

Section 1: <u>Identification of the substance / mixture and identification of the company</u>

1.1 Product identification

Trade name: HAKSAR 500 SL

Chemical Name: not applicable, the product is a mixture

EC Number: Not applicable

Registration number: mixture - not subject to registration under REACH regulation

UFI code: 0X80-K0N4-W009-M1KA

1.2 Relevant identified uses of the substance or preparation and uses advised against

Identified uses:

A herbicidal plant protection product in the form of a concentrate for the preparation of an aqueous solution, used to control annual dicotyledonous weeds in spring and winter cereals and in grassy areas, for professional use.

Uses advised against: any other than listed above.

1.3 Details of the supplier of the safety data sheet

Supplier: CIECH SARZYNA S.A.

Address: ul. Chemików 1, 37-310 Nowa Sarzyna, Poland

Telephone/Fax: + 48 (17) 2407 416 between 7.00 - 15.00

+ 48 (17) 2407 122

e-mail address of the person responsible for this Material Safety Data Sheet:

ZcsMsds@ciechgroup.com

Distributor: Hockley Agro UK

Hockley House 3 Longstone Road Ashbrook office Park

Manchester M22 5LB

E-mail: sds@hockley.co.uk

1.4 Emergency telephone number

+44 (0)800 246 1274 (24 hours)

112 (emergency)

Section 2: <u>Hazards identification</u>

2.1 Classification of the substance or mixture



Page 2 of 11

Classification according to Regulation No.1272/1272/EEC (as amended)

Acute tox. 4 H302 – Harmful if swallowed.

Eye dam. 1 H318 - Causes serious eye damage.

2.2 Label elements

Hazard pictograms and warning phrase





DANGER

(Signs - black symbol on a white background with a red border.)

Product identification

HAKSAR 500 SL

This product contains:

MCPA 4-chloro-o-tolyloxyacetic acid as dimethylamine salt (fenoxyacid group compound), Index number: 607-052-00-9

Hazard Statements:

H302 Harmful if swallowed.

H318 Causes serious eye damage.

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

Precautionary Statements:

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves / protective clothing / eye protection / face protection.

P301+P312 IF SWALLOWED: Contact POISON CENTRE or doctor/physician if feel unwell.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P330 Rinse mouth.

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.

2.3 Other hazards

The mixture constituents do not meet the PBT or vPvB criteria according to Annex XIII of the REACH Regulation.

The components of the mixture do not exhibit endocrine disrupting properties, in accordance with the criteria set out in Commission Regulation (EU) 2018/605.



Page 3 of 11

Section 3: Composition / information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

Substance ¹⁾ :	Content [%]	Classification according to Regulation No. 1272/2008 (as amended) ²⁾
<u>Dimethylamine salt MCPA</u> Dimethylamine salt of 4-chloro-o- tolyloxyacetic acid	approx. 54 %	Acute Tox. 4 H332 Acute Tox. 4 H312 Acute Tox. 4 H302
Index number: 607-052-00-9 CAS Number: 2039-46-5 EC Number: 218-014-2 Registration No.: not applicable (Art. 15 of the REACH regulation)		Aquatic Acute 1 H400 Aquatic Chronic 1 H410

^{1) -} Classification of the substance given in accordance with Tables 3.1 of Regulation No. 1272/2008 (as amended) - see Section 15.1 of this MSDS.

Section 4: First aid measures

4.1 Description of first aid measures

<u>Contact with skin:</u> immediately remove the contaminated clothing and shoes. Thoroughly wash the exposed parts of the skin with soapy water. If signs of irritation / sensitisation occur, consult a doctor.

<u>Contact with eyes:</u> immediately consult the ophthalmologist. Protect non-affected eye, remove contact lenses. Thoroughly wash contaminated eyes with water for 10-15 minutes. Avoid strong water jet as this poses risk of mechanical damage to cornea. After washing wear sterile eye patch.

<u>Ingestion:</u> call for medical assistance immediately and show the container or label. Do not induce vomiting. Thoroughly wash the mouth with water and drink plenty of water afterwards. Never give anything to drink to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

<u>Contact with skin</u>: sensitive individuals may experience redness, dry skin, itching, rash or other skin lesions.

Contact with eyes: possible redness, lacrimation, burning sensation and pain.

Swallowing: possible irritation of the digestive tract, abdominal pain and nausea.

4.3 Indication of any immediate medical attention and special treatment needed

Decision on suitable further treatment is made by the doctor after assessing the condition of the affected person. In severe intoxication give anti-liver damage drugs - control heart and circulatory system function. Antidote - none. Apply symptomatic treatment.

Section 5: Firefighting measures

5.1 Extinguishing media

^{2) -} Full text of abbreviations, symbols and H statements - see Section 16 of this MSDS.



Page 4 of 11

<u>Suitable extinguishing media:</u> water spray, foam, carbon dioxide and dry powder. Adapt the extinguishing media to materials stored in the immediate vicinity.

Unsuitable extinguishing media: compact water jets.

5.2 Special hazards arising from the substance or mixture

Combustion reaction produces dangerous vapours and gases containing carbon monoxide and hydrogen chloride. Avoid inhaling of combustion product as they can pose a threat to health.

5.3 Advice for firefighters

General protection measures in case of fire. Do not stay in the area at risk of fire without proper clothing. Recommended personal protective equipment for the rescue services: full protective gear, self-contained breathing apparatus. Post-extinguishing waters should be handles as described in Section 6.2.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

<u>For the non-members of the emergency response team</u>: restrict access of unauthorised persons to the affected area until all cleaning operations have been completed. Use personal protective equipment. Avoid contact with skin and eyes. Provide adequate ventilation.

<u>For the members of the emergency response team</u>: ensure that all activities were performed by trained personnel only. Wear protective clothing and personal protective equipment resistant to chemicals.

6.2 Environmental precautions

In case of release of large quantities of the mixture, take necessary steps to prevent spreading in the environment - protect against getting into sewage system, water reservoirs, rivers, ground waters and soil. Notify the relevant emergency services. Warn others of the hazard. Similar precautions should be also applied for the post-extinguishing water (Section 5).

6.3 Methods and material for containment and cleaning up

For large spills, embank the accumulating mixture and pump into suitable sealed and labelled containers and submit for recycling or disposal in accordance with the provisions of the Waste Act. In order to remove the remains and small amounts of spilled mixture use binding agent kits, if available, or diatomite or sand. Binding agent containing a mixture must be collected to suitable, sealed and labelled waste containers and submitted for recycling or disposal in accordance with the provisions of the Waste Act.

6.4 References to other sections

Product waste handling - see Section 13 of this MSDS. Personal protective equipment - see Section 8 of this MSDS.

Section 7: Handling and storage

7.1 Precautions for safe handling

Observe relevant occupational health and safety rules. Avoid eye and skin contamination. Remove contaminated clothing and protective equipment before entering eating areas. Before break and after work wash hands with soapy water. Keep the packages with the mixture tight. Provide adequate ventilation in work rooms.

7.2 Conditions for safe storage, including any incompatibilities

Store in original, sealed containers, in dry and ventilated storage rooms at temperatures from 0 to 30°C. Keep away from food, feed, animal feed, dishes for food, in places inaccessible to unauthorized persons, especially children.



Follow the regulations, rules and recommendations for the storage of plant protection products. Take all necessary measures to prevent damage to the packaging or transfer systems that may result in accidental release of a mixture to drains, water bodies, rivers and soil.

Material suitable for packaging: HDPE (high density polyethylene).

Shelf-life of the mixture: 3 years.

7.3 Specific end use(s)

The mixture is a plant protection herbicide. When applying the product on plants, follow the guidelines given in the label-instructions for use provided with the product.

In the production process of the mixture, follow the guidelines given in the Material Safety Data Sheet and instructions relevant for the process.

Section 8: Exposure controls / personal protection

8.1 Control parameters

The highest concentration limits of substances in the work environment in accordance with the national regulations implemented under the Commission Directive No. 2000/39/EC of June 8, 2000 - Not specified for ingredients - or UK regulations apply.

8.2. Exposure controls

Follow general occupational health and safety rules. Use personal protective measures listed in Section 8.2.2. Do not eat, drink or smoke when using the substance. Wash hands thoroughly with soapy water before breaks and after work.

8.2.1. Appropriate engineering controls

Apply the procedures for monitoring the concentrations of hazardous substances in the air, as well as procedures for the air purity monitoring in the workplace - provided they are available and reasonable for a given function - in accordance with the relevant reference methods - standards in force in UK.

8.2.2. Individual protection measures, such as personal protective equipment

The personal protective equipment used should meet the national requirements contained in Regulation (EU) 425/2016 or in the regulations applicable in Great Britain.

Employer shall provide protection measures appropriate to the activities, including their maintenance and cleaning.

a) Eye and face protection

Use protective glasses (goggles) or face protection.

b) Skin protection

Hand protection

Use suitable protective gloves (butyl or neoprene) resistant to chemical agents with a thickness of at least 0.4 mm, tested according to PN-EN 374 standard.

Body protection

Wear protective clothing and footwear suitable for the type of the performed activities. Soiled clothing should be regularly washed.

c) Respiratory protection

In well ventilated working areas personal respiratory protection is not required. In other cases, use half-respirators or respirators with filters that absorb vapours of organic compounds.

d) Thermal hazards



Page 6 of 11

Type of protective equipment: not applicable; the material is not thermally hazardous.

8.2.3 Environmental exposure controls

In order to reduce the impact on the environment and human health, the recommendations contained in this safety data sheet should be followed. When handling the product and its packaging, use efficient ventilation systems equipped with filters preventing the emission of vapors into the atmospheric air. Do not contaminate water with the product or its packaging. Protect against the leakage of the product or packaging to sewage systems, water reservoirs, rivers, groundwater and soil. It is forbidden to recover or dispose of the product, packaging and packaging waste outside of the installations or devices intended for this purpose, meeting the requirements specified in the provisions of the Act on waste.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: clear liquid colour: clear liquid

odour: weak, characteristic for amines

melting/freezing point approx. -10°C initial boiling point: > 100°C

Flammability of materials: mixture as an aqueous solution, ignition does not

occur up to the initial boiling point

upper/lower explosion limit: the mixture is not explosive ignition temperature: > 100°C (closed cup PM) self-ignition temperature: decomposition temperature: Not applicable pH 1% water solution: 8.0 – 10.0 kinematic viscosity (20°C): not determined

solubility in organic solvents

- valuesfor MCPA: in xylene - 15.8 g/l in methanol - 621.0 g/l

in 1,2-dichloroethane in n-octanol - 30.6 g/l - 205.0 g/l in acetone - 454.6 g/l in ethyl acetate - 258.4 g/l

partition coefficient: n-octanol/water: log P_{ow}=1.9 (at pH 4); 1.09 (at pH 9) at 20 °C

- the value for MCPA

vapour pressure (25°C): 4.25 x 10⁻⁴ Pa (for MCPA)

specific density (20°C): approx. 1.13 g/cm³ relative vapor density: not determined particle characteristics: not applicable

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Not applicable

9.2.2 Other safety characteristics

surface tension (25°C): 31.0 mN/m

Section 10: Stability and reactivity



Page 7 of 11

10.1 Reactivity

The mixture is stable under normal conditions of storage and use (Section 7.2).

10.2 Chemical stability

The product is stable when used and stored properly.

10.3 Possibility of hazardous reactions

None when handled in accordance with the intended use and conditions of use and when stored in the recommended conditions.

10.4 Conditions to avoid

Avoid temperatures below 0°C.

10.5 Incompatible materials

Avoid contact with acids.

10.6 Hazardous decomposition products

None when used and stored as recommended - may occur in fire (see Section 5.2).

Section 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on acute and / or delayed effects of exposure was determined on the basis of available toxicological studies for the components of the mixture.

*) - When determining the toxicological effects, the additivity principle was applied in accordance with Regulation No. 1272/2008.

Acute Toxicity

 LD_{50} (orally) rat: >300 and < 2,000 mg/kg b.w.

 LD_{50} (percutaneous) rat: > 2,000 mg/kg b.w. LC_{50} (inhalation) rat after 4h from exposure >7,570 mg/m^{3*}

Corrosive / irritating effect on the skin

Not irritating to the skin (rabbit).

Serious eye damage / eye irritation

Causes serious eye damage (rabbit).

Respiratory or skin sensitization *

The mixture does not cause skin sensitization (rabbit).

Germ cell mutagenicity **

Not applicable - the mixture components do not meet the classification criteria.

Carcinogenicity **

Not applicable - the mixture components do not meet the classification criteria.

Reproductive toxicity **

Not applicable - the mixture components do not meet the classification criteria.

Specific target organ toxicity - single exposure **

Not applicable - the mixture components do not meet the classification criteria.



Page 8 of 11

Specific target organ toxicity - repeated exposure **

Not applicable - the mixture components do not meet the classification criteria.

Aspiration hazard **

Not applicable - the mixture components do not meet the classification criteria.

* based on the results of testing a mixture with a similar composition - higher active substance content

11.2 Information on other hazards

11.2.1. Endocrine disrupting properties

The ingredients of the mixture do not show any endocrine disrupting properties.

11.2.2. Other information

Not applicable

Section 12: <u>Ecological information</u>

12.1 Toxicity

Aquatic toxicity*

Acute toxicity to carp (Ciprinus carpio): LC_{50} (after 96h) = 471 mg/l Acute toxicity to rainbow trout (Salmo gairdneri): LC_{50} (after 96h) > 100 mg/l Acute toxicity to daphnia (Daphnia magna): EC_{50} (after 48h) = 442 mg/l Acute toxicity to algae (Chlorella pyrenoidosa): IC_{50} (after 72h) = 644 mg/l

Acute toxicity to algae (Pseudokirchneriella subcapitata): E_rC_{50} (after 72 h) > 320 mg/l

 E_yC_{50} (after 72 h) > 68.54 mg/l NOEC (after 72 h) = 10 mg/l E_rC_{50} (after 72 h) > 90.76 mg/l

Acute toxicity for algae (Anabena flos-aquae): E_rC_{50} (after 72 h) > 90.76 mg/l

 E_yC_{50} (after 72 h) > 65.81 mg/l

Toxicity to honeybees

Acute oral toxicity: LD₅₀ (24 and 48 h after exposure) is 67.82 and 57.07 respectively

μg product/bee

Acute contact toxicity: LD $_{50}$ (24,48 and 72 h after exposure) > 200 μg product/bee

Toxicity to lemna gibba (Lemna gibba L.)*

 E_rC_{50} after 7 days: > 100 mg/l E_vC_{50} after 7 days: 12.63 mg/l

NOEC/ 7 days (number of segments) = 1 mg/l

Toxicity to earthworms and effects on reproduction of earthworms

LC₅₀ after 7 and 14 days is > 1000 mg/kg dry mass of substrate

12.2 Persistence and degradability

MCPA

Biodegradability in water: 100% degradable after 16 days (OECD 302 B method)

^{**} classification based on the properties of the ingredients of the mixture

^{* -} results of tests performed with the product of similar composition



Page 9 of 11

Persistence in aquatic sediments

DT₅₀ (water + sediment system) 21.9 \div 25.1 days; (OECD 308 method) Persistance in soil DT₅₀: 3.7 \div 7.1 days; (OECD 307 method)

12.3 Bioaccumulative potential

Bioconcentration in fish:

Active ingredient - MCPA present in the mixture is not bioaccumulative.

Bioconcentration factor for MCPA: BCF = 0.4 octanol/water coefficient – see Section 9.1.

12.4 Mobility in soil

MCPA is mobile in soil.

Equilibrium organic carbon adsorption coefficient (for MCPA): K_{oc} = 86.67 cm³/g (for dusty soil)

12.5 Results of PBT and vPvB assessment

Substance in the mixture does not meet the PBT or vPvB criteria according to Annex XIII of the REACH Regulation.

12.6 Endocrine disrupting properties

The ingredients of the mixture do not show any properties that disrupt the functioning of the endocrine system for the environment.

12.7 Other harmful effects

The product does not affect global warming and ozone layer depletion.

Section 13: <u>Disposal considerations</u>

13.1 Waste treatment methods

The holder of mixture waste and packaging waste is required to handle the waste in accordance with the principles of waste management specified in the Act on packaging and packaging waste, Act on waste and the environmental protection requirements.

The produced mixture waste and packaging waste must be stored, transported and recycled or disposed of in accordance with the provisions of the Waste Act and the related regulations.

The emptied mixed containers should be rinsed three times with water, and the rinsings should be poured into the sprayer tank with working liquid and treat it as a working liquid.

It is forbidden to use the emptied packages of the plant protection product for other purposes. Hand over any unused plant protection product, as well as any contaminated packaging to the entity authorized to collect hazardous waste.

Empty and rinsed packaging should be returned to the seller of plant protection products.

A waste classification should be applied, using the appropriate codes and names in line with With the current waste catalog.

Avoid unintended release to the environment.

The disposal of waste to soil and ground, sewage systems, rivers, water reservoirs is prohibited.

National legislation that meet the requirements of applicable directives of the European Union:

Directive 94/62 / EC of the European Parliament and of the Council of December 20, 1994 on packaging and packaging waste. Directive 2008/98 / EC of the European Parliament and of the Council of November 19, 2008 on waste.



14.1 UN number or ID number

Not applicable. The mixture is not a hazardous material within the meaning of RID/ADR regulations.

14.2 UN proper shipping name

Not applicable.

14.3 Transport hazard class(es)

Not applicable.

14.4 Packing Group

Not applicable.

14.5 Environmental hazards

Not applicable.

14.6 Special precautions for users

When handling during the transport, use PPE in accordance with Section 8.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

Section 15: Regulatory information

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

- Regulation (EC) No 1107/2009 of the European Parliament and of the Council of October 21, 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117 / EEC and 91/414 / EEC, (Official Journal EU L 309/1 of November 24, 2009, as amended);
- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, and 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 / WE and 2000/21 / WE, (Official Journal EU L 396/1 of 30.12.2006 with corrections and subsequent amendments);
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548 / EEC and 1999/45 / EC, and amending Regulation (EC) No. 1907/2006, (Official Journal of the European Union L 353/1 of December 31, 2008 as amended);
- Regulation of the European Parliament and of the Council (EC) No. 1005/2009 of September 16, 2009. on substances that deplete the ozone layer, (Journal of Laws UE L 286/1 of 31.10.2009 as amended;
- COMMISSION REGULATION (EU) 2018/605 of 19 April 2018 amending Annex II to Regulation (EC) No 1107/2009 by establishing scientific criteria for the determination of endocrine disrupting properties;
- DIRECTIVE 2008/68 / EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of September 24, 2008 on the inland transport of dangerous goods, OJ EUL.2008.260.13.

15.2 Chemical Safety Assessment

Assessed as crop protection product.

Section 16: Other information

Explanation of the remaining abbreviations and acronyms

Acute Tox. 4 - Acute toxicity, category 4.

Eye dam. 1 - Serious eye damage, category 1.

Aquatic Acute 1 - Acute aquatic hazard, category 1.

Aquatic Chronic 1 - Chronic aquatic hazard, category 1.



Page 11 of 11

H302 - Harmful if swallowed.

H312 - Harmful in contact with skin.

H332 - Harmful if inhaled,

H318 - Causes serious eye damage.

H400 – Very toxic to aquatic life.

H410 - Very toxic to aquatic life with long lasting effects.

Training:

Prior to working with the product, the user shall read this Material Safety Data Sheet, occupational health and safety regulations relevant to handling of chemicals, and in particular, receive appropriate on the job training as required by the regulations - the Labour Code and the Act on plant protection products.

Sources of information:

- In-house studies: physicochemical, toxicological, ecotoxicological and impact on the environment for the product and active ingredient (MCPA),
- Web page: http://sitem.herts.ac.uk/aeru/footprint/pl/Reports/605.htm(data on this website have been collected as part of the EU-funded FOOTPRINT project).

Information assessment:

Assessment of the information identified in accordance with Chapter 1 of Title II of the CLP Regulation has been performed by applying the classification criteria for each hazard class, taking into account further differentiation as specified in Annex I of the CLP Regulation and **taking into account the results of the in-house studies carried out for the plant protection product**. When assessing the available information for the purposes of classification, the form/physical state of the mixture was considered, as in the form in which the mixture is marketed and may be used in accordance with reasonable expectation.

Additional Information:

Further information may be obtained from the manufacturer - contact as in subsection 1.3. This Material Safety Data Sheet has been prepared in accordance with Annex II to Commission Regulation (EC) no. 830/2015 of 28 May 2015 amending Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Official Journal of the EU L 132/8 of 29.05.2015).

Information in this MSDS comprise our current knowledge and experience; had been provided in good faith in order to describe the mixture in terms of safety requirements. The information, however, cannot be interpreted either as a guarantee of the properties or a quality specification of the product. Regulations referenced in Section 15 and other sections of this Material Safety Data Sheet are applicable on the territory of Poland. The customer and user are responsible for the provision of safe workplace and compliance with all the applicable local regulations.

Commas in numeric data represent decimals.

Revised sections against KCh/H/367, 1st issue of 04.2019: sections 1, 2, 3, 4, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16.