

Trade name / Substance name: ECOFAX 20, ECOFAX 40

**X SAFETY DATA SHEET**

(INFORMATION FORM FOR CHEMICALS DATA)

(\*) concerns only chemical notification

(\*\*) either 3.1 or 3.2 must be filled

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier****Trade name / Substance name**

ECOFAC 20, ECOFAX 40

**Company product code**

ECHA list number: 931-322-8

**REACH Registration number**

01-2119491179-27-0096 (Ashes (residues), coal)

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

Mineral raw material and construction material in bound and unbound applications (e.g. cement, concrete, asphalt).

**Classification of economic activities (NACE) (\*)**

24.3 Manufacture of paints, varnishes and similar coatings, printing ink and mastics

26.5 Manufacture of cement, lime and plaster

26.6 Manufacture of articles of concrete, plaster and cement

45.2 Building of complete constructions or parts thereof; civil engineering

45.23 Construction of motorways, roads, airfields and sport facilities

**Use categories (UC62) (\*)**

13 Construction materials

20 Fillers

22 Flame retardants and extinguishing agents

40 pH-regulation agents

**The chemical can be used by the general public (\*)****The chemical is used by the general public only (\*)****1.3 Details of the supplier of the Safety Data Sheet****Supplier (manufacturer, importer, only representative, downstream user, distributor)****Responsible for placing a chemical on the market in Finland (\*)**

Fatec Oy

**Street address**

Lyhyenrannantie 11

**Postcode and post office**

71800 Siilinjärvi

**Post-office box**

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**Postcode and post office****Telephone number**

+35844 714 8900

**Telefax****E-mail address**

info@fatec.fi

**Finnish Business ID (Y code) (\*)**

0833375-8

**1.4 Emergency telephone number****112**

Poison Information centre (in Finland), open 24 h daily:  
(09) 471977 or (09) 4711

**SECTION 2: HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture**

In accordance with current regulations, this product has not been classified as hazardous.

**2.2 Label elements**

No labeling. In accordance with current regulations, this product has not been classified as hazardous.

**2.3 Other hazards**

Aqueous solutions of ash may be strongly basic.

**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS****3.1 Substances (\*\*)**

Main constituent / constituent	CAS-, EC- or index number	Concentration
Ash (residue), coal	REACH registration number: 01-2119491179-27-0096	100 %

**3.2 Mixtures (\*\*)**

Substance name	CAS-, EC- or index number	REACH Registration No.	Concentration	Classification

Ash is an UVCB substance composed of glassy/amorphous material and mineral phases. It is the residuum from the burning of coal in power stations with or without co-combustion from secondary fuels.

**SECTION 4: FIRST AID MEASURES****4.1 Description of first aid measures**

**Inhalation:** Move exposed person to fresh air. If symptoms occur, seek medical attention.

**Skin contact:** Rinse with plenty of water. If skin irritation persists, seek medical attention.

**Eye contact:** Rinse eyes with running water or plenty of water. If eye irritation persists, seek medical attention.

**Ingestion:** Give plenty of water to drink. If symptoms occur, seek medical attention.

**4.2 Most important symptoms and effects, both acute and delayed**

**Inhalation:** Symptoms or effects not known.

**Skin contact:** May cause irritation and drying of skin.

**Eye contact:** May irritate eyes.

**Ingestion:** Symptoms or effects not known.

**4.3 Indication of any immediate medical attention and special treatment needed**

No special instructions.

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<b>SECTION 5: FIREFIGHTING MEASURES</b>	
<b>5.1</b>	<b>Extinguishing media</b> The material in itself is not combustible. Use an extinguishing agent suitable for the surrounding fire.
<b>5.2</b>	<b>Special hazards arising from the substance or mixture</b> No special hazards.
<b>5.3</b>	<b>Advice for firefighters</b> Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA).
<b>SECTION 6: ACCIDENTAL RELEASE MEASURES</b>	
<b>6.1</b>	<b>Personal precautions, protective equipment and emergency procedures</b> Keep unnecessary and unprotected people from entering. Stop material from spreading if safe to do so. Prevent the formation and dispersal of dust if possible. Ensure adequate ventilation or bind ash with moisture. Wear appropriate protective gloves, eye protection and protective clothing, if needed. If dust forms, wear respiratory protection.
<b>6.2</b>	<b>Environmental precautions</b> Prevent the formation and dispersal of dust if possible. Avoid entry of large amounts of material into waterways, drains or sewers.
<b>6.3</b>	<b>Methods and material for containment and cleaning up</b> Sweep up and collect in a suitable vessel for use or disposal. Ensure adequate ventilation. Dry vacuum or wet cleaning with mechanical devices may be used to avoid dust dispersal.
<b>6.4</b>	<b>Reference to other sections</b> Safe handling: see point 7 Personal protection equipment: see point 8 Disposal: see point 13
<b>SECTION 7: HANDLING AND STORAGE</b>	
<b>7.1</b>	<b>Precautions for safe handling</b> Avoid the formation and inhalation of dust and ensure sufficient ventilation. Do not eat, drink or smoke in the work area. Avoid prolonged contact with skin. Wash hands before breaks and at the end of workday. Wear appropriate personal protection equipment.
<b>7.2</b>	<b>Conditions for safe storage, including any incompatibilities</b> No particular requirements.
<b>7.3</b>	<b>Specific end use(s)</b> None reported.
<b>SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION</b>	
<b>8.1</b>	<b>Control parameters</b> <b>National occupational exposure limit values</b> Inorganic dust: 10 mg/m <sup>3</sup> (8 h) <b>Other limit values</b> None known. <b>DNEL</b> No DNEL values have been determined. Coal ash is considered as inert dust, and occupational limit values for inorganic dust apply (in Finland, HTP values; see above). <b>PNEC</b> PNEC (fresh water) = 0.044 mg/L PNEC (marine water) = 0.044 mg/L PNEC (water, intermittent releases) = 0.3 mg/L PNEC (STP) = 10 mg/L PNEC (soil) = 8.4 mg/kg (dry weight)

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PNEC values have not been determined for sediments, since on basis of the properties of coal ash, toxicity to sediment organisms is low and adverse effects are not expected to occur.

## 8.2 Exposure controls

### Appropriate engineering controls

Ensure adequate ventilation or bind ash with moisture. If necessary, use filters to prevent spreading of dust from closed systems.

### Eye / face protection

If necessary, wear tight-fitting safety goggles or face protection.

### Skin protection

Wear appropriate protective clothing. Wash contaminated skin after exposure.

### Hand protection

Wear appropriate impervious gloves.

### Respiratory protection

If dust forms, wear appropriate respiratory protection (minimum filter type P2).

### Thermal hazards

None known.

### Environmental exposure controls

Avoid entry of large amounts of material into waterways, drains or sewers. Use of material in soil construction requires a site-specific environmental permit or, if certain conditions are met, a notification to the appropriate surveillance authority (see point 15.1).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES	
9.1 Information on cphysical and chemical properties	
Appearance	Solid, light gray powder.
Odour	Odourless.
Odour threshold	Not applicable.
pH	< 12.5 (20 °C, 1:10)
Melting point/freezing point	Not applicable.
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not flammable.
Upper/lower flammability or explosive limits	Not explosive.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	Ecofax 20: 2.5 (2.3-2.7) g/cm <sup>3</sup> Ecofax 40: 2.2 (2.0-2,4) g/cm <sup>3</sup>
Solubility(ies)	Water (20 °C) 0.7-1.4 g/L
Partition coefficient: n-octanol/water	Not applicable.
Auto-ignition temperature	Not flammable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.

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<b>Explosive properties</b>	Not explosive.
<b>Oxidising properties</b>	Not oxidising.

**9.2 Other information**

Bulk density:

Ecofax 20: 0.9 (0.8-1.0) g/cm<sup>3</sup>Ecofax 40: 1.2 (1.1-1.3) g/cm<sup>3</sup>**SECTION 10: STABILITY AND REACTIVITY****10.1 Reactivity**

Not reactive under normal use and storage conditions.

**10.2 Chemical stability**

Chemically stable under normal storage conditions.

**10.3 Possibility of hazardous reactions**

No hazardous reactions known.

**10.4 Conditions to avoid**

No conditions to avoid.

**10.5 Incompatible materials**

No incompatible materials.

**10.3 Hazardous decomposition products**

No hazardous decomposition products known.

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects****Acute toxicity**

The product is not classified as acutely toxic.

Ash (residue), coal:

LD50 (oral, rat) &gt; 2000 mg/kg bw

LD50 (dermal, rat) &gt; 2000 mg/kg bw

LC50 (inhalation, 4 h, rat) > 1400 mg/m<sup>3</sup>**Skin corrosion/irritation**

The product is not classified as corrosive or irritating to skin. However, it may irritate skin.

**Serious eye damage/irritation**

The product is not classified as damaging or irritating to eyes. However, it may irritate eyes.

**Respiratory or skin sensitisation**

The product is not classified as a respiratory or skin sensitiser.

**Germ cell mutagenicity**

The product is not classified as a mutagen.

**Carcinogenicity**

The product is not classified as a carcinogen.

**Reproductive toxicity**

The product is not classified as a reproductive toxicant.

**STOT-single exposure**

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The product is not classified as toxic to specific target organs at single exposure.

**STOT-repeated exposure**

The product is not classified as toxic to specific target organs at repeated exposure.

**Aspiration hazard**

The product is not classified as an aspiration hazard.

**Other information**

None reported.

<b>SECTION 12: ECOLOGICAL INFORMATION</b>	
<b>12.1</b>	<b>Toxicity</b>
	The product is not classified as hazardous to the environment. Not toxic to aqueous organisms or activated sludge. Strongly basic ash may locally elevate the pH of water in the short term, which may harm aqueous organisms. Avoid releasing large amounts of the product into waterways, drains or sewers without environmental permit.
	Ash (residue), coal: NOELR (96 h, fish <i>Poecilia reticulata</i> ): 100 mg/L EL50 (48 h, water-flea <i>Daphnia magna</i> ): > 100 mg/L NOELR (21 d, <i>D. magna</i> ): 2.2 mg/L EL50 (72 h, alga <i>Pseudokirchneriella subcapitata</i> ): 30 mg/L NOEL (3 h, activated sludge): > 100 mg/L
<b>12.2</b>	<b>Persistence and degradability</b>
	Not applicable for inorganic substances.
<b>12.3</b>	<b>Bioaccumulative potential</b>
	Not applicable for inorganic substances.
<b>12.4</b>	<b>Mobility in soil</b>
	The product is moderately mobile in soil. May adsorb to soil particles. Leaching of main compounds (SiO <sub>2</sub> , Al <sub>2</sub> O <sub>3</sub> ) is not expected.
<b>12.5</b>	<b>Results of PBT and vPvB assessment</b>
	The product does not fulfill the criteria for PBT or vPvB substances.
<b>12.6</b>	<b>Other adverse effects</b>
	None reported.
<b>SECTION 13: DISPOSAL CONSIDERATIONS</b>	
<b>13.1</b>	<b>Waste treatment methods</b>
	Dispose of in compliance with local and national regulations. EWC: 10 01 02 (coal fly ash)
<b>SECTION 14: TRANSPORT INFORMATION</b>	
<b>14.1</b>	<b>UN number</b>
	The product is not classified for transportation.
<b>14.2</b>	<b>UN proper shipping name</b>
	-
<b>14.3</b>	<b>Transport hazard class(es)</b>
	-
<b>14.4</b>	<b>Packing group</b>
	-
<b>14.5</b>	<b>Environmental hazards</b>
	The product is not classified as hazardous to the environment. IMDG class: - Marine pollutant: No

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<b>14.6</b>	<b>Special precautions for user</b>
	Avoid formation and inhalation of dust and contact with skin or eyes. Avoid releasing large amounts of the product into waterways, drains or sewers.
<b>14.7</b>	<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>
	Not applicable.
<b>SECTION 15: REGULATORY INFORMATION</b>	
<b>15.1</b>	<b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>
	Use of the product in soil construction: Environmental permit: Environmental Protection Act (86/2000) and Environmental Protection Decree (169/2000). Notification: Government Decree concerning the recovery of certain wastes in earth construction (591/2006)
<b>15.2</b>	<b>Chemical safety assessment</b>
	Chemical safety assessment has been performed.
<b>SECTION 16: OTHER INFORMATION</b>	
<b>Indication of changes</b>	
September 6, 2013: English-language SDS prepared on basis of the Finnish-language version.	
<b>Abbreviations and acronyms</b>	
DNEL: Derived no effect level	
EL50: Effective level: loading rate that kills or immobilizes 50 % of exposed organisms	
EWC: European waste code	
LC50: Lethal concentration: concentration that kills 50 % of exposed organisms	
LD50: Lethal dose: dose that kills 50 % of the experimental organisms	
NOEL: No Observed Effect Level: loading rate at which no effects are observed	
NOELR: No Observed Effect Loading Rate: loading rate at which no effects are observed	
PBT: Persistent, bioaccumulative, toxic	
PNEC: Predicted no effect concentration	
vPvB: Very persistent, very bioaccumulative	
<b>Key literature references and sources for data</b>	
Degree on Concentrations known to be Hazardous (1213/2011) (HTP-arvot 2011)	
Finnish-language SDS (August 8, 2011)	
<b>Used method in evaluating classification</b>	
-	
<b>List of relevant R-and S-phrases or/and safety and precautionary statements</b>	
-	
<b>Training advice for workers</b>	
Read safety data sheet.	