicle) control group and in the 2.5 % (w/v) dose group. Larger than normal lymph nodes were observed in the 25, 10 and 5 % (w/v) dose groups and in the positive control group. The stimulation index values were 11.2, 12.5, 2.9 and 1.0 at concentrations of 25, 10, 5 and 2.5 % (w/v), respectively. Has sensitization potential (sensitizer).

Method: EC B.42 and OECD 429

Reference: Own GLP study "Skin sensitization"

Germ sell mutagenicity	:	No mutagenic risk
Carcinogenicity	:	No carcinogenic effects
Reproductive toxicity	:	Not classified as toxic to reproduction
STOT – single exposure	:	No evidence for specific organ effects from single exposure
STOT – repeated exposure	:	No evidence for specific organ effects from repeated exposure
Aspiration hazards	:	Not applicable

12. ECOLOGICAL INFORMATION

12.1. Toxicity effects based on own studies:

Data on formulated product

Waterflea (Daphnia magna): The 24h EC_{50} value > 100 mg/L The 48h EC_{50} value > 100 mg/L Calculated 48h EC_{50} value: 166.63 mg/L NOEC = 31.3 mg/L

LOEC = 100 mg/L Method: EC C.2 and OECD 202 Reference: Own GLP study "Acute immobilisation study in *Daphnia magna*"

Algae (Pseudokirchneriella subcapitata): EC₅₀ > 100 mg/L NOEC = 31.3 mg/L LOEC = 100 mg/L

Method: EC C.3 and OECD 201 Reference: Own GLP study "Alga growth inhibition test"

Birds (Japanese quail): LD₅₀ > 2000 mg/kg oral Method: OPPTS 850.2100 Reference: Own GLP study "Acute oral toxicity study of Japanese quail"

Fish (Rainbow trout): The 24h, 48h, 72h and 96h LC_{50} value > 100 mg/L The 96h LC_{100} value > 100 mg/L NOEC = 31.3 mg/L LOEC = 100 mg/L Method: EC C.1 and OECD 203

Reference: Own GLP study "Acute oral toxicity study of Rainbow trout"

Honeybees: ORAL (24h) $LD_{50} > 97.92 \ \mu g a.i./bee (> 2388.29 \ \mu g/bee)$ ORAL (48h) $LD_{50} > 97.92 \ \mu g a.i./bee (> 2388.29 \ \mu g/bee)$ Method: EC C.16 and OECD 213

Reference: Own GLP study "Acute toxicity study in honey bees"

Honeybees: CONTACT (24h) LD₅₀ > 100 µg a.i./bee > (2439.02 µg/bee)

CONTACT (48h) LD₅₀ > 100 µg a.i./bee > (2439.02 µg/bee)

Method: EC C.17 and OECD 214

Reference: Own GLP study "Acute toxicity study in honey bees"

Earthworms: In a 14-day toxicity study to earthworms (Eisenia fetida) with Nicosulfuron 40 g/L OD, the LC₅₀ was higher than 1000 mg/kg soil dry weight.

The NOEC related to biomass changes and mortality was 1000 mg/kg soil dry weight. The test item Nicosulfuron 40 g/L OD has adverse effect on the reproduction of earthworms (Eisenia fetida).

 EC_{50} (56 day) > 1000 mg Test Item/kg soil dry weight

 LC_{50} (28 day) > 1000 mg Test Item/kg soil dry weight

NOEC (28 day) = 1000 mg Test Item/kg soil dry weight (based on the adult mortality and biomass development)

NOAEC (56 day) = 500 mg Test Item/kg soil dry weight (based on reproduction)

Method: OECD 207 and OECD 222

Reference: Own GLP study "Acute toxicity study in earthworms"

Aquatic higher plant (Lemna gibba): The effects of Nicosulfuron 40 g/L OD on Lemna gibba compared to the control plant development was demonstrated by the reduction of average specific growth rates and yield (both calculated on the basis of frond number and dry weight).

Method: OECD 221; EPA OPPTS 850.4400

Reference: Own GLP study "Toxicity to the Aquatic Higher Plant Lemna gibba"

12.2. Persistence and degradability	:	Biodegradable. DT ₅₀ (soil) 26 days (usually).	
12.3. Bioaccumulative potential	:	The product does not bioaccumulate in fish and insects	
12.4. <u>Mobility in soil</u>	:	No available information	
12.5. Results of PBT and vPvB assessment	:	No available information	
12.6. Other adverse effects	:	: Not known	
12.7. Additional information	:	No additional information	

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods	Disposal must be carried out in accordance with the provisions of the national legislation, in an environmentally safe manner.
	Recommended treatment method: burning in
	appropriately licensed incinerators.
	Collection of small product quantities:
	Absorb with an inert material – sand, zeolite and store in
	solid waste containers.
	The container should be clearly labelled, with content
	description, danger indication symbols. H- and P-
	statements.
	Store in well ventilated areas, until deposit to a licensed
	waste disposal company. The water used for
	contaminated surface washing should be collected for
	Do not rouge the empty containers for any other nurness
	Do not reuse the empty containers for any other purpose.
	Do not dispose into the sewage. Do not pollute natural
	water sources.
Waste code :	07 04 13* solid waste, containing dangerous substances 07 04 01* aqueous washing liquid and mother liquors

15 01 10* packaging containing residues of or contaminated by dangerous substances

14. TRANSPORT INFORMATION

14.1. General information		
UN-No. (ADR)	:	3082
UN proper shipping name	:	Environmentally hazardous substance, liquid, n.o.s (contains nicosulfuron)
Transport hazard class(es)	:	9
Packing group	:	III
Environmental hazards	:	Environmentally hazardous substance indication ADR/ RID/ IMDG-Code/ ICAO-TI/ IATA-DGR: x yes / _
		no
		Marine pollutant: x yes / no
Marking	:	
		\sim
Special precautions for user	:	See Sections 6 – 8

15. REGULATORY INFORMATION

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

EU Legislations:

EC Regulation 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products and repealing Directives 79/117/EEC and 91/414/EEC Applicable

REGULATION (EC) No 1272/2008 of the European parliament and of the Council of 16 December 2008 on classification, labelling and packing of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Applicable

COMMISSION REGULATION (EU) No 547/2011 of 8 June 2011 implementing Regulation (EC) No 1107/2009 of the European Parliament and of the Council as regards labelling requirements for plant protection products Applicable

REGULATION (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemical Agency, amending Directive 1999/45/EC and repealing Council regulation (EEC) No 793/93 and Commission regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

No restrictions

DIRECTIVE 2012/18/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC

This product is classified under the Seveso III Directive

Seveso III Directive

E1: Hazardous to the aquatic environment - Acute and Chronic 1

National Legislation:

Ordinance on prevention of major accidents involving hazardous substances and limiting their consequences.

Applicable

Ordinance for authorization of plant protection products. Applicable

Ordinance on procedures for labelling of plant protection products. Applicable

- 15.2. Chemical safety assessment
- : The chemical safety assessment has been carried out for the mixture

16. OTHER INFORMATION

(i) Indication of changes

- The information in this safety data sheet was changed in the following sections:
- 2 Hazard Identification
- 3 Composition/ Information of ingredients
- 15 Regulatory information
- (ii) Abbreviation and acronyms None

(iii) Key literature references and sources for data ECHA Guidance on the compilation of safety data sheets (*version 3.1, November 2015*)

(iv) Classification and procedure used to derive the classification for mixtures to Regulation (EC) 1272/2008 [CLP]

Classification according to Regulation (EC) № 1272/2008	Classification procedure
Skin Sens. 1B; H317	On basis of test data
Aquatic Acute 1; H400	On basis of calculation method
Aquatic Chronic 1; H410	On basis of calculation method

(v) Relevant H – statements (number and full text as referred to SECTION 3)

According Regulation (EC) №1272/2008

- Aquatic Acute 1 Hazardous to the aquatic environment acute, categories of danger 1; H400 Very toxic to aquatic life
- Aquatic Chronic 1 Hazardous to the aquatic environment chronic, categories of danger 1; H410 Very toxic to aquatic life with long lasting effects

(vi) Training advice

General occupational hygiene training recommended

(vii) Further information

THE INFORMATION PRESENTED IN THIS SAFETY DATA SHEET IS BASED ON OUR KNOWLEDGE OF THE PRODUCT AT THE DATE OF ISSUE AND IS INTENDED TO PROVIDE ONLY GENERAL HEALTH AND

SAFETY GUIDANCE.

THIS SAFETY DATA SHEET COMPLEMENTS THE TECHNICAL SPECIFICATION/ LABEL/ LEAFLET OF THE PRODUCT BUT DOES NOT REPLACE THEM.

THE USERS OF THIS PRODUCT SHOULD MAKE THEIR OWN ASSESSMENT OF ITS SUITABILITY FOR THE INTENDED PURPOSES PRIOR TO USE.

NO LIABILITY WILL BE ACCEPTED FOR ANY INJURY, LOSS OR DAMAGE RESULTING FROM ANY FAILURE TO TAKE ACCOUNT OF INFORMATION OR ADVICE CONTAINED IN THIS SAFETY DATA SHEET OR OTHER AVAILABLE TECHNICAL USAGE LITERATURE.