

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 PRODUCT IDENTIFIER. PRODUCT TRADE NAME: **XADO gel-revitalizant (in assortment):**

- 1) gel-revitalizant for gasoline engines
- 2) gel-revitalizant for diesel engines
- 3) gel-revitalizant for gear boxes, transfer cases and differentials
- 4) gel-revitalizant for compressors and bearings
- 5) gel-revitalizant for small engines
- 6) gel-revitalizant for shooting sports equipment
- 7) gel-revitalizant for barrels of rifled arms
- 8) gel - revitalizant for cylinders

EC № and CAS №: mixture (see section 3). Molecular formula: no data available. IUPAC name: mixture.
Ingredients REACH numbers: none.

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

IDENTIFIED USES: Additive for technical friction systems. Consumer, industrial, professional use.

USES ADVISED AGAINST: No data available.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

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1.4 EMERGENCY PHONE NUMBER: Europe: 112, USA: 911, CIS countries: +7(495) 628-16-87

SECTION 2. HAZARD IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

ACCORDING TO DIRECTIVE 1999/45/EC: Not danger. ADDITIONAL INFORMATION: M-factors and specific concentration limits: none. Classification and labelling according to GHS/Regulation 1272/2008/EC see in sec. 15.

HUMAN HEALTH AND ENVIRONMENTAL EFFECTS:

Inhalation	Inhalation of oil mist may cause irritation of the respiratory system, headaches, nausea and breathing difficulties.
Eyes effect	Expected no more than mild irritation.
Skin effect	Prolonged or repeated exposure may lead to dermatitis.
Ingestion	Strong coughs, vomiting.
Environmental effect	Major emissions may have a harmful or disturbing effect.

2.2 LABEL ELEMENTS ACCORDING TO DIRECTIVE 1999/45/EC:

Symbol of danger: none. R-phrases: none. S-phrases:

S2 Keep out of the reach of children.

S24 Avoid contact with skin.

S46 If swallowed, seek medical advice immediately and show this container or label.

Safety data sheet available for professional user on request.

2.3 OTHER HAZARDS:

Defatting to the skin. Note: High Pressure Applications. Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency (see section 4.3).

Inhalation of thermal decomposition products may be harmful.

PBT and vPvB assessment: not applicable.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS:

SUBSTANCE OR MIXTURE: Mixture.

CHEMICAL CHARACTERIZATION OF THE PRODUCT: Paraffin oil, thickener and additives.

HAZARDOUS INGREDIENTS:

Name	CAS №	EC №	Index №	Concentration (wt. %)	Classification according to 67/548/EEC	Classification according to 1272/2008/EC
Paraffin oil *	8012-95-1	232-384-2	-	65 - 80	Not danger	Not danger

* - substance with occupational exposure limit. Occupational exposure limit values, if available, are listed in section 8.

SECTION 4. FIRST-AID MEASURES

4.1 DISCRIPTION OF FIRST-AID MEASURES

GENERAL INFORMATION: None.

IF INHALED: If discomfort occurs - fresh air and rest.

ON SKIN CONTACT: Wash exposed skin with soap and warm water.

ON CONTACT WITH EYES: Rinse with running water for several minutes with eyelids held open. Then remove contact lenses if present and easy to do – and continue rinsing for at least 15 min. Obtain medical advice if discomfort persists.

ON INGESTION: Immediately flush mouth thoroughly. Immediately seek medical advice and show this safety data sheet. Do not induce vomiting without medical advice. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Never give anything by mouth to an unconscious person.

4.2 MOST IMPORTANT SYMPTOMPS AND EFFECTS, BOTH ACUTE AND DELAYED: See section 2.1, 11.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Treat according to symptoms. No know specific antidote.

Note: High Pressure Applications.

Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.

SECTION 5. FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING MEDIA: Foam, powder, carbon dioxide (CO₂).

EXTINGUISHING MEDIA WHICH MUST NOT BE USED FOR SAFETY REASONS: Full waterjet.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

SPECIFIC HAZARD: When exposed to heat, may decompose liberating hazardous gases.

HAZARDOUS COMBUSTION PRODUCTS: Fume and other.

5. ADVICE FOR FIREFIGHTERS

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS: Self-contained breathing apparatus, special fire-fighting clothing (including helmets, protective boots and gloves).

SPECIFIC METHODS: Move container away or cool with water from a protected position. Prevent water used in emergency cases from entering sewers and drainage systems.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, POTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Only personnel, eliminating accident consequences, can stay stay in the area. Use personal protection equipment. Ensure adequate ventilation of the area. Eliminate leakage observing safety precautions. Risk of slipping due to spillage.

6.2 ENVIRONMENTAL PRECAUTIONS: Prevent spread over a wide area. Do not allow to enter sewers and drainage systems, surface waters, groundwater, soil. Inform local authorities if that happened.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP: Ventilate area. Gather not-contaminated product and use for intended purpose. The waste must be covered with sand, placed in containers for chemical waste and disposed of according to section 13 of this Safety data sheet. Clean contaminated area with a water-diluted soap. **6.4 REFERENCE TO OTHER SECTIONS:** See also section 8.2.

SECTION 7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING: Observe the occupational safety rules and personal hygiene rules. Do not smoke. Do not eat in work area. Avoid even short-term skin contact with used product. See also section 2.2

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

STORAGE: Store the product in original, not damaged package, in a well-ventilated cool and dry area.

Storage temperature: -40... +50 °C. INCOMPATIBLE MATERIALS: Oxidizing agents, alkalis.

REQUIREMENTS FOR THE PACKAGING: The packaging must be strong, leakproof, and good for transportation.

7.3 SPECIFIC END USE(S): No data available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS.

Occupational exposure limit (OEL) value: oil mist, 8 hours, 5 mg/m³.

National occupational exposure limits values:

Country (standard)	Substance name	CAS №, EC №,	Occupational exposure limit value, 8 hours		Occupational exposure limit value, short term	
			mg/m ³	ppm	mg/m ³	ppm
Spain (INSHT 2009)	Mineral oil (mist)	-	5	-	10	-
Latvia (LVS 89:2004)	Mineral oil	-	AER = 5	-	-	-

8.2 EXPOSURE CONTROLS

ENGINEERING CONTROLS: Work places must be well ventilated. Provide the places with local or general circulating ventilation system. Ensure that eyewash stations and safety showers are located close to the workstation.

RESPIRATORY PROTECTION: Respirator (EN 14387).

HAND AND SKIN PROTECTION: During handling with the product, use correspondent protective clothing and protective gloves.

Recommended gloves (with approximate permeation time \geq 8 hours): polychloroprene - CR (0,5 mm), nitrile rubber/nitrile latex - NBR (0,35 mm), butyl rubber - butyl (0,5 mm), fluoro carbon rubber - FKM (0,4 mm), polyvinyl chloride - PVC (0,5 mm).

Due to many conditions (e.g. temperature) it must be considered, that a real permeation time may be much shorter than a approximate permeation time. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

EYE PROTECTION: Wear protective goggles (EN 166).

GENERAL HEALTH AND SAFETY MEASURES: See section 7.1.

ENVIRONMENTAL EXPOSURE CONTROLS: See section 13.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

AGGREGATE STATE:	gel
COLOR:	characteristic for concrete gel-revitalizant type
ODOUR:	characteristic
ODOUR THRESHOLD:	no information available
HYDROGEN ION CONCENTRATION (pH):	not applicable
MELTING POINT/FREEZING POINT, °C:	no information available
INITIAL BOILING POINT AND BOILING RANGE, °C:	no information available
FLASH POINT (BASED ON THE BASE OILS), °C:	>120
EVAPORATION RATE:	no information available
FLAMMABILITY (SOLID, GAS):	not classified as flammable, but at high temperatures will combust
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS, % vol.:	no information available
VAPOR PRESSURE, kPa:	no information available
VAPOR DENSITY:	no information available
RELATIVE DENSITY, kg/m ³ :	880 - 980 at 65 °C
SOLUBILITY(IES):	not soluble in water
PARTITION COEFFICIENT: N-OCTANOL/WATER (Log Pow):	no information available
AUTO-IGNITION TEMPERATURE, °C:	no information available
DECOMPOSITION TEMPERATURE, °C:	no information available
KINEMATIC VISCOSITY, mm ² /s	not applicable
EXPLOSIVE PROPERTIES:	not explosive
OXIDISING PROPERTIES:	the product is not oxidant

9.2 OTHER INFORMATION: None.

SECTION 10. STABILITY AND REACTIVITY

10.1 REACTIVITY: None under normal conditions.

10.2 CHEMICAL STABILITY: Following strictly the rules of handling with the product and safety regulations, the product stays stable.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS: None under normal conditions.

10.4 CONDITIONS TO AVOID: Moisture. Also see section 7 and 2.2.

10.5 INCOMPATIBLE MATERIALS: See section 7.2.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: See section 5.2

SECTION 11. TOXICOLOGIC INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

11.1.1 ACUTE TOXICITY: *For paraffin oil, CAS № 8012-95-1*: oral, rat, LD50 = 24000 mg/kg.

11.1.2 IRRITATION: See section 2.1.

11.1.3 CORROSIVITY: Not expect.

11.1.4 SENSITIZATION: Not expect.

11.1.5 REPEATED DOSE TOXICITY: See section 2.1.

11.1.6 CARCINOGENICITY: Not expect under recommended handling.

11.1.7 MUTAGENICITY: Not expect mutagenicity.

11.1.8 TOXICITY FOR REPRODUCTION: Not expect toxicity for reproduction.

SECTION 12. ECOLOGICAL INFORMATION

12.1 TOXICITY: Major emissions or frequently recurring minor emissions may have a harmful or disturbing effect. No test data available.

12.2 PERSISTENCE AND DEGRADABILITY: Biological degradability: not expect readily biodegradable.

12.3 BIOACCUMULATIVE POTENTIAL: Not expected to bioaccumulation through food chains in the environment.

12.4 MOBILITY IN SOIL: In the event of spillage on the ground, the product will be adsorbed to earth particles.

12.5 RESULTS OF PBT AND vPvB ASSESMENT: Not applicable.

12.6 OTHER ADVERSE EFFECTS: No information available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

13.1.1 PRODUCT/PACKAGING DISPOSAL: Dispose of contents/container in accordance with local/regional/national/international regulations.

WASTE DISPOSAL: European waste codes: 13 08 99 (oil waste not otherwise specified).

PACKAGE DISPOSAL: European package waste code 15 01 04 (metal packages), 15 01 02 (plastic packaging).

13.1.2 WASTE TREATMENT-RELEVANT INFORMATION: See handling with the product (sections 7).

13.1.3 SEWAGE DISPOSAL-RELEVANT INFORMATION: Do not allow product to reach sewage system.

SECTION 14. TRANSPORT INFORMATION

The product is transported by air, railway, road or marine transport in compliance with the rules for this mode of transportation. The product is stored in the original packages.

Land transport (ADR/RID):

UN-nr	3082
Proper shipping name	ENVIROMENTALLY HAZARDOUS SUBSTANCE, N.O.S.
Class	9
Classification code	M6
Packing group	III
Hazard label(s)	9
Environmental hazard	Yes
Special provision(s)	None

Marine transport (IMDG/IMO):

UN-nr	3082
Proper shipping name	ENVIROMENTALLY HAZARDOUS SUBSTANCE, N.O.S.
Class	9
Packing group	III
Hazard label(s)	9
Matine pollutante	Yes
Special provision(s)	None

Air transport (ICAO/IATA):

UN-nr	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, N.O.S.
Class	9
Packing group	III
Hazard label(s)	9
Environmental hazard	Yes
Special provision(s)	None

SECTION 15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATION/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

CLASSIFICATION ACCORDING TO GHS/REGULATION (EC) No 1272/2008/EC: Not danger.

LABEL ELEMENTS ACCORDING TO GHS/REGULATION (EC) No 1272/2008/EC:

P102: Keep out of reach of children.

EUH210: Safety data sheet available on request.

THE PRODUCT IS NOT IN THE SCOPE OF DIRECTIVE 1999/13/EC AND DIRECTIVE 2004/42/EC.

VOLATILE ORGANIC COMPOUNDS ACCORDING SWITZERLAND LEGISLATION (VERORDNUNG ÜBER DIE LENKUNGSABGABE AUF FLÜCHTIGEN ORGANISCHEN VERBINDUNGEN (VOCV) 814.018): the product ingredients doesn't refer to The Positive List of substances (Stoff-Positivliste (der Abgabe unterstellte flüchtige organische Verbindungen, VOC)).

REGULATIONS:

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH);
- Regulation (EC) No 1272/2008/EC (CLP);
- Regulation (EU) No 453/2010;
- ISO 11014:2009 Safety data sheet for chemical products – content and order of sections;
- European Union directive 67/548/EEC;
- European Union directive 1999/45/EC;
- European commission directive 2009/161/EU list of occupational exposure limit values.
- 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;
- European agreement concerning the international carriage of dangerous goods by road "ADR 2011" (United Nations, New York and Geneva, 2010);
- INSHT 2009 "Límites de exposición profesional para agentes químicos en Espaca" Occupational exposure limit values of chemical substances in work environment for professionals (Spain),
- ED 984 Occupational exposure limit values of chemical substances in work environment for professionals (France),
- LVS 89:2004 Occupational exposure limit values of chemical substances in work environment (Latvia).
- DSTU 4500-1:2008 Dangerous goods. Terms and definitions. DSTU 4500-3:2008 Dangerous goods. Classification.
- DSTU 4500-3:2006 Dangerous goods. Tests methods. DSTU 4500-5:2005 Dangerous goods. Marking and placarding. (*Ukrainian standards harmonized with international dangerous goods transportation regulations*).

15.2 CHEMICAL SAFETY ASSESSMENT: Not applicable.

SECTION 16. OTHER INFORMATION

EVALUATION OF HAZARD INFORMATION FOR SUBSTANCES AND MIXTURES:

Classification of mixtures when data are available for all components or only for some components of the mixture, the theory of additivity (according to article 9 of Regulation (EC) No 1272/2008).

CHANGES AS COMPARED WITH PREVIOUS SDS VERSION: Versions 1/1 and 1/2: section 11. Versions 1/2 and 1/3: section 2.1 (human health and environmental effects - skin effect), section 5.2. Versions 1/3 and 1/4: section 4.1.

USED ABBREVIATION:

PBT and vPvB - "Persistent, Bioaccumulative and Toxic" and "very Persistent and very Bioaccumulative".

CIS - Commonwealth of Independent States.

SDS – Safety data sheet.

SOURCES OF INFORMATION:

- site European Chemicals Agency (<http://apps.echa.europa.eu>),
- site The Information system on hazardous substances of the German Social Accident Insurance (GESTIS) (<http://gestis-en.itrust.de/>),
- site United Nation Economic Commission for Europe (<http://www.unece.org/>),
- Safety data sheets.

OTHER INFORMATION:

All information in this SDS is based on our current knowledge by the time of making SDS. Neither should any agreed property nor the suitability of the product for any specific purpose be deducted from the data contained in the safety data sheet.

It is an obligation for the users to use this product with care and to observe the applicable laws and regulations concerning the use of this kind of products.

The company does not assume responsibility for deficiencies, damages or injuries resulted from non-compliance to the safety and other measurements of this Safety data sheet, nor for any defect or risk ensuing from the nature of the product, nor for abnormal applications of the product.

If the product is purchased with the aim to its further supply to the third party, the buyer must provide any person, handling with this product, with the information contained in this safety data sheet. The employers must inform their employees and other people, who can be exposed to any danger described in this Safety data sheet, about the necessary precautionary measures.

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XADO–Technology Ltd. research engineer D.A. Shaposhnikov