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## FC02A Solvente

Residual chlorine indicator solution

SDS Number:JM25006120

Product Number: 50-2500-61

### Section 1: PRODUCT AND COMPANY IDENTIFICATION

#### 1.1 Product identification

Product Name: Residual chlorine indicator solution  
Product Model: FC02A  
Product Number: 50-2500-61  
Brand: Jensprima

#### 1.2 Details of the MSDS provider

Manufacturer or supplier name: Jensprima Instruments limited  
Kensington High St Kensington  
W8 7DS London  
United Kingdom  
Web: [www.jensprima.com](http://www.jensprima.com)  
Phone: +44-203-4681833  
Email: [info@jensprima.com](mailto:info@jensprima.com)

Jensprima Instruments (Shanghai) Co.Ltd  
2/F, Block B, No.1, No.618 Chengliu Middle Road, Jiading  
District, Shanghai, China  
Postal code: 201801  
Website: [www.jensprima.com.cn](http://www.jensprima.com.cn)  
Tel: +86-21-69108153  
E-mail: [chinainfo@jensprima.com](mailto:chinainfo@jensprima.com)

#### 1.3 Emergency counselling telephone number - China

Emergency contact no.: 400-1588-710

#### 1.4 Recommended and restricted uses of the substance or mixture

Relevant uses identified: Laboratory reagents, determination of free chlorine.  
It is recommended not to use it: Do not use for medicinal, household or other purposes

# SAFETY DATA SHEET

Prepared in accordance with GB/T 16483, GB/T 17519

## Section 2: HAZARDS IDENTIFICATION

### 2.1 GHS Hazard Category

hazard class	form	hazardous condition
metal corrosivity	1	H290
Acute toxicity, oral	5	H303
Skin corrosion/irritation	1	H314
Severe eye damage/eye irritation	1	H314

Full text of abbreviations: see section 16

### 2.2 GHS labelling elements, including precautionary statements

#### Pictogram



#### Signal word

distress

#### Hazard statement

H290

May corrode metals

H303

May be harmful if swallowed

H314

Causes severe skin burns and eye damage

#### Precautionary note

P260

Do not breathe dust/fume/gas/mist/vapours/spray

P280

Wear protective gloves/protective clothing/eye protection/face protection

P301 + P330 + P331

IF SWALLOWED: Gargle. Do not induce vomiting

P303 + P361 + P353

IF ON SKIN (or hair): Remove contaminated clothing immediately. Wash skin with water/shower

P304 + P340

IF INHALED: Remove victim to fresh air and maintain a resting position comfortable for breathing.

P305 + P351 + P338

IF IN EYES: Rinse carefully with water for a few minutes. If wearing contact lenses and can easily remove them, remove contact lenses. Continue rinsing

P234

Can only be stored in the original container

P310

Call a POISON CENTRE or doctor immediately

P363

Wash contaminated clothing before reuse

P390

Absorbs spills and prevents material damage

P405

Storage area must be locked

#### Waste disposal

P501

Dispose of contents/containers at an approved waste treatment plant.

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**2.3 Physical danger** Not applicable.

**2.4 Health hazard**

Acute health effects If the substance is swallowed in large quantities, call a doctor immediately. If symptoms persist, call a doctor. Contact may cause burns to skin and eyes. Risk of serious eye damage. Impaired vision.

Chronic effects Causes eye irritation.

**2.5 Environmental hazard** Not applicable.

This substance is a water pollutant. Keep away from drains, sewers, ditches and watercourses. Reduce water use to prevent environmental pollution. Harms the ozone layer.

**2.6 Other hazards - Not applicable**

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances/mixtures Not applicable.

**3.1 materialistic**

chemical property Aqueous solutions of organic acids.

Composition	Categorisation	%
Toluene-4-sulfonic acid monohydrate Molecular Formula : $C_7H_8O_3S$ Molecular Weight : 172.2 g/mol CAS No. : 6192-52-5	Metal corrosion Category 1 H290. Acute toxicity, oral Category 5 H303. Skin corrosion/eye damage Category 1 H314.	< 10%

## Section 4: FIRST AID MEASURES

**4.1 Description of necessary first aid measures**

**General**

**Recommendations**

First aiders need to protect themselves. Show this MSDS to the doctor arriving at the scene.

**Inhalation**

AFTER INHALATION: Remove casualty to fresh air. Seek immediate medical attention.

**Dermal contact**

In case of skin contact: Remove/take off all contaminated clothing immediately. Wash skin with water/shower. Call a doctor immediately.

**Eye contact**

In case of eye contact: Wash off with plenty of water. Contact an ophthalmologist immediately. Remove contact lenses.

## Ingestion

Rinse the mouth with water and then drink plenty of water. An unconscious victim must not be given anything by mouth. Do not induce vomiting. Seek immediate medical attention/consultation

### 4.2 Most important symptoms and health effects

symptomatic                      Burning sensation.

### 4.3 Instructions and directions for timely medical treatment and special treatment required

Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see Section 8). Ensure that medical personnel are aware of the substances involved and take precautions to protect themselves and prevent the spread of contamination. Avoid direct contact with skin. Perform mouth-to-mouth artificial respiration using a barrier.

### 4.4 Special tips for doctors

This product is corrosive material. Use of gastric lavage or vomiting is contraindicated. Gastric or oesophageal perforation may occur. No chemical antidote will be given.

## Section 5: FIRE FIGHTING MEASURES

### 5.1 Extinguishing media

#### Fire extinguishing methods and agents

Adopt fire-fighting measures appropriate to the situation and surroundings.

#### Unsuitable extinguishing agents

No restrictions on extinguishing agents are specified for this substance/mixture.

### 5.2 Special hazards arising from the substance or mixture

#### Special hazards

This product can cause burns to eyes, skin and mucous membranes. Thermal decomposition can result in the release of irritating gases and vapours.

#### flammable

Classified as combustible under GHS guidelines.

#### fig. shocking

Combustion may produce irritating and toxic gases.

#### Hazardous combustibles

Not classified according to GHS standards.

Carbon oxides, sulphur oxides.

### 5.3 Fire Fighting Precautions and Protective Measures

Firefighters should wear self-contained positive pressure breathing apparatus and full firefighting gear. Use personal protective equipment.

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## Section 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Personnel protection measures	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use the required personal protective equipment. Caution! Corrosive materials. Evacuate personnel to a safe area. Keep personnel away from spill/leakage area or upwind!
Recommendations for emergency responders	Use the required PPE.

### 6.2 Environmental protection measures

Prevents product from going down the drain.

### 6.3 Sheltering of spilled chemicals, clean-up methods and disposal materials used

Methods of accommodation	Prevent further leaks or spills, where safe and practicable.
Removal method	Absorb with inert adsorbent material (e.g., sand, silica gel, acid binder, general purpose binder, sawdust). Clean up mechanically and place in appropriate containers for disposal.
Secondary disaster prevention measures	Thoroughly clean contaminated objects and areas in compliance with environmental regulations.

### 6.4 Reference to other sections

Please refer to sections 8 and 13.

## Section 7: HANDLING AND STORAGE

### 7.1 Precautions for safe operation

Operate in accordance with good industrial hygiene and safety practices. Avoid contact with skin, eyes or clothing. Wear appropriate respiratory equipment if ventilation is poor. Handle this product only in a closed system or in an environment provided with suitable exhaust ventilation. Do not eat, drink or smoke while using this product. Remove contaminated clothing and wash before reuse.

### 7.2 Conditions of safe storage, including any incompatibilities

Storage conditions	Prohibit the use of metal containers, keep containers tightly closed and store in a dry, cool and well-ventilated place. Protect from moisture. Store under lock and key. Keep out of reach of children. Store away from other materials.
Incompatible materials	Oxidising agents. Acids. Alkalis.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 control parameter

Does not contain substances with occupational exposure limits.

### 8.2 exposure control

#### Appropriate technical controls

Change contaminated clothing immediately.

Use skin protection lotion. Wash hands and face after using this substance.

#### individual protective equipment

Protect your eyes with safety glasses that have been tested and approved according to official standards.

#### Skin protection

Wear appropriate protective clothing.

Long-sleeved shirt. Chemical resistant apron.

#### Respiratory protection

Required during dust generation . It is recommended to use respiratory protection that complies with the relevant respiratory protection.

#### Control of environmental exposure

Do not allow the product to go down the drain.

## Section 9: PHYSICAL AND CHEMICAL PROPERTION

### 9.1 Information on basic physical and chemical properties

a) Appearance and shape	fluids
b) Colour	colourless
c) Odours	stimulate
d) pH value	2
e) Melting point/solidification point	-3 °C / 26.6 °F
f) Initial boiling point and boiling range	~ 101 °C / 213.8 °
g) Flash point	No data available
h) Evaporation rate	0.8 (water = 1)
i) Flammable	No data available
j) High/low flammability or explosivity limits	No data available
k) Vapour pressure	17.327 mm Hg / 2.31 kPa at 20 °C
l) Vapour density	0.62
m) Density	No data available
n) Spontaneous combustion temperature	No data available

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- o) Decomposition temperature No data available
- p) Stickiness No data available
- q) Explosive properties No data available
- r) oxidation No data available
- s) solubility Soluble in water, acid, alkaline solution, ethanol, ether

## 9.2 Other security information

Classified as a corrosive metal according to GHS standards.

## Section 10: STABILITY AND REACTIVITY

### 10.1 stability

This product is chemically stable under standard ambient conditions (room temperature).

### 10.2 hazardous reaction

Does not occur during normal processing. Corrosive to metals.

### 10.3 Conditions to be avoided

Prolonged exposure to air or moisture.

### 10.4 prohibition on disposable material

Oxidising agents. Acids. Alkalis

### 10.5 Hazardous decomposition products

Thermal decomposition results in the release of irritating, toxic gases and vapours.

## Section 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Mixtures** No information available.

#### Acute toxicity

Based on available data, it does not meet the classification criteria.

Composition	Endpoint category	Dosages	Contact time	Toxicological effect
Toluene-4-sulfonic acid monohydrate (<5%) CAS#:6192-52-5	mice	2570mg/Kg	No data available	No data available

0.01% of the mixture consists of unknown toxic components.

## Possible routes of exposure

Eating in:

Causes burns. Ingestion can cause burns to the upper gastrointestinal tract and respiratory tract. May cause severe burns to mouth and stomach with vomiting and diarrhoea with black blood. Blood pressure may be lowered. Pale brown or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters the airways

Inhale:

Corrosive by inhalation. Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness and weakness for several hours. Pulmonary oedema may occur with tightness in the chest, shortness of breath, skin bruising, drop in blood pressure and increased heart rate. Inhalation of corrosive substances can cause toxic pulmonary oedema. Pulmonary oedema can be fatal.

Skin contact:

Corrosive. Causes severe burns. Avoid contact with skin and clothing.

Eye contact:

Causes burns. Corrodes eyes and may cause serious injury including blindness. Causes serious eye damage. May cause irreversible damage to eyes.

Symptomatic

Reddening. Burning. May cause blindness. Coughing and/or

Ingredient sensitisation data

No relevant information is available.

STOT - Single Touch

Based on available data, it does not meet the classification criteria.

STOT - repeated exposure

Based on available data, it does not meet the classification criteria.

Component-specific target organ toxicity single exposure data

No relevant information is available.

Component-specific target organ toxicity repeat exposure data

No relevant information is available.

Carcinogenicity

Based on available data, it does not meet the classification criteria.

Mutagenicity

Based on available data, it does not meet the classification criteria.

Reproductive toxicity

Based on available data, it does not meet the classification criteria.



## 11.2 Additional notes

Burning sensation:, coughing, wheezing, laryngitis, shortness of breath, cramps, inflammation, sore throat, spasms, inflammation, bronchitis, pneumonia, pulmonary oedema, The substance is very destructive to mucous membrane tissues and the upper respiratory tract, the eyes and the skin. To the best of our knowledge, the chemical, physical and toxicological properties have not been fully investigated. Other risks cannot be excluded. Handle in accordance with good industrial hygiene and safety practices.

## Section 12: ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity

Based on available data, it does not meet the classification criteria.

Aquatic toxicity unknown	0.01% of the mixture consists of constituents unknown to be hazardous to the aquatic environment.
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### 12.2 Mixtures

Acute aquatic toxicity	No relevant information is available.
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Chronic aquatic toxicity	No relevant information is available.
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### 12.3 Materialistic

Acute aquatic toxicity	No relevant information is available.
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Chronic aquatic toxicity	No relevant information is available.
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### 12.2 Persistence and degradability

No data available.

### 12.3 Bioaccumulation

No data available.

### 12.4 Mobility in soil

No data available.

### 12.6 Other environmentally harmful effects

No data available.

## Section 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste disposal methods

Residues/waste	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental regulations.
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Contaminated packaging	Do not reuse empty containers
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## Section 14: TRANSPORTATION INFORMATION

### 14.1 DOT

UN/ID number	UN2586
Official shipping name	ARYL SULFONIC ACIDS, LIQUID
United Nations	
Classification of Hazards	8
Packaging group	III
special specification	IB3, T4, TP1
instructions	
Emergency Response	UN2586, ARYL SULFONIC ACIDS, LIQUID, 8, III
Guide Number	153

### 14.2 IMDG

UN number or ID number	UN2586
Official shipping name	ARYLSULPHONIC ACIDS, LIQUID
United Nations	
Classification of Hazards	8
Packaging group	III
EmS-No	F-A, S-

### 14.3 IATA

UN number or ID number	UN2586
Official shipping name	Arylsulphonic acids, liquid
United Nations	8
Classification of Hazards	
Packaging category	III
ERG Code	8L
special specification	A80

### 14.4 sino

UN number or ID number	UN2586
Official shipping name	ARYLSULPHONIC ACIDS, LIQUID
United Nations	
Classification of Hazards	8
Packaging group	III
instructions	UN2586, ARYLSULPHONIC ACIDS, LIQUID, 8

### 14.7 Other information

Classified as dangerous goods under transport regulations.

## Section 15: REGULATORY INFORMATION

### 15.1 Regulations/laws specific to the safety, health and environment of the substance or mixture.

Law of the People's Republic of China on Prevention and Control of Occupational Diseases

Catalogue of occupational hazards Not applicable.

Catalogue of occupational diseases Not applicable.

### 15.2 Regulations on the Safe Management of Hazardous Chemicals

Catalogue of hazardous chemicals Not applicable.

GB 18218-2009 Identification of major sources of danger of dangerous chemicals Not applicable.

List of Priority Regulated Hazardous Chemicals Not applicable.

Catalogue of highly toxic substances Not applicable.

Catalogue of Toxic Chemicals Strictly Restricted for Import and Export in China Not applicable.

### 15.3 Environmental Management Approach for New Chemical Substances

Inventory of Existing Chemical Substances in China (IECSC) Conformity.

TSCA Conformity.

DSL/NDSL Conformity.

European Inventory of Existing Commercial Chemical Substances (EINECS) Conformity.

European Inventory of Notified Chemical Substances (ELINCS) Conformity.

Korea Existing Chemical List (KECL) Conformity.

Philippine Inventory of Chemicals and Chemical Substances (PICCS) Conformity.

TCSI Conformity.

AICS Conformity.

### 15.4 International regulations

Montreal Convention on Substances that Deplete the Ozone Layer Not applicable.

Stockholm Convention on Persistent Organic Pollutants Not applicable.

Rotterdam Convention Not applicable.

### 15.5 Other provisions

Please note that waste disposal should also fulfil the requirements of local regulations.

## Section 16: OTHER INFORMATION

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### Other information

The above information is considered correct but is not all-inclusive and is intended to be used as a guide only. The information in this document is based on our current knowledge and applies to this product insofar as the correct safety precautions are concerned. This information does not represent a warranty as to the nature of this product and JENSPRIMA and its affiliates shall not be liable for any damages arising out of the operation of, or contact with, said product.