

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 30.12.2019

Version: 5

Revision: 30.12.2019

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

· **1.1 Product identifier**

· **Trade name:** FS AMINE Z

· **Article number:** 93600001

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

· **Sector of Use SU22** Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

· **Product category PC35** Washing and cleaning products (including solvent based products)

· **Process category PROC8a** Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

· **Application of the substance / the mixture** Industrial cleaner

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

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· **Further information obtainable from:**

Customer Service
NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710
B: Tel: +32 2 347 0117 Fax: +32 2 347 1395
IT: Tel: +39 069 266 91 Fax: +39 06.927 470 61
UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

· **1.4 Emergency telephone number:**

Customer Service
NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710
B: Tel: +32 2 347 0117 Fax: +32 2 347 1395
IT: Tel: +39 069 266 91 Fax: +39 06.927 470 61
UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011
EU: Tel. 112

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**

Acute Tox. 4 H302 Harmful if swallowed.
Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008** The product is classified and labelled according to the CLP regulation.

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Hazard pictograms



GHS05 GHS07

Signal word Danger

Hazard-determining components of labelling:

didecyldimethylammonium chloride

Hazard statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe dusts or mists.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

- PBT: Not applicable.

- vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

- Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 7173-51-5 EINECS: 230-525-2 Reg.nr.: 01-2119945987-15-xxxx	didecyldimethylammonium chloride Acute Tox. 3, H301 Skin Corr. 1B, H314 Aquatic Acute 1, H400; Aquatic Chronic 2, H411	10-25%
CAS: 67-63-0 EINECS: 200-661-7 Reg.nr.: 01-2119457558-25-xxxx	propan-2-ol Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336	2.5-5%

- Ingredients according to Detergents Regulation 648/2004/EC For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- After inhalation: In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

If skin irritation continues, consult a doctor.

Immediately wash with water and soap and rinse thoroughly.

Immediately rinse with water.

- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Call for a doctor immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

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· 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture During heating or in case of fire poisonous gases are produced.
- 5.3 Advice for firefighters
- Protective equipment: Mount respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- 6.2 Environmental precautions: Inform respective authorities in case of seepage into water course or sewage system.
- 6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, universal binders).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- 6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- Information about fire - and explosion protection: Keep respiratory protective device available.
- 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
· Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

67-63-0 propan-2-ol (2.5-5%)

WEL (Great Britain) Short-term value: 1250 mg/m³, 500 ppm
Long-term value: 999 mg/m³, 400 ppm

· DNELs

67-63-0 propan-2-ol

Oral	DNEL Long term-systemic	26 mg/kg human/day (consumer)
Dermal	DNEL Long term-systemic	319 mg/kg human/day (consumer) 888 mg/kg human/day (worker)
Inhalative	DNEL Long term-systemic mg/m ³	89 mg/m ³ (consumer) 500 mg/m ³ (worker)

· PNECs

67-63-0 propan-2-ol

PNEC Freshwater mg/L 140.9 mg/L

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PNEC Marinewater mg/L	140.9 mg/L
PNEC Freshwater sediment	552 mg/Kg
PNEC Marine water sediment	552 mg/Kg
PNEC Intermittent release	140.9
PNEC Soil	28 mg/Kg

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Respiratory protection:** Not required.

· **Protection of hands:**



Protective gloves

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

· **Not suitable are gloves made of the following materials:** Strong material gloves

· **Eye protection:**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Liquid

Colour: Colourless

· **Odour:** Characteristic

· **Odour threshold:** Not determined.

· **pH-value at 20 °C:** 7.8

· **Change in condition**

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: >100 °C

· **Flash point:** Not applicable.

· **Flammability (solid, gas):** Not applicable.

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Product is not selfigniting.

· **Explosive properties:** Product does not present an explosion hazard.
Not determined.

· **Explosion limits:**

Lower: Not determined.

Upper: Not determined.

· **Vapour pressure at 20 °C:** 23 hPa

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· Density at 20 °C:	0.988 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Fully miscible.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	3.0 %
Swiss VOC:	2.97 %
· Solids content:	0.0 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**
Harmful if swallowed.

· **LD/LC50 values relevant for classification:**

7173-51-5 didecyldimethylammonium chloride

Oral	LD50	238 mg/kg (Rat) OECD Guideline 401
Dermal	LD50	3,342 mg/kg (Rabbit)
	LC50 / 96 h	1 mg/ltr (Oncorhynchus mykiss (Rainbow trout)) OECD guidance 203
	EC 50 / 48 h	0.19 mg/ltr (Pimephales promelas) 0.062 mg/ltr (Daphnia magna (water flea)) Method: US-EPA-FIFRA

67-63-0 propan-2-ol

Oral	LD50	>5,000 mg/kg (Rat)
Dermal	LD50	6,290 mg/kg (rab)
Inhalative	LC50 / 4 h	46-73 mg/l (Rat)
	LC50 / 8 h	12,000-19,000 mg/m ³ (Rat)
	LC50 / 96 h	9,640 mg/ltr (fish) >1,400 mg/ltr (Lepomus gobbosus (Zonnebaars)) 6,550 mg/ltr (Pimephales promelas)
	EC50 / 24 h	>1,000 mg/ltr (Daphnia magna (water flea))
	EC 50 / 48 h	2,285-13,299 mg/ltr (Daphnia magna (water flea))

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**
Causes serious eye damage.

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- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

7173-51-5 didecyldimethylammonium chloride

OECD test 301 A	90 (biodegradation in % after 28 days) Method: OECD 301 A
OECD test 301 B	72 (biodegradation in % after 28 days) Guideline: OECD 301 B
OECD test 302 B	87-94 (biodegradation in % after 28 days) Test method: OECD 302 B

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Danger to drinking water if even extremely small quantities leak into the ground.
Harmful to aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Disposal must be made according to official regulations
- **Uncleaned packaging:**
- **Recommendation:** Disposal in accordance with administrative provisions

SECTION 14: Transport information

- | | |
|---------------------------------------|--|
| · 14.1 UN-Number | |
| · ADR, IMDG, IATA | UN1760 |
| · 14.2 UN proper shipping name | |
| · ADR | 1760 CORROSIVE LIQUID, N.O.S. (didecyldimethylammonium chloride) |
| · IMDG, IATA | CORROSIVE LIQUID, N.O.S. (didecyldimethylammonium chloride) |

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· 14.3 Transport hazard class(es)

· ADR



- Class 8 (C9) Corrosive substances.
· Label 8

· IMDG, IATA



- Class 8 Corrosive substances.
· Label 8

· 14.4 Packing group

- ADR, IMDG, IATA III

· 14.5 Environmental hazards:

- Marine pollutant: No

· 14.6 Special precautions for user

- Danger code (Kemler): Warning: Corrosive substances.
80
· EMS Number: F-A,S-B
· Stowage Category B
· Stowage Code SW2 Clear of living quarters.

· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

· Transport/Additional information:

· ADR

- Limited quantities (LQ) 5L
· Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
· Transport category 3
· Tunnel restriction code E

· IMDG

- Limited quantities (LQ) 5L
· Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

· UN "Model Regulation":

UN 1760 CORROSIVE LIQUID, N.O.S.
(DIDECYLDIMETHYLAMMONIUM CHLORIDE), 8, III

SECTION 15: Regulatory information

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

- Reg. (EC) n. 1272/2008 - CLP;
Reg. (EC) n. 1907/2006 – Reach;
Reg. (EC) n. 2015/830 annex II of REACH;
Reg. (EC) n. 648/04 (Detergents);
Reg. (EC) n. 528/12 (Biocides BPR);
Reg. (EC) n. 1223/2009 (Cosmetics);
Dir. 06/08 ADR – RID - IMDG - IATA;
Dir. 47/08 (Aerosols); Dir. 12/18 (Seveso III);
Dir. 2008/98/CE and Reg. (EC) n.1357/2014 (Waste management)

· Directive 2012/18/EU

- Named dangerous substances - ANNEX I None of the ingredients is listed.

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· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3· **Regulation (EU) No 649/2012**

7173-51-5 | didecyldimethylammonium chloride

Annex I Part I

· **National regulations:**· **Technical instructions (air):**

Class	Share in %
NK	2.5-5

· **Waterhazard class:** Water danger class 3 (Self-assessment): extremely hazardous for water.· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

· **Department issuing SDS:**

Customer Service

NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710

B: Tel: +32 2 347 0117 Fax: +32 2 347 1395

IT: Tel: +39 069 266 91 Fax: +39 06.927 470 61

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IT: Tel: +39 069 266 91 Fax: +39 06.927 470 61

UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 3: Acute toxicity - oral – Category 3

Acute Tox. 4: Acute toxicity - oral – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· *** Data compared to the previous version altered.**

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Annex: Exposure scenario

· **Short title of the exposure scenario**

For the finished product.

FS AMINE Z

· **Sector of Use SU22** Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

· **Product category PC35** Washing and cleaning products (including solvent based products)

· **Process category PROC8a** Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

· **Description of the activities / processes covered in the Exposure Scenario** See section 1 of the annex to the Safety Data Sheet.

· **Conditions of use**

· **Duration and frequency** 5 workdays/week.

· **Physical parameters**

· **Physical state** Fluid

· **Concentration of the substance in the mixture** The substance is main component.

· **Used amount per time or activity** According to directions for use.

· **Other operational conditions**

· **Other operational conditions affecting environmental exposure**

No special measures required.

Use only on hard ground.

· **Other operational conditions affecting worker exposure**

Avoid contact with eyes.

Avoid contact with the skin.

· **Other operational conditions affecting consumer exposure** No special measures required.

· **Other operational conditions affecting consumer exposure during the use of the product** Not applicable.

· **Risk management measures**

· **Worker protection**

· **Organisational protective measures** No special measures required.

· **Technical protective measures**

Ensure that suitable extractors are available on processing machines

Use product only in enclosed systems.

· **Personal protective measures**

Do not inhale gases / fumes / aerosols.

Avoid contact with the skin.

Avoid contact with the eyes.

Tightly sealed goggles

Protective gloves

· **Measures for consumer protection** Ensure adequate labelling.

· **Environmental protection measures**

· **Water**

No special measures required.

Generally, prior to the introduction of wastewater into wastewater treatment plants a neutralisation is required.

Do not allow to reach sewage system.

· **Soil** Prevent contamination of soil.

· **Disposal measures**

Disposal in accordance with administrative provisions

Ensure that waste is collected and contained.

· **Disposal procedures** Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **Waste type** Partially emptied and uncleaned packaging

· **Exposure estimation**

· **Consumer** Not relevant for this Exposure Scenario.

· **Guidance for downstream users** No further relevant information available.