Acc. to: 1907/2006/EG, 2015/830] Issue, dated: 02. 03. 2017 Version EN:2.0;



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

1.1 Product identifier:

DG Air Cooler Cleaner

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

Identified uses / uses advised against: Degreaser. Product for cleaning of diesel engine charge air coolers. Sectors of Use: Industrial uses. **1.3 Details of the supplier of the safety data sheet: Distributor:** Duo Ghibli ul. Światowida 6 71-726 Szczecin Tel.: +48 606 362 590

E-mail address of the person responsible for data sheet: <u>biuro@dgpc.pl</u> **1.4 Emergency telephone number:** 112 (general emergency telephone number), 998 (fire-brigade), 999 (ambulance);

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture: Acc. to 1272/2008
Asp. Tox. 4
Human health dangers:
H304 - May be fatal if swallowed and enters airways.
EUH066 - Repeated exposure may cause skin dryness or cracking.
H412 - Harmful to aquatic life with long lasting effects.
H319 - Causes serious eye irritation.
Environmental hazards: None.
Physic-chemical hazards: None.

2.2 Label elements: Pictograms:



Signal Word: Danger

Hazard Statement:

H304 - May be fatal if swallowed and enters airways.

EUH066 - Repeated exposure may cause skin dryness or cracking.

H412 - Harmful to aquatic life with long lasting effects.

H319 - Causes serious eye irritation.

Precautionary Statement:

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P310 - Immediately call a POISON CENTER or doctor/physician.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing .

P405 – Store locked up.

P501 - Dispose of contents/container to an authorised waste collection point.

Contain:

Hydrocarbons C10-C13, Fatty alcohol ethoxylates

Acc. to: 1907/2006/EG, 2015/830] Issue, dated: 02. 03. 2017 Version EN:2.0;

According to Regulation (EC) No 648/2004 2.3 Other hazards:

Mixture doesn't meet the criteria for PBT or vPvB

SECTION 3: Composition/information on ingredients

3.1 Substances: Not applicable.3.2 Mixtures: Hazardous components:

Product identifier	Contains [%]	Classification	
		Hazard Class and Category Code(s)	Hazard Statement Code(s)
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics CAS No.: - EC No.: - WE: 918-481-9 <u>REACH No.</u> : 01-2119457273-39- XXXX	<20	Asp. Tox. 1	H304
Alcohols, C9-11, ethoxylated CAS No.: 68439-46-3 EC No.: - Index No.: - <u>REACH No.</u> : -	5 – 10	Acute Tox.4 Eye Dam.1	H302 H318
Orange terpenes CAS No.: 8028-48-6 EC No.: 232-433-8 Index No.: - <u>REACH No.</u> : -	1 – 2	Flam. Liq.3 Asp.Tox.1 Skin Irrit.2 Aquatic Chronic 3	H226 H304 H315 H412
Butyleneglycol CAS No.: 110-63-4 EC No.: 203-786-5 Index No.: - <u>REACH No.</u> : -	3 – 6	Acute Tox.4	H302

Additional information: For full text of H-statements: see SECTION 16

SECTION 4: First aid measures

4.1 Description of first aid measures:

Skin contact:

Remove contaminated clothing, wash affected skin and hair with soap and water, rinse thoroughly with water, in case of irritation, consult a doctor.

Eye contact:

Rinse for several minutes (about 15) with plenty of water, holding eyelids apart. Avoid strong stream, due to the risk of corneal damage. Removal of contact lenses after an eye injury should only be undertaken by medical personnel. Contact doctor or Poisons Information Centre.

Inhalation:

In the event of dizziness or nausea, remove casualty to fresh air, if symptoms persist, obtain medical advice. **Ingestion:**

Do not induce vomiting, rinse your mouth with water, immediately contact your doctor.





Acc. to: 1907/2006/EG, 2015/830] Issue, dated: 02. 03. 2017 Version EN:2.0;

4.2 Most important symptoms and effects, both acute and delayed:

See Section 11.

4.3 Indication of any immediate medical attention and special treatment needed:

A decision about any future medical intervention should be made by a doctor once he/she has assessed the exposed person's condition.

SECTION 5: Firefighting measures

5.1.Extinguishing media:

Suitable extinguishing media: foam, dry powder extinguishers, CO₂ water spray. Use appropriate extinguishing method for conditions.

Unsuitable extinguishing media: Water with full iet

5.2 Special hazards arising from the substance or mixture:

During a fire, high temperature, release toxic decomposition products (carbon oxides).

5.3 Advice for firefighters:

Cool containers with water spray, if possible remove from the danger zone. In the event of a fire in a confined space should wear protective clothing and breathing apparatus with compressed air. Do not allow fire-fighting water run-off into surface water, groundwater and sewer. May emit poisonous fumes.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: notify the appropriate service. Remove from the hazardous area who does not participate in liquidation of failure.

For emergency responders: Ensure adequate ventilation. Use personal protective equipment. Do not breathe vapors. 6.2 Environmental precautions

Prevent from spreading or escaping into drains and reservoirs. Inform local authorities if you fail to provide protection. 6.3 Methods and material for containment and cleaning up

Prevent leakage and absorb with inert, absorbent material (such as sand, earth, vermiculite, diatomaceous earth, etc.). The contaminated material is placed in properly labeled containers for disposal in accordance with applicable regulations.

6.4 Reference to other sections

Disposal considerations - see section 13. Personal precautions - see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:

Use in well ventilated area. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Avoid breathing vapors. Avoid sources of ignition, heat, hot surfaces and open flames. Work in accordance with the principles of safety and hygiene: Do not eat, drink and smoke at work, wash your hands after use, remove contaminated clothing and protective equipment before entering places for meals. Follow the instructions provided on the label and instructions for use.

7.2 Conditions for safe storage, including any incompatibilities:

Store in a cool (storage temperature to 20°C), dry, well ventilated place in properly labeled and tightly closed original container. Avoid direct sunlight and heat sources, hot surfaces and open flames.

7.3 Specific end use(s): Degreaser. Product for cleaning of diesel engine charge air coolers.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:

Occupational Exposure Limits (PL): 2-butoxyethanol: 98mg/m³ (8h); 200mg/m³ (15min.) Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics: 300mg/m³; =900 mg/m³ 8.2 Exposure controls

Appropriate engineering controls: It is recommended to use proper ventilation.

Material Safety Date Sheet

DG Air Cooler Cleaner



Acc. to: 1907/2006/EG, 2015/830] Issue, dated: 02. 03. 2017 Version EN:2.0;

Individual protection measures, such as personal protective equipment:



Eye protection:

Use safety glasses (according to EN 166), with side shields.

Skin protection:

Hands:

Use hand protection chosen according to working conditions (latex, nitrile rubber: PVC), should meet the requirements of the standard EN374.

The selection of suitable gloves does not only depend on the material, but also on the brand and quality resulting from differences in manufacturers. Resistance of the material, the glove can be determined after the tests. The exact time of the destruction of the protective gloves must be determined by the manufacturer. *Other:*

Wear protective clothing working - wash regularly. **Respiratory Protection:** Avoid inhalation of vapors. **Thermal hazards:** Not applicable. **Environmental exposure controls:** Prevent the spread in the environment and enter drains and watercourses.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties:

Appearance	Liquid	
Color	colourless	
Odour	Characteristic, mild	
Odour threshold	not determined	
pH	6,5	
Melting point/freezing point	not determined	
Initial boiling point and boiling range	145-245 (°C)	
Flash point	<76°C	
Evaporation rate	not determined	
Flammability	not determined	
Lower flammability or explosive limits	not determined	
Upper flammability or explosive limits	not determined	
Vapour pressure (40°C)	not determined	

Acc. to: 1907/2006/EG, 2015/830] Issue, dated: 02. 03. 2017 Version EN:2.0;



Vapour density	not determined
Density at 20°C	0,89/cm ³
Solubility(ies)	In water: completely soluble
Partition coefficient: n-octanol/water	not determined
Self-ignition temperature	not self-igniting
Decomposition temperature	not determined
Viscosity;	not determined
Explosive properties	not determined
Oxidizing properties	not determined

9.2 Other information:

Not Available.

SECTION 10: Stability and reactivity

10.1 Reactivity
No information available.
10.2 Chemical stability:
Stable under normal conditions of use, storage and transport.
10.3 Possibility of hazardous reactions
None.
10.4 Conditions to avoid:
Avoid direct sunlight, heat, open flames, hot surfaces.
10.5 Incompatible materials:
Strong oxidizing agents.
10.6 Hazardous decomposition products:
Thermal decomposition products: carbon oxides.

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

(a) acute toxicity: none 2-butoxyethanol LD50 (dermal)-490 mg/kg, (oral)-560 mg/kg Basis for assessment: Information given is based on product data, a knowledge of the components and the toxicology of similar products. Likely routes of exposure: Inhalation is the primary route of exposure although exposure may occur through skin or eye contact Acute oral toxicity: Not applicable Acute dermal toxicity: Not applicable Acute inhalation toxicity: Low toxicity: LC50 >20 mg/l / 4.00 h, Rat Skin corrosion / irritation: Not irritating to skin Serious eye damage / irritation: Essentially non-irritating to eyes Respiratory irritation: Inhalation of vapours or mists may cause irritation to the respiratory system Respiratory or skin sensitisation: Not expected to be a sensitizer. Aspiration hazard: Not considered an aspiration hazard Germ cell mutagenicity: There is no evidence of mutagenic activity Carcinogenicity: Not expected to be carcinogenic



Acc. to: 1907/2006/EG, 2015/830] Issue, dated: 02. 03. 2017 Version EN:2.0;

Reproductive & developmental toxicity: Not expected to impair fertility. Not a developmental toxicant **Specific target organ toxicity – single exposure**: High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.

Specific target organ toxicity – repeated exposure: Low systemic toxicity on repeated exposure **Additional information:** Rapid release of gases which are liquids under pressure may cause frost burns of exposed tissues (skin, eye) due to evaporative cooling. High gas concentrations will displace available oxygen from the air; unconsciousness and death may occur suddenly from lack of oxygen. Exposure to very high concentrations of similar materials has been associated with irregular heart rhythms and cardiac arrest.

SECTION 12: Ecological information

12.1 Toxicity: No information available.
12.2 Persistence and degradability: The surfactant(s) used in this preparation comply(ies) with the biodegradability criteria as laid down in Regulation (EC)
12.3 Bioaccumulative potential No information available.
12.4 Mobility in soil: No information available.
12.5 Results of PBT and vPvB assessment: No information available.
12.6 Other adverse effects: No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal of waste should be addressed by specialized companies, the manner of waste disposal to be agreed with the competent department of environmental terrain. The residue was stored in their original containers. Dispose of in accordance with applicable regulations.

Empty containers should be disposed of in accordance with applicable regulations or to provide to the appropriate landfill.

EU REGULATIONS

Directive 75/442/EEC on waste, Council Directive 91/689/EEC of 12 December 1991 on hazardous waste, Commission Decision of 3 May 2000 replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste

SECTION 14: Transport information

ADR/RID/IMDG/IATA:

- 14.1 UN number: Not applicable
- 14.2 UN proper shipping name: Not applicable
- 14.3 Transport hazard class(es): Not applicable

14.4 Packing group: Not applicable

14.5 Environmental hazards: Not applicable

14.6 Special precautions for user: Not applicable

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable

SECTION 15: Regulatory information

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

EU REGULATIONS:



Acc. to: 1907/2006/EG, 2015/830] Issue, dated: 02. 03. 2017 Version EN:2.0;

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
- COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- 3. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Text with EEA relevance).
- 4. Commission Directive 2006/8/EC of 23 January 2006 amending, for the purposes of their adaptation to technical progress, Annexes II, III and V to Directive 1999/45/EC of the European Parliament and of the Council concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations (Text with EEA relevance).

15.2 Chemical safety assessment: No chemical safety assessments for the mixture.

SECTION 16: Other information

Abbreviations and acronyms, list of hazard statements used in the safety data sheet:

H304 - May be fatal if swallowed and enters airways.

EUH066 - Repeated exposure may cause skin dryness or cracking.

H412 - Harmful to aquatic life with long lasting effects.

H319 - Causes serious eye irritation.

Acute Tox.4 – Acute toxicity cat. 4

Crac. 2 – Carcinogenicity cat. 2

Skin Corr. 1A – Skin corrosion cat. 1B

Skin Irrit.2 – Skin irritation cat. 2

Eye Dam.1 – Serious eye damage cat. 1

Eye Irrit.2 – Eye irritation cat. 2

LD50 - Lethal dose, 50 percent

PBT – Persistent, Bioaccumulative and Toxic

vPvB – very Persistent and very Bioaccumulative

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road

RID - Regulation Concerning the International Transport of Dangerous Goods by Rail

IMDG – International Maritime Code for Dangerous Goods

IATA – International Air Transport Association

Training:

This product can be used by workers who have been thoroughly trained in the method of use of this product, they have been informed about the hazardous properties of the product and of the conditions of safe use of this product. Method of classification: calculation method

RESOURCES

Annex to Regulation (EU) 2015/830.

Current legislation (Section 15).

Information Agency for Chemical Substances.

The information contained herein should be considered only as an aid for the safe use of DG Air Cooler Cleaner . Since the conditions of storage, transport and use are beyond our control, can not constitute a guarantee in the legal sense. In any case, you must observe the laws and any third party rights. The document does not estimate the risks in the workplace. Product should not be used for purposes other than those specified in Section 1 without first consulting with **Duo Ghibli**.