

Diesel ADV+

● 1 Product and company identification.

Product Name: **Diesel ADV+**
Product Use: FUEL ADDITIVE
Company name : Industrial Power Units Ltd
Address : Churchbridge, Oldbury, West Midlands, B69 2AS
Telephone: 0121 511 0400
Fax: 0121 411 0401

● 2 Composition/information on ingredients.

PREPARATION:

Chemical name	CAS No.	Concentration
Ethoxylated Alcohol blend, Xi - R41	proprietary	> 40%
Fatty acid polyglycol ester, Xi - R36 R37 R 38	61791-01-3	< 50%
Oleamide DEA, Xi - R38 R41	93-83-4	< 50%
Diethanolamine, Xn - R22 R38 R41 R48/R22	111-42-2	< 5%

● 3 Hazard identification.

Detrimental effects on health: Under customary conditions of use, this product does not present any danger of poisoning.

Skin : Severely irritating to the skin.

Eyes : Severely irritating, may injure eye tissue if not removed.

Physical-chemical hazards: No special risk of ignition or explosion in normal use.

Product classification: Irritant

● 4 First-aid measures

IN THE EVENT OF SERIOUS OR PERSISTENT PROBLEMS CALL A DOCTOR OR ASK FOR EMERGENCY MEDICAL ASSISTANCE.

ROUTES OF EXPOSURE:

Inhalation: Not expected to be a relevant route of exposure. Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.

Skin contact: Immediately remove contaminated clothing. Wash immediately and copiously with soap and water.

Eye contact: Wash immediately and copiously with water, while spreading eyelids apart, for at least 15 minutes.

Ingestion: Do not induce vomiting to avoid the risk of aspiration in the respiratory tract. Do not force the party to drink. Keep at rest and get medical attention.

Aspiration: If it is suspected that the product has been aspirated into the lungs (for instance due to vomiting) transport the patient urgently to the hospital.

● 5 Fire fighting measures

FLASH POINT: 216°C Pensky Martens CC

EXTINGUISHING MEDIA:

Suitable: Carbon dioxide (CO₂), dry chemicals, foam.
Water fog or spray fire-exposed surfaces to cool them down and protect personnel; should be used by personnel trained in fire fighting only.

Not to be used: Do not use fire monitors (solid jets) because they could favour the dispersion of the flames.

SPECIFIC HAZARDS: Incomplete combustion and thermolysis produce toxic gases such as CO, CO₂, aldehydes and soot. The inhalation of these materials is very dangerous.

PROTECTION OF PARTICIPANTS: Mandatory to wear insulating breathing apparatus in confined atmosphere because of the abundant smoke and gas given off.

● 6 Accidental release measures

**** SEE ALSO SECTIONS 8 AND 13 ****

PERSONAL PROTECTION: Wear respirator and protective clothing as appropriate.

MEASURES AFTER LEAKAGE AND SPILLAGE :

On the ground: Prevent the product from spilling on into the drains or into a watercourse or contaminating the soil. Using physical facilities (pumping, skimming, etc.); contain the spillage and recover using sand or any other type of inert absorbent material. In the event of spillage, notify competent authorities when the situation cannot be brought rapidly and efficiently under control.

On water: Floating absorbent products, then mechanical collection. If the product spreads into a watercourse or drain, notify the Authorities.

SPECIAL PRECAUTIONS: Prevent contact with hot surfaces or heat sources. Restrict access to the hazardous area.

● 7 Handling and storage

HANDLING :

Technical measures:

Worker exposure prevention:

Ensure sufficient ventilation in the event of the risk of vapours, fogs or aerosols forming. Take any steps to minimise the risks of exposure.
Keep away from foods and drinks.

Fire or explosion prevention:

Low Hazard. Liquid can burn upon heating to temperatures at or above the flashpoint, i.e. 216°C. Empty containers retain product residue (liquid and/or vapour) and can be dangerous. Do not pressurise, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity or other source of ignition. They may explode and cause injury or death.

Precautions: Remove any soiled or splashed clothing immediately. **Do not smoke**, eat or drink when using.

Instructions for use: Loading/unloading viscosity: ~ 10 – 50 mPa.s⁻¹
Loading/unloading temperature : 21°C – 49°C
Avoid contact with hot surfaces.
Use only receptacles, seals and pipes that resist hydrocarbons.
Not compatible with aluminium, magnesium and related alloys.

STORAGE :

Technical measures: Design the installations and take all steps necessary to avoid the pollution of water and soil.

Storage conditions:

Recommended:

Store at ambient temperature (minimum – 6°C, maximum 37°C) away from water, damp and any source of ignition.

Keep recipients closed when not being used.

It is recommended to store this product with a nitrogen blanket to minimize the potential for Ethoxylate oxidation.

Avoid:

Overheating (> 66° C) of an ethoxylate stored with air should be avoided.

Storage exposed to bad weather.

Incompatible materials:

Strong oxidising agents, strong acids, copper - zinc - aluminium and alloys, brass, galvanised steel

Packaging materials :

Recommended:

Stainless steel, epoxy resins, polyester

It is preferable to preserve the product in its original package.

Otherwise, if necessary, refer to any indications given on the regulatory label of the new package.

Disposal:

Empty drums should be completely drained, properly bunged and promptly returned to drum reconditioner, or properly disposed of.

● 8 Exposure controls/personal protection.

TECHNICAL MEASURES: Use the product in a ventilated area. When working in a confined space (tanks, reservoirs), air quality is to be monitored before entry and continuously through the work process and/or wear the recommended equipment.

TEST PARAMETERS:

Exposure limit values: Diethanolamine
ACGIH TLV = 0.46 ppm (2 mg/m³)
French VME = 3 ppm (15 mg/m³)

INDIVIDUAL PROTECTION EQUIPMENT:

Respiratory protection: None for a normal use.

If overexposure is possible (> 1 ppm), use either air supplying or air purifying equipment (organic vapours).

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Hand protection:	Chemical resistant gloves.
Eye protection:	Goggles in the event of any risk of splashing.
Protect skin and body other than hands:	As needed, face screen, boots, chemical resistant clothing, safety shoes (drums handling).
PERSONNAL CARE:	Avoid extended and repeated contact with skin. Do not eat or drink or smoke during use.

● 9 Physical and chemical properties.

APPEARANCE:	physical state: Clear liquid. colour: Red Amber
ODOUR:	Mild
pH:	Not applicable.
BOILING POINT:	> 149° C
FLASH POINT:	216°C CC
AUTO-IGNITION TEMPERATURE:	> 250° C
EXPLOSION LIMITS:	Not documented
DENSITY:	963 kg/m ³ at 15° C
VAPOUR PRESSURE:	0.13 hPa at -4° C
SOLUBILITY:	In water: Slightly soluble, may form a gel
OTHER PHYSICAL PROPERTIES:	Viscosity: 36 mm ² /s @ 40°C log P n-octanol/water at 20°C : Not available

● 10 Stability and reactivity

STABILITY:	Stable in normal storage, handling and use conditions.
Conditions to avoid:	Oxidation of alcohol ethoxylates may occur under certain conditions. Avoid overheating (temperatures > 66° C) especially when vigorously mixed with air. See section 7.
Materials to avoid:	Product may react vigorously with incompatible materials: - Oxidising agents - Storage in equipment containing copper and copper alloys, galvanised surfaces, iron, brass and zinc can leach metals and cause product discolouration.

HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition will generate gases such as CO, CO₂ and unidentified organic compounds.

●11 Toxicological information

ACUTE TOXICITY/LOCAL EFFECTS:

Inhalation: No reported effect.
Skin contact: Low toxicity: LD50 > 5000 mg/kg, rat
Ingestion: Moderately toxic: LD50 > 2000 mg/kg, rat

SENSITIZATION: Not a sensitizer

CHRONIC OR LONG-TERM TOXICITY:

Skin contact : No reported effect.

Carcinogenicity: The product is not considered as carcinogenic

● 12 Ecological information

MOBILITY:

Air: Low volatility
Soil : Low mobility
Water: Slightly soluble, may form a gel

PERSISTENCE AND DEGRADABILITY:

The surfactant(s) contained in this preparation complies (comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer. This product is expected to be readily biodegradable in an OECD 301 F Respirometer test based on testing of similar ingredients : >60% oxygen removal in 28 days

ECOTOXICITY:

The product is expected to have aquatic toxicity in the 1-10 mg/l range, based on testing of similar products.

● 13 Disposal considerations.

ELIMINATION OF WASTE:

Dispose of safely, in accordance with local regulations. Where applicable, recovery by an approved collector, regeneration or burning in an approved installation. As a waste, it would not be a hazardous waste by RCRA criteria (40CFR 261). However, the waste should be properly characterized to evaluate whether its composition has been modified through procession prior to disposal.

ELIMINATION OF SOLID PACKAGES: Comply with the current regulations.

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● 14 Transport information

UN number: Not regulated

Road (ADR)/rail (RID)/river (ADNR): Not regulated

Sea transportation (IMO-IMDG): Not regulated

Air transportation (OACI/IATA): Not regulated

TRANSPORT TEMPERATURE: Ambient

● 15 Regulatory information

EC REGULATIONS:

EC labelling:

Symbol(s): Xi – Irritant

R Phrase(s): R37/38 – Irritating to respiratory system and to skin.
R41 - Risk of serious damage to eyes.

S Phrase(s): S25 - Avoid contact with eyes.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S29 - Do not empty into drains
S36/37/39 - Wear suitable protective clothing, suitable gloves and eye/face protection.
S61 - Avoid release to the environment. Refer to special instructions/Safety data sheets.

GERMAN WGK: Category 2

UNITED STATES REGULATORY INFORMATION

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 Hazard Categories: Under the provisions of Title III, Sections 311/312 of Superfund Amendments and Reauthorization Act (SARA) this product is classified into the hazards Listed below:

- Fire: No
- Pressure Generating: No
- Reactivity: No
- Acute: Yes
- Chronic: Yes

☐313 Reportable Ingredients: Diethanolamine CAS 111-42-2 2%

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

If this product is accidentally spilled, it is subject to reporting under the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). We recommend you contact local authorities to determine if there may be other reporting requirements.

CERCLA Ingredient: Diethanolamine

CERCLA RQ 5000 Product

STATE REGULATIONS:

PROPOSITION 65 STATEMENT: This product contains the following levels of compounds found by the State of California to cause cancer, birth defects and other reproductive harm: Ethylene oxide: CAS NO. 75-21-8 <1 ppm

GENERAL COMMENTS: Protection of Stratospheric Ozone (Pursuant To Section 622 of The Clean Air Act Amendments Of 1990):
Per 40 CFR Part 82, this product does not contain nor was it directly manufactured with any Class I or Class II ozone depleting substances.

CANADIAN REGULATORY INFORMATION

WHMIS Class D Division 2 Subdivision B – Toxic Material

INTERNATIONAL INVENTORIES: US TSCA, Canadian DSL, EINECS (no longer polymer) Korean, Philippine, Australian

● 16 Other information

NFPA Codes: Fire : 1 – Health : 2 – Reactivity : 0

HMIS Codes: Fire : 1 – Health : 2 – Reactivity : 0

Complies with updated Directive 93/112 EC and the rules of 05/01/1993.

This document provides additional information to the product datasheet, but doesn't replace it. The information contained herein is based on our knowledge on the product, at the current date.

The user should pay attention to the risks that may arise when using the product for applications other than those for which it has been conceived.

It does not exempt in any case the user from knowing and applying all relevant regulations. He will be the only responsible for taking precautionary measures, according to the applications for which he uses the product.

All mentioned regulatory prescriptions have been indicated just to help the user to be able to meet all incumbent obligations. This listing cannot be considered exhaustive.

The user must ensure that there are no other prescriptions in addition to those indicated.

