

COMPANY AND PRODUCT BROCHURE

NitroPure DEF

Production Catalyst Factory

Saudi chemical manufacturing for industrial buyers and fleet operators



About PCF

Production Catalyst Factory LLC is a chemical manufacturer based in Al Jubail, Kingdom of Saudi Arabia. Our manufacturing scope covers water treatment, oilfield and gas, and process chemicals, together with fuel additives, catalysts, absorbents, stabilizers and stearates.

NitroPure DEF brings this manufacturing focus to diesel exhaust treatment. This brochure presents our company, certifications and product range, followed by technical specifications and safety information for supplier evaluation.

01 COMPANY

Industrial capability

Chemical manufacturing for demanding operating environments

Our product portfolio serves chemical requirements across industrial processes, water treatment and energy operations. Quality, environmental management and occupational health and safety are addressed through the management systems shown in the following pages.

Major factory customers

SABIC, ARAMCO, MARAFIQ, MASA and SWA are among PCF's major factory customers.



02 CERTIFICATIONS

Documented standards

Management systems and DEF quality requirements

ISO 9001 2015

Quality management system • AMER31847

ISO 14001 2015

Environmental management system • AMER31848

ISO 45001 2018

Occupational health and safety management system • AMER31849

ISO 22241 1 2019

Diesel engines - NOx reduction agent AUS 32, Part 1: Quality requirements • 2026022125

Certificate details

The three management system certificates cover the manufacture of chemicals including water treatment, oilfield and gas, and process chemicals; fuel additives; catalysts and services; absorbents; stabilizers; and stearates.

The ISO 22241-1:2019 certificate covers production of NitroPure DEF. Full reproductions follow for review of the certified entity, scope, issue dates and certification conditions.

Certificate group	Dates shown on certificates
ISO 9001 / 14001 / 45001	Issued 17 August 2026 Surveillance / expiry 31 August 2027 Recertification 31 August 2028
ISO 22241-1	Certified 21 February 2026 Expiry 20 February 2029, subject to conditions

CERTIFICATE

ISO 9001 2015

Quality management system



CERTIFICATE

This is to certify that the Quality Management System of
Production Catalyst Factory for Industry
Building no: 4064, Street: Dist. 6C 1019, Secondary no: 8145, C6 Dist. Postal code: 35521,
Al Jubail City, Kingdom of Saudi Arabia.

has been assessed and found to conform to the requirements of

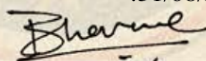
ISO 9001:2015

This Certificate is valid for the following scope

Manufacturing of Chemicals including Water Treatment Chemicals,
Oilfield and Gas Chemicals, Process Chemicals, Fuel Additives,
Catalysts & Services, Absorbents, Stabilizers and Stearates

Certificate No.	:AMER31847
Original Issue Date	:01/09/2025
Issue Date	:17/08/2026 R1
Surveillance/ Expiry Date	:31/08/2027
Recertification Date	:31/08/2028




Director

AMERICO QUALITY STANDARDS REGISTECH PVT. LTD

USA Office: 1603 Capitol Ave, Suite #402E, Majestic Building, Cheyenne, WY 82001

India Office: Office no 407, Commerce Center, Pimple Saudagar, Pune, 411027



CM-MS-7842



For verification and updated information concerning the present certificate, please visit www.americocert.com The Certificate is valid for period of 3 years subject to satisfactory annual surveillance audit. This Certificate is the property of AMERICO Quality Standards Registech Pvt. Ltd. & shall be returned immediately when demanded.

CERTIFICATE

ISO 14001 2015

Environmental management system



CERTIFICATE

This is to certify that the Environmental Management System of
Production Catalyst Factory for Industry
Building no: 4064, Street: Dist. 6C 1019, Secondary no: 8145, C6 Dist. Postal code: 35521,
Al Jubail City, Kingdom of Saudi Arabia.

has been assessed and found to conform to the requirements of

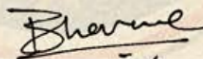
ISO 14001:2015

This Certificate is valid for the following scope

Manufacturing of Chemicals including Water Treatment
Chemicals, Oilfield and Gas Chemicals, Process Chemicals,
Fuel Additives, Catalysts & Services, Absorbents, Stabilizers
and Stearates

Certificate No.	:AMER31848
Original Issue Date	:01/09/2025
Issue Date	:17/08/2026 R1
Surveillance/ Expiry Date	:31/08/2027
Recertification Date	:31/08/2028




Director

AMERICO QUALITY STANDARDS REGISTECH PVT. LTD

USA Office: 1603 Capitol Ave, Suite #402E, Majestic Building, Cheyenne, WY 82001

India Office: Office no 407, Commerce Center, Pimple Saudagar, Pune, 411027



CM-MS-7836



For verification and updated information concerning the present certificate, please visit www.americocert.com The Certificate is valid for period of 3 years subject to satisfactory annual surveillance audit. This Certificate is the property of AMERICO Quality Standards Registech Pvt. Ltd. & shall be returned immediately when demanded.

CERTIFICATE

ISO 45001 2018

Occupational health and safety management system



CERTIFICATE

This is to certify that the Occupational Health & Safety Management System of
Production Catalyst Factory for Industry
Building no: 4064, Street: Dist. 6C 1019, Secondary no: 8145, C6 Dist. Postal code: 35521,
Al Jubail City, Kingdom of Saudi Arabia.

has been assessed and found to conform to the requirements of

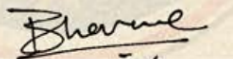
ISO 45001:2018

This Certificate is valid for the following scope

Manufacturing of Chemicals including Water Treatment
Chemicals, Oilfield and Gas Chemicals, Process Chemicals,
Fuel Additives, Catalysts & Services, Absorbents, Stabilizers
and Stearates

Certificate No.	:AMER31849
Original Issue Date	:01/09/2025
Issue Date	:17/08/2026 R1
Surveillance/ Expiry Date	:31/08/2027
Recertification Date	:31/08/2028




Director

AMERICO QUALITY STANDARDS REGISTECH PVT. LTD

USA Office: 1603 Capitol Ave, Suite #402E, Majestic Building, Cheyenne, WY 82001

India Office: Office no 407, Commerce Center, Pimple Saudagar, Pune, 411027



CM-MS-7832



For verification and updated information concerning the present certificate, please visit www.americocert.com The Certificate is valid for period of 3 years subject to satisfactory annual surveillance audit. This Certificate is the property of AMERICO Quality Standards Registech Pvt. Ltd. & shall be returned immediately when demanded.

CERTIFICATE

ISO 22241 1 2019

AUS 32 quality requirements

Certificate of Registration



This is to certify that the
Diesel engines - NOx reduction agent AUS 32 - Part 1: Quality requirements
of
PRODUCTION CATALYST FACTORY
at

**BUILDING NO: 4064, STREET: DIST.6C 1019, POSTAL CODE: 35521,
AL JUBAIL CITY, KINGDOM OF SAUDI ARABIA**

has been independently assessed and is

compliant with the requirements of:

ISO 22241-1:2019

For the following scope of activities:

PRODUCTION OF NETROPURE DEF (DIESEL EXHAUST FLUID)

Certificate Number: 2026022125

Validity of this certificate can be verified at www.eurocertverify.com

Date of Certification	21st February 2026
1 st Surveillance Audit Due	20th February 2027
2 nd Surveillance Audit Due	20th February 2028
Certificate Expiry (subject to the company maintaining its system to the required standard)	20th February 2029

Authorised Signatory



This certificate is the property of Eurocert Inspection Limited and shall be returned immediately on request.
International House, 10 Churchill Way, Cardiff, United Kingdom, CF10 2HE
Website:- www.eurocertverify.com, Email:- info@eurocertverify.com
Company No. 16823450

03 PRODUCT

NitroPure DEF

Diesel exhaust fluid for compatible SCR systems

NitroPure DEF is a high-purity aqueous urea solution for Selective Catalytic Reduction systems in modern diesel engines. Its formulation combines automotive-grade urea with deionized water to support nitrogen oxide reduction in the exhaust stream.



32.5% urea formulation

Automotive-grade urea • Deionized water • No intentionally added additives or stabilizers

How it works

DEF is dosed into the exhaust stream, where it forms ammonia. In the SCR catalyst, ammonia reacts with nitrogen oxides to form nitrogen and water vapor. Use the dedicated DEF tank and follow the engine manufacturer’s instructions; DEF must never be added to diesel fuel.

Application areas

Fleet and transport	Industrial equipment
Heavy-duty trucks and buses Long-haul and delivery fleets	Off-road machinery Industrial diesel engines
Compatible vehicles with SCR	Compatible generators and equipment with SCR

04 PACKAGING

A size for every operation

From portable cans to drum and IBC supply



20 L can



1000 L IBC

Size	Packaging	Typical use
5 L	Can	Portable replenishment
7 L	Can	Routine top-ups
10 L	Can	Portable fleet supply
20 L	Can	Workshop and service use
200 L	HDPE drum	Depot dispensing
1000 L	IBC tank	High-volume fleet and industrial use

10 L portable supply

A portable can option alongside the existing small packs, 20 L can, 200 L drum and 1000 L IBC.

Choose the pack size around consumption, storage conditions and dispensing arrangements. Custom packaging may be available on request.

05 TECHNICAL DATA

Product specifications

NitroPure DEF technical data sheet summary

Component	Concentration	CAS number
Automotive-grade urea	32.5% ± 0.7%	57-13-6
Deionized water	Balance	7732-18-5

Property	Specification	Method
Appearance at 25°C	Colorless, transparent liquid	Visual
Specific gravity at 25°C	0.99–1.09	SOP-013
pH	8.50–10.50	SOP-001
Solubility in water	Fully soluble	Visual
Odor	Odorless to mild ammonia	—
Crystallization point	–11°C	ISO 22241
Boiling point	Approximately 100°C	ISO 22241
Purity grade	Automotive-grade DEF	ISO 22241

Product quality

The product TDS states conformity with ISO 22241 requirements for DEF quality and purity. No additives, stabilizers or impurities are intentionally added, and product quality is monitored against DEF specifications.

Shelf life

Two years from the manufacturing date when stored under the recommended conditions. Keep containers sealed to maintain purity and prevent contamination.

For procurement review

Use the agreed product specification and request batch-specific quality documentation when evaluating a delivery.

06 HANDLING

Protect product purity

Storage and dispensing guidance

Store cool and sealed

Store below 25°C in a cool, dry, well-ventilated area. Protect containers from direct sunlight, heat, dust and chemical contamination. Keep the product sealed until use and manage stock within the stated shelf life.

Use dedicated equipment

Use DEF-compatible tanks, pumps, hoses and dispensing equipment. Recommended materials include suitable stainless steel, HDPE and approved DEF-grade plastics. Avoid contact with carbon steel, copper, brass and aluminum.

Keep DEF separate

Do not mix with diesel fuel, oils or other chemicals. Fill only the dedicated DEF tank and follow the vehicle or equipment manufacturer's instructions.

Manage freezing correctly

The product crystallizes at approximately -11°C. The TDS states that freezing does not damage the product; allow it to thaw completely before use. Avoid repeated freeze-thaw cycles as advised in the SDS.

Handle spills and splashes promptly

Spills can make surfaces slippery. Use gloves and eye protection where contact or splashing is possible. Contain releases and prevent large quantities from reaching drains or surface water. Follow the full SDS for cleanup, first aid and disposal.

Safety data sheet on the following pages

The complete supplied four-page SDS follows, covering identification, composition, hazards, first aid, firefighting, spills, handling, exposure controls, properties, stability, toxicology, ecology, disposal, transport and regulatory information.

Safety data sheet

NitroPure DEF • Original SDS page 1 of 4



SAFETY DATA SHEET (SDS)

NitroPure DEF / Diesel Exhaust Fluid (32.5% urea solution)

1. Identification

Product name: NitroPure DEF / Diesel Exhaust Fluid (32.5% urea solution)

Primary use: NOx reduction in diesel engines with SCR systems.

Manufacturer: Production Catalyst Factory LLC

4064, 6C 1019, Postal Code 35521, Al Jubail, Saudi Arabia

sales@kalada.sa mohammad@kaladachem.com.sa +966 56 559 5585

2. Composition/information on ingredients

Component Concentration CAS Number

Urea 31.8–33.2% 57-13-6

Water 66.8–68.2% 7732-18-5

No hazardous additives are typically present in NitroPure DEF.

3. Hazards identification

Classification: Not classified as hazardous; no signal word, hazard pictograms, or hazard statements required under GHS/CLP.

Main concerns:

- Mild irritation possible to eyes and skin.
- Spillage can cause slippery surfaces.

4. First aid measures

Inhalation:

Move to fresh air; normally no serious effects. Seek medical advice if symptoms persist.

Skin contact:

Remove contaminated clothing; wash skin with soap and water. Get medical attention if irritation persists.

Eye contact:

Rinse cautiously with water for several minutes; remove contact lenses if easy. Seek medical attention if irritation continues.

07 SAFETY DATA

Safety data sheet

NitroPure DEF • Original SDS page 2 of 4

**Ingestion:**

Rinse mouth, give water to drink. Do not induce vomiting. Seek medical advice if large amounts swallowed or if unwell.

5. Firefighting measures

Flammability: Non flammable aqueous solution.

Suitable extinguishing media: Water spray, foam, dry chemical, CO₂.

Special hazards: On strong heating, urea can decompose to ammonia and other nitrogen oxides; use normal protective equipment for firefighters.

6. Accidental release measures

Personal precautions:

- Avoid slips—product makes floors slippery.
- Use basic protective gloves and eye protection if splashing possible.

Environmental precautions:

Prevent large quantities entering surface water or drains; high nitrogen load can affect aquatic environments.

Cleanup:

Contain and absorb with sand or inert material; collect into suitable containers. Wash area with plenty of water.

7. Handling and storage

Handling:

- Avoid unnecessary contact with skin and eyes.
- Do not mix with fuels, oils, or other chemicals.

Storage conditions:

- Store in cool, well ventilated place, away from direct sunlight and heat.
- Recommended storage temperature typically around -5 to 25°C (check supplier SDS).
- Use only compatible materials (e.g., certain stainless steels, specific plastics); avoid copper, brass, and some alloys.

8. Exposure controls/personal protection

Occupational exposure limits: No specific OELs for urea in many jurisdictions; check local regulations.

Engineering controls: Normal workplace ventilation is usually sufficient.

Safety data sheet

NitroPure DEF • Original SDS page 3 of 4



Personal protective equipment (PPE):

- **Eyes/face:** Safety glasses or goggles if splashing risk.
- **Skin:** Protective gloves (e.g., nitrile) for frequent or prolonged contact.
- **Respiratory:** Not normally required; use respiratory protection if aerosols or mists are generated in poorly ventilated areas.

9. Physical and chemical properties

- Appearance: Clear, colorless liquid.
- Odor: Slight ammonia like odor possible.
- pH: Slightly alkaline (typically around 9–10).
- Freezing point: Around -11°C (for 32.5% urea solution).
- Solubility: Completely miscible with water.

10. Stability and reactivity

Stability: Stable under normal conditions and recommended storage.

Conditions to avoid:

- Excessive heat, prolonged exposure to sunlight, freezing/thaw cycles.

Incompatible materials:

- Strong oxidizing agents, nitrites, and materials sensitive to corrosion (e.g., copper, brass).

Decomposition products: Ammonia, nitrogen oxides, carbon oxides on strong heating.

11. Toxicological information

- Acute toxicity: Low acute toxicity; urea is of relatively low toxicity by oral, dermal, and inhalation routes.
- Irritation: May cause mild, transient irritation to eyes and skin.
- Sensitization, carcinogenicity, mutagenicity, reproductive toxicity: Not expected under normal use; not classified for these endpoints in standard SDSs.

12. Ecological information

- Aquatic toxicity: Not classified as dangerous for the environment, but large releases can contribute to eutrophication due to nitrogen content.
- Persistence and degradability: Urea is readily biodegradable.
- Bioaccumulation: Not expected to bioaccumulate.

07 SAFETY DATA

Safety data sheet

NitroPure DEF • Original SDS page 4 of 4



13. Disposal considerations

Product:

Dispose of in accordance with local regulations; avoid discharge of large quantities into sewers or waterways.

Packaging:

Rinse and recycle or dispose of as per local requirements; avoid reuse for food or drink.

14. Transport information

UN number / class: Not classified as dangerous goods for transport (ADR/RID, IMDG, IATA) in typical formulations.

15. Regulatory information

Classification: Not classified as hazardous under CLP/GHS in many jurisdictions when meeting AdBlue/DEF specifications

08 ENQUIRIES

Discuss your DEF requirements

Production Catalyst Factory LLC



Product and supply enquiries

Contact PCF to discuss pack sizes, expected consumption, delivery requirements and the documentation needed for supplier evaluation.

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