



**Safety Data Sheet dated 18/12/2018, version 10**

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

1.1. Product identifier

Trade name: Essechlor  
40,45,50,52,54,56,60,HC,60HS,40HS,44HS,50HS,56HS  
CAS number: 85535-85-9  
EC number: 287-477-0  
Index 67/548/EEC: 602-095-00-X  
REACH number: 01-2119519269-33-0009

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

Recommended use:

FOR INDUSTRIAL USE  
FOR PROFESSIONAL USE

1.3. Details of the supplier of the safety data sheet

Company:  
ALTAIR CHIMICA S.p.a.  
Via Moie Vecchie 13  
56048 Saline di Volterra (PI)  
Competent person responsible for the safety data sheet: [sds@altairchimica.com](mailto:sds@altairchimica.com)

1.4. Emergency telephone number

ALTAIR CHIMICA S.p.a. Phone n. +39-0588-9811

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**SECTION 2: Hazards identification**

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

Lact., May cause harm to breast-fed children.

⚠ Warning, Aquatic Acute 1, Very toxic to aquatic life.

⚠ Warning, Aquatic Chronic 1, Very toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H362 May cause harm to breast-fed children.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P263 Avoid contact during pregnancy and while nursing.

P273 Avoid release to the environment.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

EUH066 Repeated exposure may cause skin dryness or cracking.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None



- 2.3. Other hazards  
 vPvB Substances: None - PBT Substances: None  
 Other Hazards:  
 No other hazards

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### SECTION 3: Composition/information on ingredients

- 3.1. Substances  
 Trade name: Essechlor  
 40,45,50,52,54,56,60,HC,60HS,40HS,44HS,50HS,56HS  
 CAS number: 85535-85-9  
 EC number: 287-477-0  
 REACH number: 01-2119519269-33-0009

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 90%	alkanes, C14-17, chloro	Index number: 602-095-00-X CAS: 85535-85-9 EC: 287-477-0 REACH No.: 01-2119519269-33-0009	3.7/Lact. Lact. H362  4.1/A1 Aquatic Acute 1 H400  4.1/C1 Aquatic Chronic 1 H410 EUH066

- 3.2. Mixtures  
 N.A.

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### SECTION 4: First aid measures

- 4.1. Description of first aid measures  
 In case of skin contact:  
 Immediately take off all contaminated clothing.  
 Wash with plenty of water and soap.  
 In case of eyes contact:  
 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 In case of Ingestion:  
 Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.  
 In case of Inhalation:  
 Remove casualty to fresh air and keep warm and at rest.
- 4.2. Most important symptoms and effects, both acute and delayed  
 None
- 4.3. Indication of any immediate medical attention and special treatment needed  
 Treatment:  
 None

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### SECTION 5: Firefighting measures

- 5.1. Extinguishing media  
 Suitable extinguishing media:  
 Dry chemical fire extinguishe.  
 Foaming  
 Extinguishing media which must not be used for safety reasons:  
 None in particular.
- 5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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**SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Provide adequate ventilation.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Eliminate all unguarded flames and possible sources of ignition. Do not smoke.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Recover the product for re-use if possible, or for elimination. The product might, where appropriate, be absorbed by inert material.

After the product has been recovered, rinse the area and materials involved with water.

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

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**SECTION 7: Handling and storage**

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep this product in a dry place.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Do not pour the product into other containers. Always use the original container.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

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**SECTION 8: Exposure controls/personal protection**

8.1. Control parameters

No occupational exposure limit available

DNEL Exposure Limit Values

ESSECHLOR - CAS: 85535-85-9

Worker Industry: 47.9 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Industry: 6.7 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects  
 Consumer: 28.75 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects  
 Consumer: 2 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects  
 Consumer: 0.58 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

**PNEC Exposure Limit Values**

ESSECHLOR - CAS: 85535-85-9

Target: Fresh Water - Value: 0.001 mg/l  
 Target: Marine water - Value: 0.0002 mg/l  
 Target: Freshwater sediments - Value: 2.6 mg/kg  
 Target: Marine water sediments - Value: 13 mg/kg  
 Target: Microorganisms in sewage treatments - Value: 80 mg/l  
 Target: Soil (agricultural) - Value: 10.5 mg/kg  
 Target: Food chain - Value: 10 mg/kg

**8.2. Exposure controls**

Eye protection:

Basket eye glasses.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Use protective gloves that provides comprehensive protection.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

**SECTION 9: Physical and chemical properties**

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

Appearance and colour:	Liquid
Odour:	Characteristic
Odour threshold:	N.A.
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	>200°C
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	N.A.
Flash point:	210 ° C
Evaporation rate:	N.A.
Vapour pressure:	1.3 x 10 <sup>-4</sup> - 2.7 x 10 <sup>-4</sup> Pa (20°C)
Relative density:	1.1 - 1.45
Solubility in water:	INSOLUBLE
Solubility in oil:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	N.A.
Decomposition temperature:	N.A.
Viscosity:	90-12 mm <sup>2</sup> /s (20°C) - 25-1200 mm <sup>2</sup> /s (40°C)
Explosive properties:	N.A.
Oxidizing properties:	N.A.

**9.2. Other information**

Miscibility: N.A.

Fat Solubility: N.A.  
Conductivity: N.A.  
Substance Groups relevant properties N.A.

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### **SECTION 10: Stability and reactivity**

- 10.1. Reactivity  
Stable under normal conditions
  - 10.2. Chemical stability  
Stable under normal conditions
  - 10.3. Possibility of hazardous reactions  
Can react with metals and alkaline minerals that have a strong affinity with chlorine.  
At high temperatures can react with iron, zinc and aluminum anticipating the decomposition.
  - 10.4. Conditions to avoid  
High temperature.
  - 10.5. Incompatible materials  
Oxidants, reducing agents.
  - 10.6. Hazardous decomposition products  
Carbon monoxide, hydrochloric acid.  
Thermal decomposition at high temperature will generate irritating vapours.
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### **SECTION 11: Toxicological information**

- 11.1. Information on toxicological effects  
Toxicological information of the substance:  
ESSECHLOR - CAS: 85535-85-9
    - a) acute toxicity  
Not classified  
Based on available data, the classification criteria are not met
    - b) skin corrosion/irritation  
Not classified  
Based on available data, the classification criteria are not met
    - c) serious eye damage/irritation  
Not classified  
Based on available data, the classification criteria are not met
    - d) respiratory or skin sensitisation  
Not classified  
Based on available data, the classification criteria are not met
    - e) germ cell mutagenicity  
Not classified  
Based on available data, the classification criteria are not met
    - f) carcinogenicity  
Not classified  
Based on available data, the classification criteria are not met
    - g) reproductive toxicity  
The product is classified: Lact. H362
    - h) STOT-single exposure  
Not classified  
Based on available data, the classification criteria are not met
    - i) STOT-repeated exposure  
Not classified  
Based on available data, the classification criteria are not met
    - j) aspiration hazard  
Not classified  
Based on available data, the classification criteria are not met
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### **SECTION 12: Ecological information**

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

ESSECHLOR - CAS: 85535-85-9

The product is classified: Aquatic Acute 1 - H400; Aquatic Chronic 1 - H410

alkanes, C14-17, chloro - CAS: 85535-85-9

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 0.006 mg/l - Duration h: 48

Endpoint: LC50 - Species: Crustaceans > 1 mg/l - Duration h: 96

Endpoint: LC50 - Species: Fish > 5000 mg/l - Duration h: 96

Endpoint: EC50 - Species: Algae > 3.2 mg/l - Duration h: 96

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

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**SECTION 13: Disposal considerations**

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

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**SECTION 14: Transport information**



14.1. UN number

ADR-UN Number: 3082

IATA-UN Number: 3082

IMDG-UN Number: 3082

14.2. UN proper shipping name

ADR-Shipping Name: 0(alkanes, C14-17, chloro)

IATA-Shipping Name: 0(alkanes, C14-17, chloro)

IMDG-Shipping Name: 0(alkanes, C14-17, chloro)

14.3. Transport hazard class(es)

ADR-Class: 9

ADR - Hazard identification number: 90

IATA-Class: 9

IATA-Label: 9

IMDG-Class: 9

14.4. Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

14.5. Environmental hazards

ADR-Environmental Pollutant: Yes

IMDG-Marine pollutant: Marine Pollutant

14.6. Special precautions for user

ADR-Subsidiary risks: -

ADR-S.P.: 274 335 601 375

ADR-Transport category (Tunnel restriction code): (E)

IATA-Passenger Aircraft: 964  
IATA-Subsidiary risks: -  
IATA-Cargo Aircraft: 964  
IATA-S.P.: A97 A158 A197  
IATA-ERG: 9L  
IMDG-EmS: F-A , S-F  
IMDG-Subsidiary risks: -  
IMDG-Stowage and handling: Category A  
IMDG-Segregation: -

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code  
N.A.

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## SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture  
Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation  
(EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

1999/13/EC (VOC directive)

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: E1

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for the substance.

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## SECTION 16: Other information

Full text of phrases referred to in Section 3:

H362 May cause harm to breast-fed children.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

Hazard class and hazard category	Code	Description
Lact.	3.7/Lact.	Reproductive toxicity, Hazard category for lactation effects
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1

Paragraphs modified from the previous revision:

SECTION 6: Accidental release measures  
SECTION 10: Stability and reactivity  
SECTION 15: Regulatory information  
SECTION 16: Other information

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,  
Commission of the European Communities  
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van  
Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
ATE: Acute Toxicity Estimate  
ATEmix: Acute toxicity Estimate (Mixtures)  
CAS: Chemical Abstracts Service (division of the American Chemical Society).  
CLP: Classification, Labeling, Packaging.  
DNEL: Derived No Effect Level.  
EINECS: European Inventory of Existing Commercial Chemical Substances.  
GefStoffVO: Ordinance on Hazardous Substances, Germany.  
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.  
IATA: International Air Transport Association.  
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).  
ICAO: International Civil Aviation Organization.  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).  
IMDG: International Maritime Code for Dangerous Goods.  
INCI: International Nomenclature of Cosmetic Ingredients.  
KSt: Explosion coefficient.  
LC50: Lethal concentration, for 50 percent of test population.  
LD50: Lethal dose, for 50 percent of test population.  
N.A.: Not Available  
PNEC: Predicted No Effect Concentration.  
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.





## Safety Data Sheet ESSECHLOR

STEL: Short Term Exposure limit.  
STOT: Specific Target Organ Toxicity.  
TLV: Threshold Limiting Value.  
TWA: Time-weighted average  
WGK: German Water Hazard Class.