

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 13.04.2017

Version number 8

Revision: 13.04.2017

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

1.1 Product identifier

Trade name: Turbo-K Concentrate (1:4)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Application of the substance / the preparation: Gas Turbine Compressor Cleaner.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

TURBO-K Ltd.
19 Staple Gardens, Winchester,
SO23 8SR,
United Kingdom.
Email: info@turbo-k.com
Web: www.turbo-k.com
Tel. (Germany): +49-(0)7641-55346

Global Distribution:

FP Turbomachinery
Email: info@fpturbo.com
Web: www.fpturbo.com

1.4 Emergency telephone number(s):

NHS Direct: 111 (England and Scotland), 0845 46 47 (Wales).
National Poisons Information Service (NPIS): 0344 892 0111 (healthcare professionals only).
Germany: +49-(0)7641-55346 (office hours).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Eye Dam. 1 H318 Causes serious eye damage.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008:

The product is classified and labelled according to the CLP regulation.

Hazard pictograms:



GHS05

Signal word: Danger

Hazard-determining components of labelling:

Aliphatic amine derivative

Hazard statements:

H318 Causes serious eye damage.

Precautionary statements:

P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P233	Keep container tightly closed.
P234	Keep only in original container.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

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Trade name: Turbo-K Concentrate (1:4)**Additional information:**

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****3.2 Mixtures****Hazardous components:**

	Salt of an amino acid derivative Eye Irrit. 2, H319	5-15%
	Aliphatic amine derivative Eye Dam. 1, H318; Acute Tox. 4, H302	5-15%
CAS: 34590-94-8 EINECS: 252-104-2	Dipropylene glycol methyl ether substance with a Community workplace exposure limit	5-15%

Non-hazardous components:

CAS: 7732-18-5 EINECS: 231-791-2	Water (demineralised)	55-85%
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Additional information: For the wording of the listed hazard phrases refer to section 16.**SECTION 4: First aid measures****4.1 Description of first aid measures****After inhalation:** Move patient to fresh air, if symptoms persist consult a doctor.**After skin contact:** Immediately wash with water and soap and rinse thoroughly.**After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.**After swallowing:** Do not induce vomiting; call for medical help immediately.**4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing agents:**CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.**5.2 Special hazards arising from the substance or mixture**

No further relevant information available.

5.3 Advice for firefighters**Protective equipment:** Wear self-contained respiratory protective device.**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment.

6.2 Environmental precautions No special measures required.**6.3 Methods and material for containment and cleaning up**

Absorb with liquid-binding material.

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Dispose contaminated material as waste according to item 13.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage**7.1 Precautions for safe handling** Store in cool, dry place in tightly closed receptacles.**Information about fire - and explosion protection:** No special measures required.**7.2 Conditions for safe storage, including any incompatibilities****Requirements to be met by storerooms and receptacles:**

Keep container tightly closed.

Keep only in original container.

Information about storage in one common storage facility: Store away from oxidising agents.**Further information about storage conditions:** Store above 5 °C.**7.3 Specific end use(s):** No further relevant information available.**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Ingredients with limit values that require monitoring at the workplace:****34590-94-8 Dipropylene glycol methyl ether**

WEL (Great Britain)	Long-term value: 308 mg/m ³ , 50 ppm Sk
IOELV (EU)	Long-term value: 308 mg/m ³ , 50 ppm Skin

Additional information: The lists valid during the making were used as basis.**8.2 Exposure controls****Personal protective equipment****General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Avoid contact with the eyes and skin.

Respiratory protection: Not required.**Protection of hands:**

Protective gloves.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Eye protection:

Safety glasses with side-shields (EN 166).

Body protection: Protective work clothing.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form: Liquid.
Colour: Amber / pale Straw.

Odour: Mild.
Odour threshold: Not determined.

pH-value: 6.5-7.5

Melting point/Melting range: Not determined.

Boiling point/Boiling range: 100 °C

Flash point: >100 °C

Flammability (solid, gaseous): Not applicable.

Ignition temperature: Not determined.

Decomposition temperature: Not determined.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower: Not determined.
Upper: Not determined.

Oxidising properties: Not determined.

Vapour pressure: Not determined.

Density: 1.01 g/cm³ (± 0,05)

Relative density: Not determined.

Vapour density: Not determined.

Evaporation rate: Not determined.

Solubility in / Miscibility with

Water: Fully miscible.

Partition coefficient (n-octanol/water): Not determined.

Viscosity:

Dynamic: Not determined.
Kinematic at 20 °C: 10 ± 3 cSt (According to ASTM D445)

9.2 Other information: No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity: No known hazardous reactions under normal use.

10.2 Chemical stability: Stable under normal circumstances.

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions: No dangerous reactions known.

10.4 Conditions to avoid: No further relevant information available.

10.5 Incompatible materials: Strong oxidizing agents.

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10.6 Hazardous decomposition products

Formation of irritating gases (fumes) is possible during heating or in case fire.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

Primary irritant effect:

Skin corrosion/irritation:

Based on available data, the classification criteria are not met; however, Irritation and redness may occur at site of contact.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation:

Causes serious eye damage. There may be irritation and redness. There may be severe pain. Vision may become blurred. There may be permanent damage.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

LC50/96h	>2000 mg/L (Scophthalmus Maximus (Turbot))
ErC50/72h	>120 mg/L (Skeletonema costatum)
LC50/10d	>5000 mg/L (crustacean)

12.2 Persistence and degradability Fully biodegradable.

12.3 Bioaccumulative potential No evidence of bioaccumulative potential.

12.4 Mobility in soil Mixture is not persistent in the environment.

Additional environmental information:

General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects None.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation:

Disposal must be made according to official regulations.

Do not allow product to reach sewage system.

Uncleaned packaging:

Recommendation:

Disposal must be made according to official regulations.

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Packaging that may not be cleansed must be disposed of in the same manner as the product.

SECTION 14: Transport information

14.1 UN Number

ADR, ADN, IMDG, IATA Not applicable.

14.2 UN proper shipping name

ADR, ADN, IMDG, IATA Not applicable.

14.3 Transport hazard class(es)ADR, ADN, IMDG, IATA
Class Not applicable.**14.4 Packing group**

ADR, IMDG, IATA Not applicable.

14.5 Environmental hazards

Marine pollutant: No

14.6 Special precautions for user Not applicable.**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.

SECTION 15: Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients are listed.

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

15.2 Chemical safety assessment A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

Acute Tox. 4: Acute toxicity – Category 4

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2