

SAFETY DATA SHEET

Nikit 240 SC

This safety data sheet complies with the requirements of:
Regulation (EC) No. 453/2010 and Regulation (EC) No. 1272/2008



SDS # : FO002236-A
Revision date: 2019-10-28
Format: EU
Version 1

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Code(s) FO002236-A
Legacy Product Code 79A/7950
Product Name Nikit 240 SC

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

Recommended Use: Herbicide
Restrictions on Use: Use as recommended by the label.

1.3. Details of the supplier of the safety data sheet

Supplier CHEMINOVA A/S, a subsidiary of FMC Corporation
Thyborønvej 78
DK-7673 Harbøre
Denmark
+45 9690 9690
SDS.Ronland@fmc.com

For further information, please contact:

Contact point E-Mail: SDS-Info@fmc.com
Phone: +1 215-299-6000 (General Information)

1.4. Emergency telephone number

Emergency telephone (+45) 97 83 53 53 (24 h; for emergencies only)

Medical emergencies:

Austria: +43 1 406 43 43
Belgium: +32 70 245 245
Bulgaria: +359 2 9154 409
Cyprus: 1401
Czech Republic: +420 224 919 293, +420 224 915 402
Denmark: +45 82 12 12 12
France: +33 (0) 1 45 42 59 59
Finland: +358 9 471 977
Greece: 30 210 77 93 777
Hungary: +36 80 20 11 99
Ireland (Republic): +352 1 809 2166
Italy: +39 02 6610 1029
Lithuania: +370 523 62052, +370 687 53378
Luxembourg: +352 8002 5500
Netherlands: +31 30 274 88 88
Norway: +47 22 591300

Poland: +48 22 619 66 54, +48 22 619 08 97
Portugal: 800 250 250 (in Portugal only), +351 21 330 3284
Romania: +40 21318 3606
Slovakia: +421 2 54 77 4 166
Slovenia: +386 41 650 500
Spain: +34 91 562 04 20
Sweden: +46 08-331231112
Switzerland: 145
United Kingdom: 0870 600 6266 (in the UK only)
U.S.A. & Canada: +1 800 / 331-3148
All other countries: +1 651 / 632-6793 (Collect)

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture *Regulation (EC) No 1272/2008*

Skin corrosion/irritation	Category 2 (H315)
Skin sensitization	Category 1B (H317)
Acute aquatic toxicity	Category 1 (H400)
Chronic aquatic toxicity	Category 1 (H410)

2.2. Label elements

Hazard pictograms



Signal Word

Warning

Hazard Statements

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H410 - Very toxic to aquatic life with long lasting effects

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

Precautionary Statements

P261: Avoid breathing mist.

P280 - Wear protective gloves

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P362 + P364 - Take off all contaminated clothing and wash it before reuse

P501: Dispose of contents/container as hazardous waste in accordance with local regulations.

2.3. Other hazards

None of the ingredients in the product meets the criteria for being PBT or vPvB.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

The product is a mixture, not a substance.

3.2 Mixtures

Chemical name	EC-No	CAS-No	Weight %	Classification according to	REACH
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				Regulation (EC) No. 1272/2008 [CLP]	registration number
NICOSULFURON	-	111991-09-4	25	Not classified	No data available
Calcium dodecylbenzene sulfonate	-	26264-06-2	1-5	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic chronic 2 (H411)	No data available
Octadecanoic acid, 12-hydroxy-, homopolymer, octadecanoate	-	58128-22-6	1-5	Skin Irrit. 2 (H315)	No data available
2-Ethylhexan-1-ol	-	104-76-7	1-5	Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	No data available

Additional Information

For the full text of the H- and EUH- phrases mentioned in this Section, see Section 16

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact	Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.
Skin Contact	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.
Inhalation	If experiencing any discomfort, immediately remove from exposure. Light cases: Keep person under surveillance. Get medical attention immediately if symptoms develop. Serious cases: Get medical attention immediately or call for an ambulance.
Ingestion	Rinse mouth with water and afterwards drink plenty of water or milk. Do NOT induce vomiting. If vomiting does occur, rinse mouth and drink fluids again. Immediate medical attention is required.

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

Most important symptoms and effects, both acute and delayed	Irritation and possibly allergic reactions.
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4.3. Indication of any immediate medical attention and special treatment needed

Indication of immediate medical attention and special treatment needed, if necessary	Immediate medical attention is required in cases of ingestion. It may be helpful to show this safety data sheet to physician. Notes to physician: A specific antidote for exposure to this material is not known. Gastric lavage and/or the administration of activated charcoal can be considered. After decontamination, treatment should be directed at the control of symptoms and the clinical condition.
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Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Small Fire	Dry chemical, Carbon dioxide (CO ₂).
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Large Fire

Water spray, Foam.

Unsuitable extinguishing media

Avoid heavy hose streams.

5.2. Special hazards arising from the substance or mixture

The essential breakdown products are volatile, toxic, irritant and inflammable compounds such as nitrogen oxides, sulphur dioxide, carbon monoxide and carbon dioxide.

5.3. Advice for firefighters

Use water spray to keep fire-exposed containers cool. Approach fire from upwind to avoid hazardous vapours and toxic decomposition products. Fight fire from protected location or maximum possible distance. Dike area to prevent water runoff. Firemen should wear self-contained breathing apparatus and protective clothing.

Section 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures****Personal Precautions**

It is recommended to have a predetermined plan for the handling of spills. Empty, closable vessels for the collection of spills should be available.

In case of large spill (involving 10 tonnes of the product or more):

Observe all safety precautions when cleaning up spills. Use personal protection equipment. Depending on the magnitude of the spill this may mean wearing respirator, face mask or eye protection, chemical resistant clothing, gloves and rubber boots. Stop the source of the spill immediately if safe to do so. Keep unprotected persons away from the spill area.

For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Contain the spill to prevent any further contamination of surface, soil or water. Wash waters must be prevented from entering surface water drains. Uncontrolled discharge into water courses must be alerted to the appropriate regulatory body.

6.3. Methods and material for containment and cleaning up**Methods for Containment**

It is recommended to consider possibilities to prevent damaging effects of spills, such as bunding or capping.

If appropriate, surface water drains should be covered. Minor spills on the floor or other impervious surface should immediately be swept up or preferably vacuumed up using equipment with high efficiency final filter. Transfer to suitable containers. Clean area with detergent and much water. Absorb wash liquid onto inert absorbent such as universal binder, Fuller's earth, bentonite or other absorbent clay and collect in suitable containers. The used containers should be properly closed and labelled.

Large spills in water should be contained as much as possible by isolation of the contaminated water. The contaminated water must be collected and removed for treatment or disposal. Spills which soak into the ground should be dug up and transferred to suitable containers.

Methods for cleaning up

Pick up and transfer to properly labeled containers.

6.4. Reference to other sections

See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Handling

In an industrial environment, it is recommended to avoid any personal contact with the product, if possible, using remotely controlled systems with remote control. Otherwise, it is recommended to process the material with maximum mechanical means. Adequate ventilation or local exhaust ventilation is required. Exhaust gases must be filtered or treated differently. For personal protection in this situation, see Section 8.

Remove contaminated clothing and shoes. Wash thoroughly after handling. Use protective gloves made from chemicals such as nitrile or neoprene. Wash gloves with soap and water before reuse. Check regularly for leaks. Do not dispose into the environment. Do not contaminate water when disposing of the flushing water for equipment. Collect all waste and residues from cleaning equipment, etc. And dispose of them as hazardous waste. See Section 13 for disposal.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities**Storage**

No special restrictions on storage with other products. The product is stable under normal conditions of warehouse storage.

Store in closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. A warning sign reading "POISON" is recommended. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available.

7.3. Specific end use(s)**Specific Use(s)**

The product is a registered pesticide which may only be used for the applications it is registered for, in accordance with a label approved by the regulatory authorities.

Risk Management Methods (RMM)

The information required is contained in this Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

To our knowledge, personal exposure limits have not been established for the active ingredient in this product. An exposure limit of 10 mg/m³ (8-hr TWA) is recommended for other sulphonylureas.

Derived No Effect Level (DNEL)

Nicosulfuron
DNEL, systemic0.8 mg/kg bw/day.

Predicted No Effect Concentration (PNEC)

Nicosulfuron
PNEC, aquatic environment0.17 g/L.

8.2. Exposure controls**Engineering measures**

When used in a closed system, personal protection equipment will not be required. The following is meant for other situations, when the use of a closed system is not possible, or when it is necessary to open the system. Consider the need to render equipment or piping systems non-hazardous before opening.

The precautions mentioned below are primarily meant for handling of the undiluted product and for preparing the spray solution, but can be recommended for spraying as well.

In cases of incidental high exposure, maximal personal protection maybe necessary, such as respirator, face mask, chemical resistant coveralls.

Personal protective equipment**Eye/Face Protection**

Safety glasses with side-shields. Provide emergency on-site eyewash.

Hand Protection	Wear chemical resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber or viton. The breakthrough times of these materials for the product are unknown, but it is expected that they will give adequate protection.
Skin and Body Protection	Wear appropriate chemical resistant clothing to prevent skin contact depending on the extent of exposure. During most normal work situations where exposure to the material cannot be avoided for a limited time span, waterproof pants and apron of chemical resistant material or coveralls of polyethylene (PE) will be sufficient. Coveralls of PE must be discarded after use if contaminated. In cases of appreciable or prolonged exposure, coveralls of barrier laminate may be required.
Respiratory Protection	The product does not automatically present an airborne exposure concern during normal handling. In the event of an accidental discharge of the material which produces a heavy vapour or mist, workers should put on officially approved respiratory protection equipment with a universal filter type including particle filter.
Environmental exposure controls	No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Liquid
Odor	Odorless
Color	Off-white
Odor threshold	No information available
pH	Undiluted: 4.3 1% dispersion in water: 4.1
Melting point/freezing point	No information available
Boiling Point/Range	No information available
Flash point	118 °C (Pensky-Martens closed cup)
Evaporation Rate	No information available
Flammability (solid, gas)	
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	Nicosulfuron : 1.6 x 10 ⁻¹⁴ Pa @ 25°C
Vapor density	No information available
Specific gravity	No information available
Water solubility	Emulsifies
Solubility in other solvents	No information available
Partition coefficient	Nicosulfuron : log Kow = -0.36 at pH 4 and 25°C log Kow = -1.77 at pH 7 and 25°C log Kow = -2 at pH 9 and 25°C
Autoignition temperature	308 °C
Decomposition temperature	No information available
Viscosity, kinematic	323 mPa.s @ 20°C, 137 mPa.s @ 40°C
Viscosity, dynamic	No information available
Explosive properties	Not explosive
Oxidizing properties	Non-oxidizing

9.2. Other information

Softening point	No information available
Molecular weight	No information available
VOC content (%)	No information available
Relative density	Not determined Density: 1.02 g/ml at 20°C
Bulk density	No information available
K_{st}	No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

To our knowledge, the product has no special reactivities.

10.2. Chemical stability

The product is stable during normal handling and storage at ambient temperatures.

Explosion data

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

10.3. Possibility of hazardous reactions**Hazardous polymerization**

Hazardous polymerization does not occur.

Hazardous reactions

None known.

10.4. Conditions to avoid

Heating of the product will produce harmful and irritant vapors.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

See Section 5.2 for more information.

Section 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects****Acute toxicity****Product Information**

LD50 Oral	> 2000 mg/kg (rat) (Method OECD 425)
LD50 Dermal	> 2000 mg/kg (rat) (Method: OECD 402)
LC50 Inhalation	> 2.15 mg/L 4 hr (rat) (Method: OECD 403)

Skin corrosion/irritation	Irritating to skin. (Method: OECD 404).
Serious eye damage/eye irritation	Mildly irritating. (Method: OECD 405).
Sensitization	Not expected to be sensitizing based on the components. (Method: OECD 406) (Method OECD 429)

Mutagenicity	The product contains no ingredients known to be mutagenic.
Carcinogenicity	The product contains no ingredients known to be carcinogenic.

Reproductive toxicity	The product contains no ingredients known to have adverse effects on reproduction.
STOT - single exposure	No specific effects after single exposure have been observed.
STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure. See listed target organs below.
Target organ effects	Liver,

Symptoms Irritation and possibly allergic reactions. To our knowledge, adverse effects in humans have not been reported. Poisoning is unlikely, unless very large quantities are ingested. Generally, sulphonylurea herbicides cause lethargy, confusion, dizziness, seizures and coma on ingestion.

Aspiration hazard The product does not present an aspiration pneumonia hazard.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity

The ecotoxicity of the product is measured as:

- Fish: Rainbow trout (*Oncorhynchus mykiss*)96-h LC50: 64.4 mg/L
- Invertebrates: Daphnids (*Daphnia magna*)48-h EC50: > 10 mg/L
- Algae:
 - Green algae (*Pseudokirchneriella subcapitata*) ..72-h EC50: 0.70 mg/L
 - Blue-green algae (*Anabaena flos-aquae*)72-h EC50: 2.22 mg/L
- Plants: Duckweed (*Lemna gibba*)7-day EC50: 5.81 ug/L
- Earthworms: *Eisenia foetida*14-day LC50: > 1000 mg/kg dry soil
Reproduction EC50: 935 mg/ kg dry soil
- Birds: Japanese quails (*Coturnix japonica*)LD50: > 2000 mg/kg
- Insects:
 - Honey bees (*Apis mellifera*):
 - 48-h LD50, contact: > 400 ug/bee
 - 48-h LC50, acute oral: > 432 ug/bee

12.2. Persistence and degradability

Nicosulfuron: Moderately persistent.

12.3. Bioaccumulative potential

Nicosulfuron: Does not bioaccumulate.

12.4. Mobility in soil

Mobility in soil

Nicosulfuron: Mobile in soil.

12.5. Results of PBT and vPvB assessment

The substance does not meet the criteria for being PBT or vPvB.

12.6. Other adverse effects

None known

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Residual waste

Remaining quantities of the material and empty but unclean packaging should be regarded as hazardous waste. Disposal of waste and packaging must always be in accordance with all applicable local regulations.

According to the Waste Framework Directive (2008/98/EC), possibilities for reuse or reprocessing should first be considered. If this is not feasible, the material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing.

Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated containers and packages

It is recommended to consider possible ways of disposal in the following order:

1. Reuse or recycling should first be considered. Reuse is prohibited except by the authorisation holder. If offered for recycling, containers must be emptied and triply rinsed (or equivalent). Do not discharge rinsing water to sewer systems.
2. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.
3. Delivery of the packaging to a licensed service for disposal of hazardous waste.
4. Disposal in a landfill or burning in open air should only occur as a last resort. For disposal in a landfill containers should be emptied completely, rinsed and punctured to make them unusable for other purposes. If burned, stay out of smoke.

Section 14: TRANSPORT INFORMATION

IMDG/IMO

- | | |
|--|--|
| 14.1 UN/ID no | UN3082 |
| 14.2 Proper Shipping Name | Environmentally hazardous substance, liquid, n.o.s. (nicosulfuron) |
| 14.3 Hazard class | 9 |
| 14.4 Packing Group | III |
| 14.5 Marine Pollutant | Yes |
| Environmental Hazard | Yes |
| 14.6 Special Provisions | Avoid any unnecessary contact with the product. Misuse can result in damage to health. Do not release to the environment |
| 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | The product is not transported in bulk by ship. |

RID

- | | |
|----------------------------------|--|
| 14.1 UN/ID no | UN3082 |
| 14.2 Proper Shipping Name | Environmentally hazardous substance, liquid, n.o.s. (nicosulfuron) |
| 14.3 Hazard class | 9 |
| 14.4 Packing Group | III |
| 14.5 Environmental Hazard | Yes |
| 14.6 Special Provisions | Avoid any unnecessary contact with the product. Misuse can result in damage to health. Do not release to the environment |

ADR/RID

- | | |
|----------------------------------|---|
| 14.1 UN/ID no | UN3082 |
| 14.2 Proper Shipping Name | Environmentally hazardous substance, liquid, n.o.s. (nicosulfuron) |
| 14.3 Hazard class | 9 |
| 14.4 Packing Group | III |
| 14.5 Environmental Hazard | Yes |
| 14.6 Special Provisions | Avoid any unnecessary contact with the product. Misuse can result in damage to health. Do not discharge to the environment. |

ICAO/IATA

14.1 UN/ID no	UN3082
14.2 Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s. (nicosulfuron)
14.3 Hazard class	9
14.4 Packing Group	III
14.5 Environmental Hazard	Yes
14.6 Special Provisions	Avoid any unnecessary contact with the product. Misuse can result in damage to health. Do not release to the environment

Section 15: REGULATORY INFORMATION

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

National regulations Seveso category in Annex I to Dir. 2012/18/EU: dangerous for the environment.

 The substance is covered by EU chemical legislation.

 Young people under the age of 18 are not allowed to work with the substance.

European Union**Authorizations and/or restrictions on use:**

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not Applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not Applicable

International Inventories

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Octadecanoic acid, 12-hydroxy-, homopolymer, octadecanoate 58128-22-6	X	X	X		X		X	X

15.2. Chemical safety assessment

A chemical safety assessment is not required to be included for this product.

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet**Full text of H-Statements referred to under sections 2 and 3**

H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
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
EUH401 - To avoid risks to human health and the environment, comply with the instructions for use

Legend

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS:	CAS (Chemical Abstracts Service)
Ceiling:	Maximum limit value:
DNEL:	Derived No Effect Level (DNEL)
EINECS:	EINECS (European Inventory of Existing Chemical Substances)
GHS:	Globally Harmonized System (GHS)
IATA:	International Air Transport Association (IATA)
ICAO:	International Civil Aviation Organization
IMDG:	International Maritime Dangerous Goods (IMDG)
LC50:	LC50 (lethal concentration)
LD50:	LD50 (lethal dose)
PBT:	Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
RID:	Regulations Concerning the International Transport of Dangerous Goods by Rail
STEL:	Short term exposure limit
SVHC:	SVHC: Substances of Very High Concern for Authorization:
TWA:	time weighted average
vPvB:	very Persistent and very Bioaccumulative

Classification procedure

Test data

Key literature references and sources for data

Data measured on the product are unpublished company data. Data on ingredients are available from published literature and can be found several places.

Revision date: 2019-10-28

Reason for revision: Format Change.

Training Advice This material should only be used by persons who are made aware of its hazardous properties and have been instructed in the required safety precautions.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Prepared By:

FMC Corporation

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End of Safety Data Sheet