



SAFETY DATA SHEET	Revision Date: 09.06.2017
	Print Date: 10.12.2018
	SDS Number: R0717832
Ceraphyl™ 424 ester ™ Trademark, Ashland or its subsidiaries, registered in various countries 826794	Version: 2.0

Conforms to EU Regulation 1907/2006/EC as amended. - SDSGHS_BE

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : Ceraphyl™ 424 ester
™ Trademark, Ashland or its subsidiaries, registered in various countries

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

Recommended use : Personal care

1.3 Details of the supplier of the safety data sheet

Ashland
P.O. Box 8619
NL3009 AP, Rotterdam
Netherlands
+31 10 497 5000 (in the Netherlands), or
contact your local CSR contact person

EUSMT@ashland.com

1.4 Emergency telephone number

+1-800-274-5263/001-859-357-3564, or contact
your local emergency telephone number at
070/245.245

Product Information

+31 10 497 5000 (in the Netherlands), or contact
your local CSR contact person

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Chronic aquatic toxicity, Category 2 H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



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Hazard statements : H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
 P273 Avoid release to the environment.
Response:
 P391 Collect spillage.
Disposal:
 P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards**Additional advice**

No information available.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

Chemical nature : organic

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
Tetradecanol	112-72-1 204-000-3 01-2119485910-33-0031	Eye Irrit.2; H319 Aquatic Chronic1; H410	>= 5,00 - < 10,00

For explanation of abbreviations see section 16.

SECTION 4: First aid measures**4.1 Description of first aid measures**

General advice : No hazards which require special first aid measures.

If inhaled : If breathed in, move person into fresh air.
 If unconscious, place in recovery position and seek medical advice.

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If symptoms persist, call a physician.

- In case of skin contact : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
- In case of eye contact : Remove contact lenses.
Protect unharmed eye.
- If swallowed : Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No symptoms known or expected.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : No hazards which require special first aid measures.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Water spray
Foam

5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide

5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.



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Specific extinguishing methods : Product is compatible with standard fire-fighting agents.

Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Avoid dust formation.
Avoid breathing dust.
Material can create slippery conditions.
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
Comply with all applicable federal, state, and local regulations.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Pick up and arrange disposal without creating dust.
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For further information see Section 8 and Section 13 of the safety data sheet.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid dust formation.
Ensure all equipment is electrically grounded and bonded before beginning transfer operations.
The material can accumulate static charge and can therefore cause electrical ignition of flammable atmospheres.
Container hazardous when empty.



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Smoking, eating and drinking should be prohibited in the application area.
For personal protection see section 8.
Maintain good housekeeping. Do not permit dust layers to accumulate, for example, on floors, ledges, and equipment, in order to avoid any potential for dust explosion hazards.

Advice on protection against fire and explosion : Take measures to prevent the build up of electrostatic charge. Provide appropriate exhaust ventilation at places where dust is formed.

Hygiene measures : Avoid breathing dust.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage : No materials to be especially mentioned.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures

Provide appropriate exhaust ventilation at places where dust is formed.
General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Eye protection : Safety glasses



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Hand protection

Remarks : Neoprene gloves

Skin and body protection : Wear as appropriate:
Safety shoes

Respiratory protection : No personal respiratory protective equipment normally
required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : solid

Odour : No data available

Odour Threshold : No data available

pH :
No data available

Melting point/freezing point : 36 - 39 °C

Boiling point/boiling range : No data available

Flash point : 226,1 °C

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : No data available

Density : 1 g/cm³ (20 °C)

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Solubility(ies)
 Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-
 octanol/water : No data available

Decomposition temperature : No data available

Viscosity
 Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Oxidizing properties : No data available

9.2 Other information

No data available

SECTION 10: Stability and reactivity**10.1 Reactivity**

No decomposition if stored and applied as directed.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Product will not undergo hazardous polymerization.

10.4 Conditions to avoid

Conditions to avoid : Keep away from heat, flame, sparks and other ignition sources.

10.5 Incompatible materials

Materials to avoid : strong bases
 Strong oxidizing agents



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10.6 Hazardous decomposition products

Hazardous decomposition : carbon dioxide and carbon monoxide products

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of exposure : Inhalation
Skin contact
Eye Contact
Ingestion

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Components:

Tetradecanol

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg
Assessment: No adverse effect has been observed in acute oral toxicity tests.

Acute inhalation toxicity : LC50 (Rat): > 1,5 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: No adverse effect has been observed in acute inhalation toxicity tests.

Acute dermal toxicity : LD50 (Rabbit): > 8.000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Product:

Species: Rabbit

Result: No skin irritation

Components:

Tetradecanol

Result: Slight, transient irritation

Serious eye damage/eye irritation

Not classified based on available information.



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Product:

Species: Rabbit

Result: No eye irritation

Remarks: Unlikely to cause eye irritation or injury., Product dust may be irritating to eyes, skin and respiratory system.

Components:

Tetradecanol

Result: **Irritating to eyes.****Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Product:

Assessment: Did not cause sensitisation on laboratory animals.

Components:

Tetradecanol

Test Type: **Maximisation Test**Species: **Guinea pig**Assessment: **Does not cause skin sensitisation.**Method: **OECD Test Guideline 406****Germ cell mutagenicity**

Not classified based on available information.

Components:

Tetradecanol

Genotoxicity in vitro

: Test Type: **Ames test**Test species: **Salmonella typhimurium**Metabolic activation: **with and without metabolic activation**Result: **negative****Carcinogenicity**

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information**Product:**

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Remarks: No data available

SECTION 12: Ecological information

12.1 Toxicity

Components:

Tetradecanol

Toxicity to fish : **LC50 (Oncorhynchus mykiss (rainbow trout)): > 1 mg/l**
Exposure time: 96 h
Test Type: semi-static test
Method: OECD Test Guideline 203
Remarks: No toxicity at the limit of solubility

Toxicity to daphnia and other aquatic invertebrates : **EC50 (Daphnia magna (Water flea)): 3,2 mg/l**
Exposure time: 48 h
Test Type: semi-static test
Method: OECD Test Guideline 202
Remarks: No toxicity at the limit of solubility

Toxicity to algae : **EL50 (Pseudokirchneriella subcapitata (green algae)): > 10 mg/l**
End point: Growth inhibition
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 201
Remarks: No toxicity at the limit of solubility

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : **NOEC: 0,0016 mg/l**
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Test Type: semi-static test
Method: OECD Test Guideline 211

M-Factor (Chronic aquatic toxicity) : **1**

12.2 Persistence and degradability

Components:

Tetradecanol

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Biodegradability : Test Type: **aerobic**
 Result: **Readily biodegradable.**
 Biodegradation: **92 %**
 Exposure time: **28 d**

12.3 Bioaccumulative potential**Components:**

Tetradecanol

Partition coefficient: n-
 octanol/water : log Pow: **6,03**

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects**Product:**

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Product : The product should not be allowed to enter drains, water courses or the soil.

Contaminated packaging : Empty remaining contents.
 Dispose of as unused product.
 Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information**SECTION 14: Transport information****14.1 UN number**



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ADN: UN3077

ADR: UN3077

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: UN3077

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: UN3077

INTERNATIONAL MARITIME DANGEROUS GOODS: UN3077

RID: UN3077

14.2 UN proper shipping name

ADN: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (MYRISTYL ALCOHOL)

ADR: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (MYRISTYL ALCOHOL)

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Environmentally hazardous substance, solid, n.o.s. (MYRISTYL ALCOHOL)

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Environmentally hazardous substance, solid, n.o.s. (MYRISTYL ALCOHOL)

INTERNATIONAL MARITIME DANGEROUS GOODS: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (MYRISTYL ALCOHOL)

RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (MYRISTYL ALCOHOL)

14.3 Transport hazard class(es)

ADN: 9

ADR: 9

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: 9

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: 9

INTERNATIONAL MARITIME DANGEROUS GOODS: 9

RID: 9

14.4 Packing group

ADN: III

ADR: III

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: III

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: III

INTERNATIONAL MARITIME DANGEROUS GOODS: III

RID: III

14.5 Environmental hazards

ADN: Environmentally hazardous

ADR: Environmentally hazardous

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Environmentally hazardous

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Environmentally hazardous



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INTERNATIONAL MARITIME DANGEROUS GOODS: Environmentally hazardous, MARINE POLLUTANT

RID: Environmentally hazardous

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Ship Type: Not applicable

Hazard code(s): Not applicable

Pollutant Category: Not applicable

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15: Regulatory information

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

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Quantity 1

Quantity 2

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E2

ENVIRONMENTAL
HAZARDS

200 t

500 t

The components of this product are reported in the following inventories:

DSL : All components of this product are on the Canadian DSL

AICS On the inventory, or in compliance with the inventory

ENCS On the inventory, or in compliance with the inventory

PICCS Not in compliance with the inventory

KECI On the inventory, or in compliance with the inventory

IECSC On the inventory, or in compliance with the inventory

TSCA On TSCA Inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

15.2 Chemical safety assessment

No data available

SECTION 16: Other information**Further information**

Revision Date: 09.06.2017

Classification procedure:

H411 Toxic to aquatic life with long lasting effects. Calculation method

Full text of H-Statements

H319 Causes serious eye irritation.

H410 Very toxic to aquatic life with long lasting effects.



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Other information : The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (+31 10 497 5000).

Sources of key data used to compile the Safety Data Sheet
 Ashland internal data including own and sponsored test reports
 The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists
 BEI : Biological Exposure Index
 CAS : Chemical Abstracts Service (Division of the American Chemical Society).
 CMR : Carcinogenic, Mutagenic or Toxic for Reproduction
 FG : Food grade
 GHS : Globally Harmonized System of Classification and Labeling of Chemicals.
 H-statement : Hazard Statement
 IATA : International Air Transport Association.
 IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
 ICAO : International Civil Aviation Organization
 ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"
 IMDG : International Maritime Code for Dangerous Goods
 ISO : International Organization for Standardization
 logPow : octanol-water partition coefficient
 LCxx : Lethal Concentration, for xx percent of test population
 LDxx : Lethal Dose, for xx percent of test population.
 ICxx : Inhibitory Concentration for xx of a substance
 Ecxx : Effective Concentration of xx
 N.O.S.: Not Otherwise Specified
 OECD : Organization for Economic Co-operation and Development
 OEL : Occupational Exposure Limit
 P-Statement : Precautionary Statement
 PBT : Persistent , Bioaccumulative and Toxic



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PPE : Personal Protective Equipment
 STEL : Short-term exposure limit
 STOT : Specific Target Organ Toxicity
 TLV : Threshold Limit Value
 TWA : Time-weighted average
 vPvB : Very Persistent and Very Bioaccumulative
 WEL : Workplace Exposure Level

ABM : Water Hazard Class for the Netherlands
 ADR : Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: Regulation for the Carriage of Dangerous Substances on the Rhine
 CLP : Classification, Labelling and Packaging
 CSA : Chemical Safety Assessment
 CSR : Chemical Safety Report
 DNEL : Derived No Effect Level.
 EINECS : European Inventory of Existing Commercial Chemical Substances.
 ELINCS : European List of Notified Chemical Substances
 GV: Exposure limits (DK)
 PEC : Predicted Effect Concentration
 PEL : Permissible Exposure Limits
 PNEC : Predicted No Effect Concentration
 R-phrase : Risk phrase
 REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals
 RID : Regulation Concerning the International Transport of Dangerous Goods by Rail
 S-phrase: Safety phrase
 WGK : German Water Hazard Class