SAFETY DATA SHEET

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

1.1 Product identifier

OptiSpray™

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

NOx reduction

1.3 Details of the supplier of the safety data sheet

Supplier

Agro Oil
Box 30192
104 25 Stockholm, Sweden
Telephone +46 (0)10-556 00 00
E-mail info@agrol.se

1.4 Emergency telephone number

Sweden

Swedish Poisons Information Centre	010-456 67 00 (Open 24/7)
Emergency	112 (Ask for the Posion Centre)

Finland

Poison Information Centre	09-471 977 (Open 24/7)
Emergency	112 (Ask for the Poison Centre)

Norway

Norwegian Poison Information Centre	22 59 13 00 (Open 24/7)
Emergency	113 (Ask for the Poison Centre)

SECTION 2. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

The product does not meet the criteria for classification according to Regulation (EC) No 1272/2008 (CLP).

2.2 Label elements

No labelling required according to Regulation (EC) No 1272/2008 (CLP).

2.3 Other hazards

None known

SECTION 3. COMPOSITION/INFORMATION OM INGREDIENTS

3.2 Mixtures

Classification according to Regulation (EC) No 1272/2008 [CLP]

Contains no substances subject to classification or having been assigned an occupational exposure limit.

Other information

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SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

After inhalation: Fresh air and rest. If difficulties in breathing get medical advice.
After eye contact: Rinse the eyes gently with water. If symptoms persist consult a doctor.
After skin contact: Take off contaminated clothing. Wash skin with soap and water
After ingestion: Rinse mouth and drink water. Contact a doctor if experiencing symptoms.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Eye: No known serious effects.
Skin: No known serious effects.
Ingestion: No known serious effects.

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: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media: None identified.

5.2 Special hazards arising from the substance or mixture

In case of fire, nitrogen oxides and amminoa may develop.

5.3 Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Precautions according to the standard procedure for chemical fires.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Do not touch or walk through spilled material. Avoid inhalation of dust, vapours or smoke from burning materials. Use appropriate personal protective equipment.

6.2 Environmental precautions

Do not allow discharge to enter sewers, watercourses or the ground.

6.3 Methods and material for containment and cleaning up

Contain/absorb spillages with suitable absorbent material such as sand, earth, vermiculite or diatomaceous earth.
Small spill: Dilute with water and mop up.
Large spill: Contain and collect spillage with non-combustible, absorbent material and place in container for disposal according to local regulations.

6.4 Reference to other sections

See Section 8 for Exposure controls / personal protection and Section 13 for disposal considerations.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid prolonged or repeated contact with skin. Avoid inhalation of vapours, mist or fumes. Do not reuse soiled clothing unless laundered.

7.2 Conditions for safe storage, including any incompatibilities

Store in original container protected from direct sunlight in a dry, cool and well ventilated area. Containers must be kept tightly closed and sealed. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Keep out of reach of children.

7.3 Specifik end use

See Section 1.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure limits according to National regulations

Contains no substances with occupational exposure limits in the workplace.

8.2 Exposure controls

Appropriate technical measures

Ensure adequate ventilation. Methods are designed to prevent direct contact.

Personal protection

Respiratory protection: Use respiratory protection when insufficient ventilation.

Eye/face protection:	Wear eye protection (safety glasses with side shields or full face shield) when risk of splashing.
Skin protection:	Wear protective gloves (nitrile) and protective clothing.

Environmental exposure control

Prevent discharges into drains.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Colorless
Odour:	slight, ammoniac like
Melting point / freezing point:	-11,5 °C
Boiling point or initial boiling point and boiling range:	100 °C
Flammability:	Not igniteable
Upper / lower flammability or explosive limits:	Not applicalbe
Flash point:	Not applicalbe
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH	9-10
Kinematic viscosity:	No information
Solubility:	Soluble in water, > 100 g/l
Partition coefficient n-octanol/water:	No data available
Vapour pressure	No data available
Density and/or relative density:	1,09 g/cm^3
Relative vapour density:	No data available
Particle characteristics:	Not relevant (liquid)

9.2 Other information

9.2.1. Information with regard to physical hazard classes

Not relevant

9.2.2 Other safety characteristics

Not relevant

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

The product is not reactive under normal conditions.

10.2 Chemical stability

The product is stable under normal conditions.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

Avoid contamination by any source including metals, dust and organic materials.

10.5 Incompatible materials

Urea can react with calcium hypochlorite or sodium hypochlorite to form explosive nitrogen trichloride.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11. TOXIKOLOGICAL INFORMATION

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

Acute toxicity

Not considered to be acutely toxic.

Corrosive / irritating on the skin

Not considered to be irritating/corrosive to the skin.

Serious eye damage / irritation

Not considered to be irritating/cause serious damage to the eyes.

Respiratory / skin sensitization

Not considered to be sensitizing.

Germ cell mutagenicity

Not considered to be cause mutations in germ cells.

Carcinogenicity

Not considered to be carcinogenic.

Toxic to reproduction

Not considered to be toxic to reproduction.

Specific organ toxicity-single exposure

No known significant effects or critical hazards.

Specific organ toxicity-repeated exposure

No known significant effects or critical hazards.

Aspiration Hazard

Not considered to be an aspiration hazard.

11.2 Information on other hazards

Endocrine disrupting properties

Based on available information, this mixture contains no substance which is identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100 or (EU) 2018/605 in concentrations ≥ 0.1% (w/w).

SECTION 12. ECOLOGICAL INFORMATION

The product is not classified as hazardous to the environment.

12.1 Toxicity
No data available.

12.2 Persistence and degradability
No data available.

12.3 Bioaccumulative potential
No information available.

12.4 Mobility in soil
The product is soluble in water and is considered to be mobile in soil.

12.5 Results of PBT och vPvB assessment
Based on available information, this mixture contains no substance that meets the PBT or vPvB criteria according to Annex XIII to Regulation (EC) No. 1907/2006 (REACH).

12.6 Endocrine disrupting properties
Based on available information, this mixture contains no substance which is identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100 or (EU) 2018/605 in concentrations ≥ 0.1% (w/w).

12.7 Other adverse efffects
None known.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Classified as conventional waste according to Commission Regulation (EU) No 1357/2014 on waste. Prevent discharge into drains.

Suggested waste code (EWC): 06 10 99 wastes not otherwise specified

Packaging

EWC-code: 15 01 02, Plastic packaging
EWC-code: 15 01 04, Metallic packaging

Dispose of contents/container to approved waste disposal facility in accordance with local regulations.

SECTION 14. TRANSPORT INFORMATION

The product is not covered by the regulations for the transport of dangerous goods.

	ADR/RID	ADN	IMDG	IATA /ICAO
14.1 UN-number or ID number	N/A	N/A	N/A	N/A
14.2 UN proper shipping name	N/A	N/A	N/A	N/A
14.3 Transport hazard class	N/A	N/A	N/A	N/A
14.4 Packing group	N/A	N/A	N/A	N/A
14.5 Environmental hazards	N/A	N/A	N/A	N/A

14.6 Special precautions for user

Not applicable.

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

This safety data sheet is prepared in accordance with the EUROPEAN PARLIAMENT AND COUNCIL REGULATION (EC) No 1907/2006 of 18 December 2006 concerning the registration, evaluation, authorization and restriction of chemicals (REACH) and Commission Regulation (EU) No 2020/878 of 18 June 2020 amending the European Parliament and Council Regulation (EC) No 1907/2006 on the registration, evaluation, authorization and restriction of chemicals (REACH).

Regulations

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substance and mixtures (CLP).

Commission Regulation (EU) No 1357/2014 of 18 December 2014 replacing Annex III to Directive 2008/98/EC of the European Parliament and of the Council on waste.

Sweden

AFS 2011:19, amended by AFS 2018:2 (Chemical risks at work)
AFS 2018:1 (Occupational exposure limits)
KIFS 2017:7 (Chemical products and Biotechnicological organisms Regulation)

Finland

654/2020 (Occupational exposure limits)
715/2001 (Chemical risks at work)

Norway

Regulations concerning the design and layout of workplaces and work premises (the Workplace Regulations)
Regulations concerning action and limit values for physical and chemical agents in the working environment and classified biological agents (Regulations concerning Action and Limit values)

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16. OTHER INFORMATION

Please note! This safety data sheet is an English translation applicable for Sweden, Norway and Finland. A safety data sheet in local language is also available. Please refer to the Agro Oil webshop for safety data sheets in local languages. https://webshop.agrol.se/

Classification procedure

Test data is prioritized when classifying the product. When no test data are available the classification criteria in Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (CLP) have been used.

Hazard statements in Section 3

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Abbreviations

ADN	International Carriage of Dangerous Goods by Inland Waterways
ADR	International Carriage of Dangerous Goods by Road
BCF	Bio Concentration Factor
BOD5/COD	Biological Oxygen Demand 5 days/Chemical Oxygen demand
BOD (MITI)	Biological Oxygen Demand
DNEL	Derived No Effect Level
EC_{50}	Effective Concentration (concentration that gives response in 50% of test subjects)
ECHA	European Chemical Agency
EmS	Emergency Schedule Information
HTP	Exposure value, concentrations of impurities in workplace air known to be harmful.
IARC	International Agency for Research on Cancer
IATA/ICAO	IATA Dangerous goods regulation / ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air
IC_{50}	Inhibitory Concentration (concentration that shows inhibition in 50% of the test subjects)
IMDG	International Maritime Dangerous Goods Code
KTV	Short term exposure values, normally 15 minutes
LC_{50}	Lethal Concentration (concentration causing the death of 50% of a group of test animals)
LD_{50}	Lethal Dose (dose causing the death of 50% of a group of test animals)
Log Pow	Partition coefficient of octanol - water
MITI	Ministry of International Trade and Industry, Japan
NGV	Long term exposure value, normally 8 hours.

NOEC	No Observed Effect Concentration
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bio-accumulative and Toxic substance
PNEC	Predicted No Effect Concentration
RID	International Carriage of Dangerous Goods by Rail
STEL	Short Term Exposure Limit
SVHC	Substance of Very High Concern
TWA	Time-weighted average
vPvB	very Persistent and very Bioaccumulative

Advice on education

The user of this product should have training that is relevant to the properties of the product and relevant use.

References

Information from the supplier: SDS in Swedish, version 6.0.
Classification & Labelling Inventory Database, ECHA.
Registered substances, ECHA.

Version description

The information has been modified under the following sections in the safety data sheet: 1, 3-5, 8-9, 11-12, 14-16

The safety data sheet is dated 19.01.2022 and replaces the version dated 20.04.2020.