

SECTION 1: Identification

1.1. Product identifiers

Product Code	: Kumi1F12
Substance name	: 4-(Fluoromethyl)-1,3-dioxolan-2-one
Synonym	: Monofluoropropylene carbonate, Monofluoromethyl ethylene carbonate
Trademark	: Fluora
CAS No	: 127213-73-4
Formula	: C ₄ H ₅ FO ₃
Reach No.	: Exempted from registration

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

Identified Uses	: Laboratory chemicals Manufacture of substances Scientific research and development
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1.3. Details of the supplier of the safety data sheet

Kumidas SA
Avenue Louise 279,1050,Brussels, Belgium
T: +32(0) 2 699 82 36 F: +32(0) 2 699 82 36 40
E: info@kumidas.com W: www.kumidas.com

1.4. Emergency telephone number

Emergency Phone# : +32(0)484 58 71 75

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008[EC-GHS/CLP]


Skin irritation (Category 2), H315
Eye irritation (Category 2), H319
Specific target organ toxicity – single exposure (Category 3), H335

Classification according to EU Directives 67/548/EEC or 1999/45/EC


Irritating to eyes and skin.

2.2. Label elements

Labeling according to Regulation (EC) No 1272/2008

Hazard pictogram(s)	: 
Signal word	: Warning
Hazard statement(s)	: H315 – Causes skin irritation H319 – Causes serious eye irritation
Precautionary statement(s)	: P280 – Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 – If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statement(s)	: None

According to European Directive 67/548/EEC as amended.

Hazard symbols(s)	: 
R-phrases(s)	: R36/38 – Irritating to eyes and skin.
S-phrases(s)	: S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice..

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.

4-(Fluoromethyl)-1,3-dioxolan-2-one

Safety Data Sheet

According to Regulation (EC) No. 1907/2006

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent
Formula : C₄H₅FO₃
Molecular weight : 120.08 g/mol

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Product identifier	Concentration	Classification
4-(Fluoromethyl)-1,3-dioxolan-2-one (Main constituent)	(CAS No.) 127213-73-4	≤ 100%	Skin Irrit. 2, H315 Eye Irrit. 2A, H319

Full text of H-statements: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general advice : In case of accident or if you feel unwell, seek medical advice immediately (show this SDS to the doctor in attendance). Move the affected personnel away from the contaminated area.

First-aid measures if inhaled : Move person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. Consult a physician.

First-aid measures in case of skin contact : Wash off with soap and plenty of water. Consult a physician.

First-aid measures in case of eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a physician.

First-aid measures if swallowed : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth out with water. Consult a physician.

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

Symptoms/injuries : The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen fluoride.

5.3. Advice for firefighters

Firefighting instructions : In case of fire: Evacuate area.

Protection during firefighting : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters drains or public waters.

6.3. Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

4-(Fluoromethyl)-1,3-dioxolan-2-one

Safety Data Sheet

According to Regulation (EC) No. 1907/2006

6.4. Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

For precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Moisture sensitive.

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Contains no substances with occupational exposure limit value.

8.2. Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body protection

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Don't let product enter drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	: Liquid
Color	: Colorless
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Initial boiling point and boiling range	: 65°C
Flash point	: No data available
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available

4-(Fluoromethyl)-1,3-dioxolan-2-one

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Molecular Weight	: 120.08 g/mol
solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other safety information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

The product is stable at normal handling and recommended storage conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen fluoride.

Other decomposition products - No data available.

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: No data available
Skin corrosion/irritation	: No data available
Serious eye damage/irritation	: No data available
Respiratory or skin sensitization	: No data available
Germ cell mutagenicity	: No data available
Carcinogenicity	: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity	: No data available
Specific target organ toxicity(single exposure)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: No data available
Aspiration hazard	: No data available
Additional Information	RETCS: Not available.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

