



Sina Chemical Industries Co. (SCIC)
Public Joint Stock

RWTV Iran
ISO 9001 - 2000



Sina Chemical Industries Co. (Public Joint Stock)





Our Horizon

- To maximize sustainable value and performance for the shareholders, clients, employees and the society.
- To achieve sustainable economic success.
- To achieve sustainable development and profitable growth.

We Care and value

- Environmentally friendly products.
- Clear competitive advantage.
- Clearer strategic focus.
- Reliability and safety.
- Quality and high-speed response.
- Flexibility and innovation.

SCIC (PJS) is located in the gas and oil-rich area, southeast of Iran. The Plant is 15 Kilometers away from the Shiraz Petrochemical Company (www.spc-ir.com), thus Methanol, Urea and Ammonia raw materials are freely available .

Surrounded by 7 hectares of green plantation. Land transport as well as on the way operative railroad facilities to our biggest Bandar Abbas sea port has made a unique opportunity for SCIC to improve and develop her international exportation market.

Overview

Sina Chemical Industries. Co. Plants of FA 37-42 Percent, Hexamine min 99.5 Percent, Paraformaldehyde min 96 Percent Powder, benefits a well managed architectural backbone based on BIP, England and Joseph Meisener ,Germany established in 1983 and put into production in the year 1990.

Current Situation

Thanks god that by now Sina Chem. IND. Co has the ability to design, construct and commission 100 TPD Formalin plants along with silver regeneration technology and other derivatives plants at any place inside or outside Iran.

Production Units

Sina and her affiliated companies produce following chemicals:

- A) Formalin 37– 42 Percent
- B) Hexamine Min. 99.5 Percent
- C) Paraformaldehyde 96 Percent Powder

A) Formalin (CH₂O)

Capacity: 70,000 MTPY

Commercially, formaldehyde is marked chiefly in the form of aqueous solutions containing 37-52 percent by weight dissolved formalin.

Higher concentration of formalin contains sufficient methanol to prevent precipitation of polymer under ordinary conditions of transportation and storage.



UN No.	2209
IMDG Code	8176-1
IMCO Class	8

CAS Number	50-00-0
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EC Number	200-001-8
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A-1) Specification:

Spec.	Result
Appearance	Colorless liquid
Formaldehyde wt%	37 - 42
Methanol * wt%	Min. 3
Acidity wt%	Max. 0.05
PH	2.4 - 4
SPG gr/cm ³	1.09 - 1.12
Iron Content	Nil

* Higher Methanol content can be adjusted upon request. (Max. 8.5 wt%)

A-2) Application:

- Polyacetal
- Amino Resins
- Phenolic Resins
- MDI
- Pentaerythritol
- Synthetic Rubber
- TMP, TME, NPG
- Paraformaldehyde
- Hexamethylenetetramine

A-3) Storage:

If kept at room or at slightly higher temperature in non corrosive tank, it will avoid polymerization and contamination.

A-4) Packaging:

- In 220 Liter net HM-HDPE drums, 4 drums on pallet, 20 pallets = 18.4 MT net in 40 FCL.
- In 24-25 MT net ISO tanks.

B) Hexamine (C₆H₁₂N₄)

Capacity: 4000 MTPY

Hexamine is formed by the reaction of formaldehyde and ammonia, it reacts as formaldehyde in many instances and therefore may be regarded as a special form of formaldehyde from the standpoint of use.



UN No.	1328
IMDG Code	4033
IMCO Class	4.1
Packing Code	5H3

CAS Number 100-97-0

EC Number 202-905-8

Molecular Weight	gr	140.2
Melting Point	°c	270
Density	gr/cm ³	1.33
Bulk density	Kg/ M ³	0.7 - 0.8
Solubility In 20 °c	Water	wt.% 81.3
	Methanol	wt.% 7.25
	Ethanol	wt.% 2.89
	Acetone	wt.% 0.65



Specification:

B-1-1) Hexamine Unstabilized

Spec.	Result
Appearance	White Crystalline Powder
Purity wt. %	Min. 99.5
Ash Content wt. %	Max. 0.03
Humidity wt. %	Max. 0.25
Ammonia wt. %	Max. 0.02
Formaldehyde wt. %	Max. 0.02
Chloride	Nil
Sulfate	Nil
Heavy metals	Nil
PH (10% Aq. soln.)	8 – 9.5
Particle Size μ	80 - 800

B-1-2) Hexamine Stabilized (0.5 – 1.5 Wt% Silica) *

Spec.	Status
Appearance	White Crystalline Powder
Purity wt. %	Min. 98 – 99 %
Ash Content wt. %	Max. 0.53- 1.53
Humidity wt. %	Max. 0.25
Ammonia wt. %	Max. 0.02
Formaldehyde wt. %	Max. 0.02



Chloride	Nil
Sulphate	Nil
Heavy metals	Nil
PH (10% Aq. soln.)	8 – 9.5
Particle Size μ	80 - 800

* Benzoic, Salicylic,....., and their mineral salts can be replaced by request

B-2) Application:

- Hardener in synthetic resins
- Pharmaceuticals
- Agriculture
- Leather and Textile
- Explosives
- Rubber
- Photography
- Organic chemicals
- Paper
- Oil
- Metal Industry

B-3) Storage:

Hexamine is sensitive to humidity, but is not a hygroscopic substance. It may cake at low humidity, excess pressure and temperature. Suitable storage condition is recommended.

B-4) Packaging: (Group III)

- In 25 kg net PP/PE or a 3 layer pressed Polyethylene bag, 40 bags on pallet, 20 Pallets = 20 MT in 20 FCL.

**C) Paraformaldehyde H-(CH₂O)_n-OH Capacity: 10000 MTPY**

Paraformaldehyde is the commercial linear polymer of formaldehyde. It is the mixture of low molecular weight of polyoxymethylene glycols. The polymer behaves chemically as a solid form of formaldehyde. It is much more stable and suitable for storage and economical transportation.

UN No.	2213
IMDG Code	4164
IMCO Class	4.1
Packing Code	

CAS Number	<u>30525-89-4</u>
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EC Number	200-001-8
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C-1) Specification:

Characteristic	Actual Value
Appearance	White Powder
Color	Sol. 10 wt. % (Aq) 20 Apha
Aldehyde Content (wt%)	Min. 96
Melting Range (°C)	120 – 170
Acidity (As formic acid) (wt %)	Max. 0.02
Water Insoluble (wt %)	Max. 0.1
pH of 10% aqueous solution	5 – 7
Iron content (ppm)	15 ± 5
Ash Content (wt %)	Max. 0.1
Bulk Density (g/cm ³)	0.8-0.9
Flash point (°C)	71
Moisture (wt %)	Max. 1
Mesh Size	100-3000 Micron 0.1-3.0 mm US Mesh: 6-140



C-2) Application:

- Thermosetting resins
- Coating resins, Enamels
- Glyphosate
- Disinfectants, insecticides & pesticides
- Fungicide and bactericide
- Ion exchange resins
- Abrasives
- Pharmaceuticals
- Textile dyes & special plasticizers
- Automotive paints and Stoving finishes
- Electro coatings and water born finishes
- Ink industries

C-3) Storage:

In tightly closed bags prevented from direct sunlight and humidity.

C-4) Packaging:

- In 25 kg net PP/PE or 3-layer pressed Polyethylene bag, 40 bags on pallet, 20 Pallets = 20 MT in 20 FCL.
- 1000 kg Jumbo Bags, Stuffing: one Jumbo bag with pallet on top of the other Jumbo bags without pallet / 2 x 10 = 20 jumbo bags /20' FCL.
- 500 kg Jumbo Bags , Stuffing: Two Jumbo bags with pallet / 2 x 20 = 40 jumbo bags /20' FCL.