

SAFETY DATA SHEET

PRF IPA

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

1.1. Product identifier

Trade name

PRF IPA

Product no.

PEIPA22

Unique formula identifier (UFI)

199X-U8YG-M003-0VKM

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

Relevant identified uses of the substance or mixture

Cleaning product

EuPCS

PC-CLN-2 / All-purpose (or multi-purpose) non-abrasive cleaners

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Taerosol Oy

Hampuntie 21

36220 Kangasala

Finland

+358 033565600

<http://www.taerosol.com>

E-mail

tilaukset@taerosol.com

Revision

04/06/2024

SDS Version

3.0

1.4. Emergency telephone number

HUS Poison Information Center, 24h 0800 147 111

Poison Information Center / HUS, Tukholmankatu 17, 00029 HUS (Helsinki)

See first aid measures section 4.

SECTION 2: Hazards identification

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

2.1. Classification of the substance or mixture

Aerosol 1; H222, H229, Extremely flammable aerosol. Pressurised container: May burst if heated.

Eye Irrit. 2; H319, Causes serious eye irritation.

STOT SE 3; H336, May cause drowsiness or dizziness.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

Extremely flammable aerosol. Pressurised container: May burst if heated. (H222, H229)

Causes serious eye irritation. (H319)

May cause drowsiness or dizziness. (H336)

Precautionary statement(s)

General

Keep out of reach of children. (P102)

Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)

Do not spray on an open flame or other ignition source. (P211)

Do not pierce or burn, even after use. (P251)

Response

-

Storage

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F. (P410+P412)

Disposal

Dispose of contents/container in accordance with local regulation (P501)

Hazardous substances

Propan-2-ol

Additional labelling

UFI: 199X-U8YG-M003-0VKM

Labelling of contents according to Detergents Regulation (EC) No 648/2004

15% - 30%

· Aliphatic hydrocarbons

2.3. Other hazards

Additional warnings

The material contains peroxide forming substances, which can form hazardous levels of peroxides e.g. during distillation, evaporation or extraction.

In the event of leaks, high concentrations of gases can quickly form. They can be toxic, asphyxiating, or explosive. This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Propan-2-ol	CAS No.: 67-63-0 EC No.: 200-661-7 REACH: 01-2119457558-25- Index No.: 603-117-00-0	< 100%	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	
Isopentane	CAS No.: 78-78-4 EC No.: 201-142-8 REACH: 01-2119475602-38- Index No.: 601-085-00-2	< 1%	EUH066 Flam. Liq. 1, H224 Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Chronic 2, H411	[1]

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[1] European occupational exposure limit.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

Eye contact

If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system.

Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

If eye irritation persists: Get medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Extremely flammable aerosol. Pressurised container. In a fire or if heated, a pressure increase will occur and the container may burst.

In use may form flammable/explosive vapour-air mixture.

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO₂)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the Poison Information Center on: 09-471977, in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Accidental releases always pose a serious risk of fire or explosion.

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

Ensure adequate ventilation, especially in confined areas.

Avoid inhalation of vapours from spilled material.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not spray on an open flame or other ignition source.

Do not pierce or burn, even after use.

The product should be tested for peroxides before distillation or evaporation and tested for peroxide formation or discarded after 1 year.

Peroxide formation may be present anywhere in the container, including the sides, bottom, exterior and threaded cap. Peroxide formation in ppm concentrations may not be visually observable and must be identified through the use of appropriate testing procedures. If any of the following conditions exist, the material may be explosively unstable and will require stabilization prior to use:

1. Material appears to be degraded and or contaminated.

2. Material appears to be discolored.

3. Deterioration or distortion of storage container.

4. Thermal shock (sunlight).

5. Age of material exceeds recommended storage time.

Avoid contact during pregnancy and while nursing.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Recommended storage material

Always store in containers of the same material as the original container.

Storage conditions

No specific requirements

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Propan-2-ol

Long term exposure limit (8 hours) (ppm): 200

Long term exposure limit (8 hours) (mg/m³): 500

Short term exposure limit (15 minutes) (ppm): 250

Short term exposure limit (15 minutes) (mg/m³): 620

Isopentane

Long term exposure limit (8 hours) (ppm): 500

Long term exposure limit (8 hours) (mg/m³): 1500

Short term exposure limit (15 minutes) (ppm): 630

Short term exposure limit (15 minutes) (mg/m³): 1900

Regulation of the Ministry of Social Affairs and Health on concentrations of chemical substances found to be harmful (654/2020).

DNEL

Isopentane

Duration:	Route of exposure:	DNEL:
Long term - Systemic effects - Workers	Dermal	432 mg/kg bw/day
Long term - Systemic effects - Workers	Inhalation	3000 mg/m ³

Propan-2-ol

Duration:	Route of exposure:	DNEL:
Long term - Systemic effects - General population	Dermal	319 mg/kg bw/day
Long term - Systemic effects - Workers	Dermal	888 mg/kg bw/day

Long term - Systemic effects - General population	Inhalation	89 mg/m ³
Long term - Systemic effects - Workers	Inhalation	500 mg/m ³
Long term - Systemic effects - General population	Oral	26 mg/kg bw/day

PNEC

Propan-2-ol

Route of exposure:

Duration of Exposure:

PNEC:

Freshwater	140.9 mg/L
Freshwater sediment	552 mg/kg
Intermittent release (freshwater)	140.9 mg/L
Marine water	140.9 mg/L
Marine water sediment	552 mg/kg
Sewage treatment plant	2.251 g/L
Soil	28 mg/kg

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.

Respiratory Equipment

Type	Class	Colour	Standards
Respiratory protection is not needed in the event of adequate ventilation.			
Combination filter AXP2		Brown/White	EN14387, EN143



Skin protection

Recommended	Type/Category	Standards
No special when used as intended.	-	-

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
If exposure is likely.			
Nitrile	0,38	> 480	EN374-2, EN374-3, EN388



Eye protection

Type	Standards
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Safety glasses with side shields EN166



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Aerosol

Colour

Clear

Odour / Odour threshold

Alcohol odor

pH

Not applicable - pH is not defined for non-aqueous systems

Density (g/cm³)

Not applicable - product is an aerosol

Relative density

Not applicable - product is an aerosol

Kinematic viscosity

Not applicable - product is an aerosol

Particle characteristics

Not applicable - product is an aerosol

Phase changes

Melting point/Freezing point (°C)

No data available

Softening point/range (waxes and pastes) (°C)

Does not apply to aerosols.

Boiling point (°C)

No data available

Vapour pressure

No data available

Relative vapour density

Not applicable - product is an aerosol

Decomposition temperature (°C)

No data available

Data on fire and explosion hazards

Flash point (°C)

< 0

Flammability (°C)

The material is ignitable.

Auto-ignition temperature (°C)

Not applicable - product is an aerosol

Lower and upper explosion limit (% v/v)

No data available

Solubility

Solubility in water

No data available

n-octanol/water coefficient (LogK_{ow})

No data available

Solubility in fat (g/L)

No data available

9.2. Other information

Other physical and chemical parameters

No data available.

Oxidizing properties

Testing not relevant or not possible due to the nature of the product.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Avoid static electricity.

Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

Risk of formation of explosive peroxides when distilled, evaporated or otherwise concentrated.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

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

Acute toxicity

Product/substance	Propan-2-ol
Test method:	OECD 401
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	5840 mg/L

Product/substance	Propan-2-ol
Test method:	OECD 402
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	> 12800 mg/kg

Product/substance	Propan-2-ol
Test method:	OECD 403
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50
Result:	> 10000 ppmV

Product/substance	Isopentane
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	> 2000 mg/kg

Product/substance	Isopentane
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50 (4 hours)
Result:	> 25,3 mg/L

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Based on available data, the classification criteria are not met.

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

May cause drowsiness or dizziness.

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.

11.2. Information on other hazards

Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs.

Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system.

Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

Propan-2-ol has been classified by IARC as a group 3 carcinogen.

SECTION 12: Ecological information

12.1. Toxicity

Product/substance Propan-2-ol

Test method: OECD 203

Species: Fish, Pimephales promelas

Duration: 96 hours

Test: LC50

Result: 9640 mg/L

Product/substance Propan-2-ol

Test method: OECD 202

Species: Daphnia, Daphnia magna

Duration: 24 months

Test: EC50

Result: > 10000 mg/L

Product/substance Propan-2-ol

Species: Algae

Duration: 7 days

Test: EC50

Result: 1800 mg/L

Product/substance Propan-2-ol

Test method: QSAR

Species: Fish

Duration: 28 days

Test: NOELR

Result: > 1000 mg/L

Product/substance Propan-2-ol

Test method: QSAR

Species: Daphnia, Daphnia magna

Duration: 21 days

Test: NOELR

Result: > 1000 mg/L

Product/substance Isopentane

Species: Algae

Duration: 96 hours

Test: EC50

Result: 5,2 mg/L

Product/substance: Isopentane
 Species: Fish
 Duration: 96 hours
 Test: LC50
 Result: 12,8 mg/L

Product/substance: Isopentane
 Species: Fish
 Duration: 96 hours
 Test: LL50
 Result: 34,05 mg/L

12.2. Persistence and degradability

Based on available data, the classification criteria are not met.

12.3. Bioaccumulative potential

Product/substance: Propan-2-ol
 Conclusion: Bioaccumulation is not expected

Product/substance: Propan-2-ol
 Conclusion: Readily biodegradable

Product/substance: Propan-2-ol
 LogKow: 0.3
 Conclusion: -

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 3 - Flammable

HP 4 - Irritant (skin irritation and eye damage)

Dispose of contents/container to an approved waste disposal plant.

Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code

Not applicable.

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

14.1 ADR	14.2 UN / ID UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
	UN1950 AEROSOLS	Transport hazard class: 2 Label: 2.1 Classification code: 5F 	-	No	Limited quantities: 1 L Tunnel restriction code: (D) See below for additional information.

14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
IMDG	UN1950 AEROSOLS	Transport hazard class: 2 Label: 2.1 Classification code: 5F 	-	No	Limited quantities: 1 L EmS: F-D S-U See below for additional information.
IATA	UN1950 AEROSOLS	Transport hazard class: 2 Label: 2.1 Classification code: 5F 	-	No	See below for additional information.

* Packing group

** Environmental hazards

Additional information

ADR / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Restrictions for application

People under the age of 18 shall not be exposed to this product.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

P3a - FLAMMABLE AEROSOLS, Qualifying quantity (lower-tier): 150 tonnes (net) / (upper-tier): 500 tonnes (net)

REACH, Annex XVII

Propan-2-ol is subject to REACH restrictions, REACH annex XVII (entry 40).

Isopentane is subject to REACH restrictions, REACH annex XVII (entry 40).

Labelling of contents according to Detergents Regulation (EC) No 648/2004

15% - 30%

· Aliphatic hydrocarbons

Additional information

Not applicable.

Sources

Government Decree 603/2015 on factors posing a risk to reproductive health at work and risk prevention.

Law for compliance of aerosols 13.11.2020/794

Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents.

Government Decree 686/2015 amending the Government Decree on Safety Requirements for the Industrial Handling and Storage of Dangerous Chemicals.

Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

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

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

EUH066, Repeated exposure may cause skin dryness or cracking.
H224, Extremely flammable liquid and vapour.
H225, Highly flammable liquid and vapour.
H304, May be fatal if swallowed and enters airways.
H319, Causes serious eye irritation.
H336, May cause drowsiness or dizziness.
H411, Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
GWP = Global warming potential
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP). The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP). The classification of the mixture in regard to physical hazards has been based on the flammability classification procedure given by Regulation (EC) No. 1272/2008 (CLP).

The safety data sheet is validated by

Taerosol Oy

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a

triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: FI-en