

DYNAMAX RADIATOR SYSTEM CLEANER**Safety data sheet**

(Regulation 1907/2006/EC, amended by 2015/830/EU)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY /UNDERTAKING**1.1. Product identifier**

Material Name:	DYNAMAX RADIATOR SYSTEM CLEANER		
CAS:		EINECS:	
		ELINCS:	


1.2. Identified uses

Uses:	Cleaner liquid
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1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier:	EURO-VAT spol. s r.o.
IČO:	18049397
Address:	Alekšince 231
	951 22
	Alekšince
	Slovakia
Phone/fax number:	+421 37 7822 326-7
E-mail:	eurovat@eurovat.sk www.eurovat.sk
Emergency phone number:	National Poisons Information Service: City Hospital, Birmingham B187QH, United Kingdom Phone: +44 121 507 4123 E-mai: allistervale(at)npis.org , sallybradberry(at)npis.org Website: www.npis.org

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture	Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS] Hazard categories: Eye Irritation: Eye Irrit. 2
2.2 Label elements	Hazard pictograms (CLP/GHS) :  Signal word: warning H-phrases: H319 Causes serious eye irritation. P-phrases: P264 Wash water and soap thoroughly after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention.

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2.3 Other hazards	<p>Contains: 2-butoxyethanol</p> <p>Precautionary statements</p> <p>Prevention : Do not breathe vapour. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.</p> <p>Response : Get medical attention if you feel unwell. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell.</p> <p>Storage : Store in original container in a well ventilated area at temperatures up to 40 °C.</p> <p>Disposal : Not applicable.</p> <p>Supplemental label elements: Not applicable.</p> <p>Special packaging requirements</p> <p>Containers to be fitted with child-resistant fastenings: Not applicable.</p> <p>Tactile warning of danger: Not applicable.</p> <p>Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII: Not available.</p> <p>Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII: Not available.</p> <p>Other hazards which do not result in classification: Not available.</p>
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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product /ingredient name	CAS	EC	Symbols	Conc.	Registr. no REACH	GHS classification
2-butoxyethanol	111-76-2	203-905-0	GHS05,07	1 – 10	01-2119475108-36-xxxx	Acute Tox. 4 Acute Tox. 4 Eye Irrit. 2 Skin Irrit. 2 H332 H312 H302 H319 H315
morpholine	110-91-8	203-815-1	GHS02,05 07	max. 1	01-2119496057-30-xxxx	Flam. Liq. 3 Acute Tox. 4 Acute Tox. 4 Acute Tox. 4 Skin Corr. 1B H226 H332 H312 H302 H314

Full text of H and EUH phrases: see section 16.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures	<p>Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.</p> <p>Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.</p> <p>Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor.</p> <p>Ingestion: Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor.</p>
4.2 Most important symptoms and effects, both acute and delayed	<p>Potential acute health effects</p> <p>Eye contact: There may be irritation and redness. The eyes may water profusely.</p> <p>Inhalation : There may be irritation of the throat with a feeling of tightness in the chest.</p> <p>Skin contact : There may be irritation and redness at the site of contact.</p> <p>Ingestion : There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.</p>
4.3 Indication of any	<p>Notes to physician: No specific notes.</p>

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immediate medical attention and special treatment needed

Specific treatments: No specific treatment.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Suitable extinguishing media	Alcohol or polymer foam. Carbon dioxide. Dry chemical powder.
5.2. Unsuitable extinguishing media	None known.
5.3. Specific hazards	In combustion emits toxic fumes of carbon dioxide / carbon monoxide.
5.4. Protective equipment for firefighters	Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.
Additional advice	Alcohol or polymer foam. Carbon dioxide. Dry chemical powder.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions	Refer to section 8 of SDS for personal protection details. If outside keep bystanders upwind and away from danger point.
6.2. Environmental precautions	Do not discharge into drains or rivers. Contain the spillage using bunding.
6.3. Clean up methods	Mix with sand or vermiculite.

SECTION 7. HANDLING AND STORAGE

7.1. Handling	Ensure there is sufficient ventilation of the area. Avoid direct contact with the substance.
7.2 . Storage	Store in cool, well ventilated area.

SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1. Control parameters	No data available.
8.2 Exposure controls	Observe the usual precautions for health at work and in good ventilation. When using do not eat, drink or smoke.
8.2.1 Occupational exposure controls	<ul style="list-style-type: none"> a) Respiratory protection: it is necessary only in case of exceeding the TWA (mask with organic vapor filter type A) b) Eye protection: safety glasses c) Protection of hands: protective gloves (EN 374) d) protection: clothing (impermeable overalls and closed safety boots)
8.2.2. Environmental exposure controls	To prevent leakage of concentrated mixture into surface water drains or soil. Mixture stored in tightly sealed and labeled containers.
8.3. TWA	<u>2-butoxyethanol</u> : average: 25 ppm short: 50 ppm

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Fysical state	liquid
Colour	colourless
Odour	charakteristic
pH	not available
Flash point (ASTM-D92) [°C]	>93

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Boiling point [°C]	100
Freezing point [°C]	not available
Flammability	not available
Temperature of spontaneous combustion [°C]	200
Lower limit of explosion	not available
Superior limit of explosion	not available
Oxidising properties	not available
Vapour pressure [hPa]	not available
Relative density [g.cm ⁻³] typ.	1,01
Water solubility [g.l ⁻¹]	miscible in all proportions
Solubility in solvents [g.l ⁻¹]	not available
9.2 Other information	
VOC [g.l ⁻¹]	50

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity	Stable under recommended transport or storage conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	Hazardous reactions will not occur under normal transport or storage conditions.
10.4 Conditions to avoid	No information available.
10.5 Incompatible materials	No information available.
10.6 Hazardous decomposition products	In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects	<p><u>Acute toxicity</u></p> <p><u>Acute oral toxicity:</u> 2-butoxyethanol: LD50 (rat) = 470 mg/kg</p> <p><u>Acute dermal toxicity:</u> No data available.</p> <p><u>Acute inhalation toxicity:</u> No data available.</p> <p><u>Irritation/Corrosion</u> Conclusion/Summary : Causes eye irritation.</p> <p><u>Sensitisation</u> Conclusion/Summary : Not available.</p> <p><u>Mutagenicity</u> Conclusion/Summary : Not available.</p> <p><u>Carcinogenicity</u> Conclusion/Summary : Not available.</p> <p><u>Reproductive toxicity</u> Conclusion/Summary : Not available.</p>
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	<p><u>Teratogenicity</u> Conclusion/Summary : Not available.</p> <p><u>Aspiration hazard</u> Not available.</p> <p>Information on the likely routes of exposure: Not available.</p> <p><u>Symptoms related to the physical, chemical and toxicological characteristics</u> Eye contact : No specific data. Inhalation : No specific data. Skin contact: No specific data Ingestion: No specific data.</p> <p><u>Delayed and immediate effects and also chronic effects from short and long term exposure</u></p> <p><u>Short term exposure</u> Potential immediate effects: Not available. Potential delayed effects : Not available.</p> <p><u>Long term exposure</u> Potential immediate effects: Not available. Potential delayed effects: Not available. <u>Potential chronic health effects</u> Conclusion/Summary : Not available.</p> <p>Other information : Not available.</p>
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SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity	Not available.
12.2 Persistence and degradability	Biodegradable.
12.3 Bioaccumulative potential	No bioaccumulation potential.
12.4 Mobility	Non-volatile. Soluble in water.
12.5 Results of PBT and vPvB assessment	PBT : Not available. vPvB : Not available.
12. 6 Other adverse effects	-

SECTION 13. DISPOSAL CONSIDERATIONS**13.1 Product**

Methods of disposal: Physico-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the other possible disposal operations (e.g. evaporation, drying, calcination, etc.).

Recovery operations: Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).

Waste code number: 07 07 04

DYNAMAX RADIATOR SYSTEM CLEANER**13.2 Packaging**

Methods of disposal: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Type of waste	Name of waste	Category of waste
15 01 10	Packaging containing residues of hazardous substances or contaminated by dangerous substances	N

SECTION 14. TRANSPORT INFORMATION

ADR	This product does not require a classification for transport.
UN proper shipping name	-
Transport hazard class	-
Packing group	-
Hazard No.	-

SECTION 15. REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
EU Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU**Annex XIV - List of substances subject to authorisation****Substances of very high concern**

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles: Not applicable.

EU Regulation (EC) No 1272/2008 of the European Parliament and of the Council**Other EU regulations**

Europe inventory : All components are listed or exempted.

Black List Chemicals : Not listed

Priority List Chemicals : Not listed

Integrated pollution prevention and control list (IPPC) - Air: Not listed

Integrated pollution prevention and control list (IPPC) - Water: Not listed

International regulations

Chemical Weapons Convention List Schedule I Chemicals: Not listed

Chemical Weapons Convention List Schedule II Chemicals: Not listed

Chemical Weapons Convention List Schedule III Chemicals: Not listed

15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

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SECTION 16. OTHER INFORMATION

Reason for Revision:

11.10.2018 - Classification of the mixture of the European Parliament and Council Regulation (EC) No. 2015/830

16.1 Text of H-phrases (point 3):

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.

16.3 Other information:

The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. This does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field.