



## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Trade name : **IKANOS 40 OD**

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

Use : Plant Protection Product, Herbicide

### 1.3. Details of the supplier of the safety data sheet

Nufarm GmbH & Co KG  
St.-Peter-Str. 25  
A-4021 Linz  
Austria  
Telephone: +43/732/6918-3187  
Telefax: +43/732/6918-63187  
E-mail address: Katharina.Krueger@at.nufarm.com

### 1.4. Emergency telephone number

+43/732/6914-2466 (Linz/Austria production site)

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

EG_1272/08 :	SkinIrrit.2	H315 - Causes skin irritation.
	AquaticAcute1	H400 - Very toxic to aquatic life.
	AquaticChronic1	H410 - Very toxic to aquatic life with long lasting effects.

### 2.2. Label elements

REGULATION (EC) No 1272/2008

Pictogram:



GHS07



GHS09

Signal word: Warning

- H315 - Causes skin irritation.  
 H410 - Very toxic to aquatic life with long lasting effects.
- P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
 P332 + P313 - If skin irritation occurs: Get medical advice/ attention.  
 P362 - Take off contaminated clothing and wash before reuse.  
 P391 - Collect spillage.  
 P501 - Dispose of contents/ container to an approved waste disposal plant.

### 2.3. Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical nature** : Mixture of active ingredient and additives  
 Nicosulfuron 40 g/l

### 3.2. Mixtures

#### Components:

Nicosulfuron  
 CAS-No.: 111991-09-4  
 EINECS-No. / ELINCS No.:  
 REACH No.:  
 Concentration: 4,3 % (w/w)

Classification:  
 EG\_1272/08 : AquaticAcute1 H400 - Very toxic to aquatic life.  
 AquaticChronic1 H410 - Very toxic to aquatic life with long lasting effects.



Isotridecyl alcohol, ethoxylated

CAS-No.: 9043-30-5  
EINECS-No. / ELINCS No.: 500-027-2  
REACH No.:  
Concentration: 2,0% - 5,0% (w/w)

Classification:

EG\_1272/08 : AcuteTox.4 H302 - Harmful if swallowed.  
EyeDam.1 H318 - Causes serious eye damage.

Benzenesulfonic acid, 4-C10-14-alkyl derivs., calcium salts

CAS-No.: 90194-26-6  
EINECS-No. / ELINCS No.: 290-635-1  
REACH No.:  
Concentration: 1,5% - 4,5% (w/w)

Classification:

EG\_1272/08 : SkinIrrit.2 H315 - Causes skin irritation.  
EyeDam.1 H318 - Causes serious eye damage.

2-Ethylhexanol

CAS-No.: 104-76-7  
EINECS-No. / ELINCS No.: 203-234-3  
REACH No.: 01-2119487289-20  
Concentration: 1,5% - 4,5% (w/w)

Classification:

EG\_1272/08 : AcuteTox.4 H332 - Harmful if inhaled.  
SkinIrrit.2 H315 - Causes skin irritation.  
EyeIrrit.2 H319 - Causes serious eye irritation.  
STOT\_SE3 H335 - May cause respiratory irritation.

Polyethylene glycol esters of fatty acids

CAS-No.: 220037-02-5  
EINECS-No. / ELINCS No.:  
REACH No.:  
Concentration: 2,0% - 4,0% (w/w)

Classification:

EG\_1272/08 : SkinSens.1 H317 - May cause an allergic skin reaction.

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

- Eye contact : Obtain medical attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- Skin contact : Take off all contaminated clothing immediately. Wash off immediately with soap and plenty of water. Obtain medical attention.
- Inhalation : Remove casualty to fresh air. Obtain medical attention.



Ingestion : Rinse mouth thoroughly and consult a physician Do NOT induce vomiting.

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

Symptoms : No information available.

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

Treatment : Treat according to symptoms (decontamination, vital functions).

### SECTION 5: FIREFIGHTING MEASURES

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray, Dry powder, Sand, Foam, Carbon dioxide (CO<sub>2</sub>)

Extinguishing media which shall not be used for safety reasons : High volume water jet

#### 5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting : In the event of fire (CO<sub>x</sub>, SO<sub>2</sub>, HCl, NO<sub>x</sub>) may be formed.

#### 5.3. Advice for firefighters

Special protective equipment for firefighters : Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.

Further Information : Standard procedure for chemical fires. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. (see Chapter 8)

#### 6.2. Environmental precautions



Do not flush into surface water or sanitary sewer system.

### 6.3. Methods and materials for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder). Use mechanical handling equipment.

Additional advice : Never return spills in original containers for re-use.

### 6.4. Reference to other sections

see Chapter 13

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Safe handling advice : Wear personal protective equipment. Keep out of the reach of children.

### 7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container. Keep out of the reach of children.

Advice on common storage : Keep away from food, drink and animal feeding stuffs.

#### Storage stability

Storage temperature : > -5 °C

### 7.3. Specific end use(s)

none

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Components with workplace control parameters

Components	CAS-No.	National occupational exposure limits	Note
Nicosulfuron	111991-09-4		no classification available
Isotridecyl alcohol, ethoxylated	9043-30-5		no classification available
Benzenesulfonic acid, 4-C10-14-alkyl derivs., calcium salts	90194-26-6		no classification available
2-Ethylhexanol	104-76-7		no classification available
Polyethylene glycol esters of fatty	220037-02-5		no classification available



## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

**IKANOS 40 OD**

Version 1 (Georgia)

Issuing date: 2016/04/27

acids

### 8.2. Exposure controls

#### Personal protective equipment

- Respiratory protection : Suitable respiratory protection for higher concentrations or long-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic and alkaline compounds (e.g. EN 14387 Type ABEK).
- Hand protection : Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) and other
- Eye protection : Safety glasses with side-shields (frame goggles) (e.g. EN 166)
- Skin and body protection : Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).
- Hygiene measures : Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.
- Protective measures : The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

#### Appearance

- Physical state : liquid
- Form : Oil Dispersion (OD)
- Colour : opaque
- Odour : odourless
- Melting point/range : no data available
- Boiling point/boiling range : no data available



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Flash point	:	ca.126 °C at 1 hPa
Ignition temperature	:	274 °C
Upper explosion limit	:	no data available
Lower explosion limit	:	no data available
Vapour pressure	:	negligible
Density	:	0,918 g/cm <sup>3</sup>
pH	:	4,2
Partition coefficient: n- octanol/water	:	no data available
Dissociation constant	:	no data available
Viscosity, dynamic	:	23 - 417 mPa.s
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Explosive properties	:	Not explosive

## 9.2. Other information

none

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

no data available

### 10.2. Chemical stability

Stable under recommended storage conditions.



### 10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

### 10.4. Conditions to avoid

No dangerous reaction known under conditions of normal use.

### 10.5. Incompatible materials to avoid

no data available

### 10.6. Hazardous decomposition products

no data available

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Acute oral toxicity : LD50 rat  
Dose: > 2.000 mg/kg

Acute dermal toxicity : LD50 rat  
Dose: > 2.000 mg/kg

Acute inhalation toxicity : LC50 rat  
Dose: > 2,13 mg/l

Skin irritation : rabbit  
Result: No skin irritation

Eye irritation : rabbit  
Result: No eye irritation

Sensitisation : Guinea-pig  
Result: Causes sensitization on guinea-pigs.

Carcinogenicity : not carcinogenic (active substance)

Reproductive toxicity : Multigeneration study: negative (active substance)

Teratogenicity : not teratogenic (active substance)





## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

- Toxicity to earthworms : LD50 *Eisenia fetida* (earthworms)  
Dose: > 1.000 mg/kg
- : LD50 *Eisenia fetida* (earthworms)  
Dose: > 1.000 mg/kg  
Test substance: (Nicosulfuron)
- Toxicity to bees : LD50 (contact) *Apis mellifera* (Honey bee)  
Testing period: 2 d  
Test substance: (Nicosulfuron)  
Dose ( $\mu\text{g}/\text{Species}$ ): 76
- Toxicity to fish : LC50 *Oncorhynchus mykiss* (Rainbow trout)  
Dose: 65,7 mg/l  
Testing period: 96 h  
Test substance: (Nicosulfuron)
- : NOEC *Oncorhynchus mykiss* (Rainbow trout)  
Dose: 10 mg/l  
Test substance: (Nicosulfuron)
- Toxicity to aquatic invertebrates : EC50 *Daphnia magna* (Water flea)  
Dose: 2,8 mg/l  
Testing period: 48 h
- : EC50 *Daphnia magna* (Water flea)  
Dose: 90 mg/l  
Testing period: 48 h  
Test substance: (Nicosulfuron)
- : NOEC *Daphnia magna* (Water flea)  
Dose: 5,2 mg/l  
Test substance: (Nicosulfuron)
- Toxicity to algae : *Desmodesmus subspicatus* (green algae)  
Dose: 0,701 mg/l
- : EC50 Toxicity to algae  
Dose: 0,0017 mg/l  
Test substance: (Nicosulfuron)



EC50 *Anabaena flos-aquae* (cyanobacterium)  
Dose: 7,8 mg/l  
Test substance: (Nicosulfuron)

## 12.2. Persistence and degradability

Biodegradability : no data available

## 12.3. Potential bioaccumulation

Bioaccumulation : Does not bioaccumulate.  
Test substance: (Nicosulfuron)

## 12.4. Mobility in soil

Kfoc = 7.9 - 51.3 mL/g, 1/n = 0.90 - 1.01 (nicosulfuron)

## 12.5. Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

## 12.6. Other adverse effects

none

## SECTION 13: DISPOSAL CONSIDERATIONS

According to European Directive 2000/532/EC as amended :  
Waste Code : 02 01 08 (agrochemical waste containing dangerous substances)

### 13.1. Waste treatment methods

Product : In accordance with local and national regulations.

Contaminated packaging : Do not re-use empty containers.

Dispose empty and triple rinsed container within a local disposing system according to EC directive 94/62/EC



## SECTION 14: TRANSPORT INFORMATION

### 14.1. UN number

UN3082

### 14.2. Proper shipping name

UN3082 Environmentally hazardous substance, liquid, n.o.s.(Nicosulfuron)

### 14.3. Transport hazard class(es)

ADR/RID :  
Class : 9

IMDG :  
Class : 9

IATA-DGR :  
Class : 9

### 14.4. Packaging group

ADR/RID : III

IMDG : III

IATA-DGR : III

### 14.5. Environmental hazards

**IMDG**  
Marine Pollutant : MP

### 14.6. Special precautions for user

none

## SECTION 15: REGULATORY INFORMATION

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



Other regulations : The product is classified and labelled in accordance with EC directives or respective national laws.

## 15.2. Chemical Safety Assessment

none

## SECTION 16: OTHER INFORMATION

Print Date : 2016/04/27

The date format YYYY/MM/DD is used according to ISO 8601.  
(Alterations are indicated in the left hand margin by: || )

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.

### Contact person

Company : Nufarm GmbH & Co KG  
K. Krüger  
St.-Peter-Str. 25  
A-4021 Linz  
Austria

Telephone : +43/732/6918-3187  
Telefax : +43/732/6918-63187  
E-mail address : Katharina.Krueger@at.nufarm.com

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