

SAFETY DATA SHEET
FORMAL ACETIC ALCOHOL FIXATIVE

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Compilation date: 01/02/2019

Revision No: 1

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

1.1. Product identifier

Product name: FORMAL ACETIC ALCOHOL FIXATIVE

Product code: RRF7000

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

Use of substance / mixture: PC21: Laboratory chemicals.

1.3. Details of the supplier of the safety data sheet

Company name: Atom Scientific Ltd

2b East Tame Business Park

Hyde

Manchester

SK14 4GX

Tel: 0161 366 5123

Fax: 01704 337167

Email: technical@atomscientific.com

1.4. Emergency telephone number

Emergency tel: 07833453806

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Carc. 2: H351; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1: H317

Classification under CHIP: -: R10; Xn: R20/21/22; Xi: R36/38; Xn: R40; Sens.: R43

Most important adverse effects: Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Suspected of causing cancer.

2.2. Label elements

Label elements under CLP:

Hazard statements: H226: Flammable liquid and vapour.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H351: Suspected of causing cancer.

Signal words: Warning

Hazard pictograms: GHS02: Flame

GHS07: Exclamation mark

GHS08: Health hazard

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Precautionary statements: P280: Wear protective gloves/protective clothing/eye protection/face protection.
P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+313: IF exposed or concerned: Get medical advice/attention.
P321: Specific treatment (see instructions on this label).
P370+378: In case of fire: Use suitable media for extinction.

2.3. Other hazards

Other hazards: In use, may form flammable / explosive vapour-air mixture.

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

ETHANOL

EINECS	CAS	CHIP Classification	CLP Classification	Percent
200-578-6	64-17-5	Substance with a Community workplace exposure limit.	Flam. Liq. 2: H225	70-90%

ACETIC ACID

200-580-7	64-19-7	-	Flam. Liq. 3: H226; Skin Corr. 1A: H314	1-10%
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FORMALDEHYDE

200-001-8	50-00-0	-	Carc. 2: H351; Acute Tox. 3: H331; Acute Tox. 3: H311; Acute Tox. 3: H301; Skin Corr. 1B: H314; Skin Sens. 1: H317	1-10%
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METHANOL

200-659-6	67-56-1	-	Flam. Liq. 2: H225; Acute Tox. 3: H331; Acute Tox. 3: H311; Acute Tox. 3: H301; STOT SE 1: H370	1-10%
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Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor.

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Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

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

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment: Not applicable.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Alcohol or polymer foam. Carbon dioxide. Dry chemical powder. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Flammable. In combustion emits toxic fumes. Forms explosive air-vapour mixture.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid. Eliminate all sources of ignition.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Do not use equipment in clean-up procedure which may produce sparks.

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6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.
Do not handle in a confined space. Avoid the formation or spread of mists in the air.
Smoking is forbidden. Use non-sparking tools.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed. Keep away from sources of ignition. Prevent the build up of electrostatic charge in the immediate area.
Ensure lighting and electrical equipment are not a source of ignition.

Suitable packaging: Not applicable.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

ETHANOL

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	1920 mg/m ³	-	-	-

FORMALDEHYDE...100%

UK	2.5 mg/m ³	2.5 mg/m ³	-	-
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METHANOL

UK	266 mg/m ³	333 mg/m ³	-	-
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8.1. DNEL/PNEC Values

Hazardous ingredients:

METHANOL

Type	Exposure	Value	Population	Effect
DNEL	Dermal	40 mg/kg	Workers	Systemic
DNEL	Dermal	8 mg/kg	Consumers	Systemic

[cont...]

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DNEL	Ingestion	8 mg/kg	Consumers	Systemic
DNEL	Dermal	40 mg/kg	Workers	Systemic
DNEL	Dermal	8 mg/kg	Consumers	Systemic
DNEL	Ingestion	8 mg/kg	Consumers	Systemic
DNEL	Inhalation	260 mg/kg	Workers	Systemic
DNEL	Inhalation	260 mg/kg	Workers	Local
PNEC	Inhalation	260 mg/kg	Workers	Systemic
DNEL	Inhalation	260 mg/kg	Workers	Local
DNEL	Inhalation	50 mg/kg	Consumers	Systemic
DNEL	Inhalation	50 mg/kg	Consumers	Local
DNEL	Inhalation	50 mg/kg	Consumers	Systemic
DNEL	Inhalation	50 mg/kg	Consumers	Local
PNEC	Soil	23.5 mg/kg	-	-
PNEC	Marine water	15.4 mg/l	-	-
PNEC	Fresh water	154 mg/l	-	-
PNEC	Fresh water sediments	570.4 mg/kg	-	-
PNEC	Onsite sewage treatment plant	100 mg/kg	-	-

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Impermeable gloves.

Eye protection: Safety glasses. Ensure eye bath is to hand.

Skin protection: Impermeable protective clothing.

Environmental: Do not let product enter drains.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Flash point°C: 23

9.2. Other information

Other information: Not applicable.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions. Stable at room temperature.

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10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.
Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat. Hot surfaces. Sources of ignition. Flames.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

ETHANOL

IVN	RAT	LD50	1440	mg/kg
ORL	MUS	LD50	3450	mg/kg
ORL	RAT	LD50	7060	mg/kg

ACETIC ACID...100%

IVN	MUS	LD50	525	mg/kg
ORL	RAT	LD50	3310	mg/kg

FORMALDEHYDE...100%

ORL	MUS	LD50	42	mg/kg
ORL	RAT	LD50	100	mg/kg
SCU	RAT	LD50	420	mg/kg

METHANOL

IVN	RAT	LD50	2131	mg/kg
ORL	MUS	LD50	7300	mg/kg
ORL	RAT	LD50	5628	mg/kg

Relevant effects for mixture:

Effect	Route	Basis
Acute toxicity (harmful)	INH DRM ING	Hazardous: calculated

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Irritation	OPT DRM	Hazardous: calculated
Sensitisation	DRM	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Other information: Not applicable.

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

METHANOL

ALGAE	96H ErC50	22000	mg/l
DAPHNIA	48H EC50	>10000	mg/l
FISH	96H LC50	15400	mg/l

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Recovery operations: Not applicable.

Disposal of packaging: Dispose of as unused product.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

[cont...]

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Section 14: Transport information

14.1. UN number

UN number: UN1170

14.2. UN proper shipping name

Shipping name: ETHANOL (ETHYL ALCOHOL)

14.3. Transport hazard class(es)

Transport class: 3

14.4. Packing group

Packing group: II

14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: D/E

Transport category: 2

Section 15: Regulatory information

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

Specific regulations: This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and 3: H225: Highly flammable liquid and vapour.

H226: Flammable liquid and vapour.

H301: Toxic if swallowed.

H311: Toxic in contact with skin.

H314: Causes severe skin burns and eye damage.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

[cont...]

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H319: Causes serious eye irritation.

H331: Toxic if inhaled.

H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H370: Causes damage to organs <or state all organs affected, if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

R10: Flammable.

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

R36/38: Irritating to eyes and skin.

R40: Limited evidence of a carcinogenic effect.

R43: May cause sensitisation by skin contact.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.