

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

1.1. Product Identifier

Product name: Fast Cast FC 226-A
Product code: FC 226-A

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

Use of substance: Tooling system

1.3. Details of supplier of the safety data sheet

Company Name: Ru-bix Tooling Board
Venus Court
Hardwick Industrial Estate
King's Lynn
Norfolk
PE30 4HY
United Kingdom
Telephone: 01485 313 020
Email: ash.colvin@ru-bix.com

1.4. Emergency telephone number

Emergency telephone: 01485 313 020 (office hours only)

Section 2: Hazards identification

2.1. Classification of a substance or mixture

Classification under CLP: EC1272/2008
Health hazards: Eye Irritation, Category 2 – H319 Causes serious eye irritation.

2.2. Label elements

Hazard statements: H319 Causes serious eye irritation.

Hazard pictograms:



Signal words: Warning
Precautionary statements: P264 Wash skin thoroughly after handling.
P280 Wear 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.
P337 + P313 If eye irritation persists: Get medical advice/attention.

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2.3. Other hazards

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

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

CHEMICAL NAME	CAS No. EC No. Registration Number	Classification Regulation (EC) No. 1272/2008	Concentration (%)
ALKYL AMINO POLYOXYALKYLENOL	25214-63-5 500-035-6	H319: Eye Irrit.2	>=25 - <40
PROPYLENE CARBONATE	108-32-7 203-572-1 01-2119537232-48-XXXX	H319: Eye Irrit.2	>=5 - <10

Substances with a workplace exposure limit:

HYDROCARBONS, C12-C15, N-KANE, ISOALKANE, <2% AROMATIC	64742-47-8 920-107-4 265-149-8 01-2119453414-43-XXXX	H304: Asp. Tox.1	>=5 - <10
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For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4: First Aid measures

4.1. Description of First Aid measures

General Information: Move out of dangerous area.

Get medical attention immediately.

Show this Safety Data Sheet to the medical personnel.

Skin contact: It is important to remove contaminated clothing and any substance from the skin immediately.

In the event of any sensitisation symptoms developing, ensure further exposure is avoided.

Remove contamination with soap and plenty of water or recognised skin cleansing agent.

Get medical attention if symptoms are severe or persist after washing.

Eye Contact: Rinse immediately with plenty of water.

Remove any contact lenses and open eyelids wide apart.

Continue to rinse for at least 10 minutes.

Get medical attention if symptoms are severe or persist after washing.

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Ingestion: Rinse mouth thoroughly with water.
Remove any dentures.
Do not give milk or alcoholic beverages.
Do not induce vomiting unless under the direction of medical personnel.
If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.
Never give anything by mouth to an unconscious person.
Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Place unconscious person on their side in the recovery position and ensure breathing can take place.
Maintain an open airway.
Loosen tight clothing such as collar, tie or belt.

Inhalation: Remove affected person from source of contamination.
Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Maintain an open airway.
Loosen tight clothing such as collar, tie or belt.
Place unconscious person on their side in the recovery position and ensure breathing can take place.
In the event of any sensitisation symptoms developing, ensure further exposure is avoided.
Get medical attention after significant exposure.

Protection of first aiders: First aid personnel should wear appropriate protective equipment during any rescue.
If it is suspected that volatile contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus.
Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves.
It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.

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

General information: See Section 11 for additional information on health hazards.
The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Eye Contact: Excessive lachrymation,
Causes serious eye Irritation.

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

Notes for the doctor: Treat symptomatically.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media: Use fire-extinguishing media that are appropriate to local circumstances and the surrounding environment.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion Products: No hazardous combustion products are known.

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5.3. Advice for fire-fighters

Advice for fire-fighters: Avoid breathing fire gases or vapours.
Evacuate area.
Keep upwind to avoid inhalation of gases, vapours, fumes and smoke.
Ventilate closed spaces before entering them.
Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk.
Cool containers exposed to flames with water until well after the fire is out.
If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak.
Control run-off water by containing and keeping it out of sewers and watercourses.
If risk of water pollution occurs, notify appropriate authorities.

Protective Equipment for fire-fighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: No action shall be taken without appropriate training or involving any personal risk.
Keep unnecessary and unprotected personnel away from the spillage.
Wear protective clothing as described in Section 8 of this safety data sheet.
Follow precautions for safe handling described in this safety data sheet.
Wash thoroughly after dealing with a spillage.
Ensure procedures and training for emergency decontamination and disposal are in place.
Do not touch or walk into spilled material.
Use suitable respiratory protection if ventilation is inadequate.
Avoid contact with skin and eyes.

6.2. Environmental precautions

Environmental precautions: Avoid discharge into drains or watercourses or onto the ground.
Avoid discharge to the aquatic environment.
Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Wear protective clothing as described in Section 8 of this safety data sheet.
Clear up spills immediately and dispose of waste safely.
Provide adequate ventilation.
Approach the spillage from upwind.
Small Spillages: If the product is soluble in water, dilute the spillage with water and mop it up.
Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container.
Large Spillages: If leakage cannot be stopped, evacuate area.
Flush spilled material into an effluent treatment plant or proceed as follows.
Contain and absorb spillage with sand, earth or other non-combustible material.

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Place waste in labelled, sealed containers.

Clean contaminated objects and areas thoroughly, observing environmental regulations.

The contaminated absorbent may pose the same hazard as the spilled material.

Flush contaminated area with plenty of water.

Wash thoroughly after dealing with a spillage.

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

6.4. Reference to the other sections

Reference to the other sections: For personal protection, see Section 8.

See Section 11 for additional information on health hazards.

See Section 12 for additional information on ecological hazards.

See Section 13 for additional information on waste disposal.

Section 7: Handling and storage

7.1. Precaution for safe handling

Handling requirements: Read and follow manufacturer's recommendations.

Wear protective clothing as described in Section 8 of this safety data sheet.

Keep away from food, drink and animal feeding stuffs.

Handle all packages and containers carefully to minimise spills.

Keep container tightly sealed when not in use.

Do not handle until all safety precautions have been read and understood.

Do not handle broken packages without protective equipment.

Advice on general occupational hygiene: Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse.

Do not eat, drink or smoke when using this product.

Wash at the end of each work shift and before eating, smoking and using the toilet.

Change work clothing daily before leaving workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in accordance with local regulations.

Keep only in the original container.

Keep container tightly closed, in a cool, well ventilated place.

Keep containers upright.

Protect containers from damage.

Bund storage facilities to prevent soil and water pollution in the event of spillage.

The storage area floor should be leak-tight, jointless and not absorbent.

Storage class (TRGS 510): 10, Combustible liquids

Other data: No decomposition if stored and applied as directed.

7.3. Specific end use(s)

Specific end use(s): No data available.

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Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits:

CHEMICAL NAME	CAS No.	OEL
HYDROCARBONS, C12-C15, N-ALKANE, ISOALKANE, <2% AROMATIC	64742-47-8	600mg/m ³

8.2. Exposure controls

- Protective equipment:** Respirator, gloves, safety glasses/goggles, safety shoes
- Engineering measures:** Provide adequate ventilation.
Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure.
Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures.
Ensure control measures are regularly inspected and maintained.
Ensure operatives are trained to minimise exposure.
- Respiratory protection:** Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible.
Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked.
Check that the respirator fits tightly, and the filter is changed regularly.
Gas and combination filter cartridges should comply with European Standard EN14387.
Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136.
Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.
- Hand protection:** Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.
The most suitable glove should be chosen in consultation with the glove supplier/manufacture, who can provide information about the breakthrough time of the glove material.
To protect hands from chemicals, gloves should comply with European Standard EN374.
Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected.
Frequent changes are recommended.
- Eye protection:** Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.
Personal protective equipment for eye and face protection should comply with European Standard EN166.
Wear tight-fitting, chemical splash goggles or face shield.
- Skin protection:** Appropriate footwear and additional protective clothing complying with EN ISO 20345 should be worn.
Rubber aprons and protective boots are additionally recommended for mixing and stirring work.

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Hygiene measures: Provide eyewash station.
Contaminated work clothing should not be allowed out of the workplace.
Wash contaminated clothing before reuse.
Clean equipment and the work area every day.
Good personal hygiene procedures should be implemented.
Wash at the end of each work shift and before eating, smoking and using the toilet.
When using do not eat, drink or smoke.
Preventive industrial medical examinations should be carried out.
Warn cleaning personnel of any hazardous properties of the product.

Environmental exposure controls: Keep container tightly sealed when not in use.
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.
If the product contaminates rivers and lakes or drains inform respective authorities.

Section 9: Physical and chemical properties

9.1. Information on basic and chemical properties

State: Liquid
Colour: Beige
Odour: Characteristic
Odour threshold: No data available
Flash point: >101°C
Autoignition temperature: No data available
Decomposition temperature: No data available
Lower explosion limit (Vol-%): No data available
Upper explosion limit (Vol-%): No data available
Flammability: No data available
Explosive properties: No data available
Oxidizing properties: No data available
pH: Not applicable
Melting point/range/Freezing point: No data available
Boiling point/boiling range: No data available
Vapour pressure: 2.92 hPa
Density: ca.1g/cm³ at 20°C
Water solubility: insoluble
Partition coefficient: n-octanol/water: No data available
Viscosity, dynamic: ca.110mPa.s at 25°C
Viscosity, kinematic: > 20.5 mm²/s at 40 °C
Relative vapour density: No data available
Evaporation rate: No data available

9.2. Other Information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: There are no known reactivity hazards associated with this product.

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10.2. Chemical stability

Chemical stability: The product is chemically stable.

10.3. Possibility of hazardous reactions

Hazardous reactions: Stable under recommended storage conditions.

10.4. Conditions to avoid

Conditions to avoid: There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid: No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

Hazardous decomposition products: Does not decompose when used and stored as recommended.

Section 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity: Not classified based on available information.

Alkyl amino polyoxyalkylenol Acute toxicity – oral:	oral LD50 (Rat)	>2000 mg/kg
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Skin corrosion/irritation: Not classified based on available information.

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory sensitization: Not classified based on available information.

Skin sensitization: Not classified based on available information.

Germ cell mutagenicity: Not classified based on available information.

Carcinogenicity: Not classified based on available information.

Reproductive toxicity: Not classified based on available information.

STOT - single exposure: Not classified based on available information.

STOT - repeated exposure: Not classified based on available information.

Aspiration hazard: Not classified based on available information.

Section 12: Ecological information

12.1. Toxicity

Components:

Alkyl amino polyoxyalkylenol:	Toxicity to fish	LD50	>100 mg/l, 96 h, Fish
	Toxicity to daphnia and other aquatic invertebrates	EC50	>100 mg/l, 48 h, Daphnia (water flea)
	Toxicity to algae	EC50	>100mg/l, 72 h, Desmodesmus subspicatus (green algae)

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12.2. Persistence and degradability

Persistence and degradability: The degradability of the product is not known.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available on bioaccumulation.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

Other adverse effects: Additional ecological information for this product: No data available

Section 13: Disposal considerations

13.1. Waste treatment methods

General information: The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal operations: Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

Section 14: Transport information

14.1. UN number

General: Not regulated as a dangerous good

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14.2. UN proper shipping name

General: Not regulated as a dangerous good

14.3. Transport hazard class(es)

General: Not regulated as a dangerous good

14.4. Packing group

General: Not regulated as a dangerous good

14.5. Environmental hazards

General: Not regulated as a dangerous good

14.6. Special precautions for user

General: No data available

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

General: Not applicable

Section 15: Regulatory information

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

Prohibition/Restriction:		
	REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII):	Banned and/or restricted (low boiling point modified naphtha)
	REACH - Candidate List of Substances of Very High Concern for Authorization (Article 59).	None of the components are listed (\Rightarrow 0.1 %).
	REACH - List of substances subject to authorization (Annex XIV)	Not applicable
VOC-CH (VOCV):	0.38 % no VOC duties	
VOC-EU (solvent):	15.28 %	

15.2. Chemical safety assessment

Chemical safety assessment: No Chemical Safety Assessment has been carried out.

Section 16: Other information

16.1. Other information

Classification procedures according to Regulation (EC) 1272/2008:

Training advice: Read and follow manufacturer's recommendations. Only trained personnel should use this material.

Hazard statements in full: H304 May be fatal if swallowed and enters airways
H319 Causes serious eye irritation.

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Other information:	Asp. Tox.	Aspiration hazard
	Eye Irrit.	Eye irritation
	Skin Sens.	Skin sensitization
	ADR	Accord européen relatif au transport international des marchandises Dangereuses par Route
	CAS	Chemical Abstracts Service
	DNEL	Derived no-effect level
	EC50	Half maximal effective concentration
	GHS	Globally Harmonized System
	IATA	International Air Transport Association
	IMDG	International Maritime Code for Dangerous Goods
	LD50	Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)
	LC50	Median lethal concentration (concentrations of the chemical in air that kills 50% of the test animals during the observation period)
	MARPOL	International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978
	OEL	Occupational Exposure Limit
	PBT	Persistent, bioaccumulative and toxic
	PNEC	Predicted no effect concentration
	REACH	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency
	SVHC	Substances of Very High Concern
	vPvB	Very persistent and very bioaccumulative

Legal disclaimer: Recommendations and technical information are provided in good faith, based on current knowledge and experience. However, due to variations in storage conditions, storage period, substrates and site conditions, no warranty in respect of fitness for purpose can be inferred from this information. The user must test the product's suitability for the intended application. Ru-bix Tooling Board is happy to provide free-issue samples for this purpose. All orders are accepted subject to our current terms of sale, a copy of which can be obtained from the Ru-bix office.