

## ***CLEANING AND DEGREASING EMULSIVE BIOTECHNOLOGICAL FLUID***

**Immediate compensation of Trichloro-1,1,1,-etane, Perchlorethylene, Hydrokarbon, organic diluents and petrol**

**Unique removes mineral and vegetable oils, lubricants, tar, bitumen and oil products, non curing PU matters, epoxy and polyester adhesives**

**Water diluted emulsion (from 3%)**

**Extreme degreasing and removing power**

**100% biodegradable degreaser**

**Anticorrosive**

**ABSOLUTLY SAFETY, WITHOUT VOC**



**IMPASOL® BIO E** is specifically developed biotechnology liquid, absolutely different from harmful hydrocarbon degreasers and cleaners. It is emulsive cleansing and degreasing liquid that was developed for safety and economic cleaning of metal surfaces. Removes uniquely bitumen, ink, oil, lubricant, fat. Another using is at removing remains of non curing adhesives, sealants and remains of oil products combustion (tar). It operates instead of hydrocarbon degreasers or any degreasers oil based.

**IMPASOL® BIO E** is up to standard most strict working (health protection, non flammable, non toxic, usable in enclosed and unventilated places) and enviromental requirements under the very advantageous economic conditions.

Product is perfect for excellent removing of mineral oils, impurities, petrols, bitumens, emulsive oils and for lubricant and combustion remains removing. The widest utilization is in places where can come about degreaser-escape into environment. It is compatible with all materials such as metal, plastic, elastomer and rubbers, concrete, paving and another building materials.

You avoid to venomous, toxic, cancerogenic, dangerous and combustibile degreasers by using of **IMPASOL® BIO E**. You resolved working (e.g. incombustibility according to 99/92/EC ATEX Zona) and enviromental (EMS, ISO 14000) matters in your company and escape from sanction for neglect of the strict ecological and working rules.

**Warranted without VOC, ATOMATES, CHLORINE, BROMINE, GLYCOL, HEAVY METALS, CFC, HCFC, HFE and oil derivates.**

**IMPASOL® BIO E** is absolutely pure degreaser without aggressive odour. It is usable at all branches of engineering, oil, rubber, printing, electrotechnic, packaging, agricultural, textile and building industry.

**IMPASOL® BIO E** is applicable for all types of metals. With its safety composition (it is not very flammable, toxic or venomous product) is this product designed for degreasing and removing of impurities from machines and machine complex in industry, building and agriculture where is not classified as extreme or very flammable matter.

# IMPASOL® BIO E

## BENEFITS:

- + *CLEANER IN COLD AND WARM*
- + *WATER DILUTED*
- + *VERY ECONOMIC*
- + *RECYCLABLE*
- + *ANTICORROSIVE*
- + *WATER RINSING*
- + *SAFETY*
- + *NON FLAMMABLE*
- + *NON TOXIC*
- + *ODOURLESS*

Warranted without venomous, karcinogenic and toxic matters and derivates.

## APPLICATION and USAGE

**IMPASOL® BIO E** IS EFFECTIVE FOR MOST OF IMURITIES at using in concentrate and later power water rinsing.

### Excellent results for:

- Mineral oil ..... excellent
- Vegetable oil ..... excellent
- Pressing oil ..... excellent
- Emulsive oil ..... excellent
- Bitumen and tar ... excellent
- Petrols ..... excellent

### Good effectivity with mechanical help:

- Mineral lubricant ..... excellent
- Synthetic lubricant ..... excellent
- Synthetic oil ..... excellent
- Paints and inks ..... excellent
- polyurethane, epoxy and polyester adhesives ..... excellent

Example of IMPASOL BIO E concentration in dependence on application method:

# IMPASOL® BIO E

Is aplicable such as 5-12% emulsion or 3% emulsion for general hand washing.

8 až 12 % emulsion of **IMPASOL® BIO E** removes in cold rough impurities in oil transfer stations, storage vessels (rinsing of drums), from very polluted motors, transport reservoirs or at spray washing.

**IMPASOL® BIO E** 5 - 8 % concentrate is sufficient for extra effective cleaning of all surfaces polluted with light hydrocarbons (petrol marks, oil, etc.), other fuelling, remainders originates at wood combustion (natural resin), gases and oils.

**Usable pure, non-diluted IMPASOL® BIO E** allows immediate dissolution or removal of bitumen or asphalt marks etc.; it is an excellent diluter that is able to substitute chlorinate or aromatic solvents; perfect for elimination of bitumen from machines.

After a short time of operation non-diluted **IMPASOL® BIO E** it is possible to sprinkle with water with or without pressure very slightly; thereby happen to saving of material.

**For frequency washing** is full sufficient aqueous solution of 3 % **IMPASOL® BIO E**. In this concentration provides an excellent effectivity for hand removing of impurities e.g. machines, motors, working surfaces and hand tools, floors etc.

**IMPASOL® BIO E** eliminates fast all tars incl. that are coming from remains at combustion or vegetable originates tars (bitumen from Jude, tar from Norvege).

**IMPASOL® BIO E** is perfect solvent for removing of all petroleum derivates (also organic origin) cutting oils or emulsions for machining (e.g. cutting operation) and metal, grease, lubricants, separators and lubricating liquids shanking.

**IMPASOL® BIO E** is perfect for machines and motors in engineering cleaning where at very advantageous economic parameters fulfil the most strict ecological standards incl. ISO 14001.

**IMPASOL® BIO E** removes efficient consequences of oil accidents with perfect removing of all remainders (fuelling, oils and fats, mazut, tar). Removes also remainders from floors and roads after accidents. This product is absolutely safe for environment.

**IMPASOL® BIO E** is used for cleaning and washing cars, building, agricultural and logging machines.

**IMPASOL® BIO E** is used for :

- + hand wash
- + soaking
- + in flooring machines
- + low-pressure spattering
- + high-pressure spattering
- + in biological washing equipments till + 60°C
- + immersion in tanks in cold or in warm till + 80°C
- + immersion in tanks with circle in cold or in warm till + 80°C

## SAFETY

**IMPASOL® BIO E** is 100% **BIODEGRADABLE** washing and degreasing liquid **WITHOUT OIL DERIVATES AND VOC.**

## DEVELOPED WITHOUT SOLVENTS AND WITHOUT VOC

Regulation EU regarding VOC 1999/13/EC (emission) is not relevant from 29. May 2000 to **IMPASOL® BIO E**. The main reason for its development (BIOTECHNOLOGY) is effort at production of health unexceptionable product that shall have no negative influence for human health. With regard to solvents absence (oil fraction and VOC) the manipulation with **IMPASOL® BIO E** can't be the cause of any occupational disease (n°84).

## DEVELOPED FOR IMPROVEMENT OF HYGIENE

**IMPASOL® BIO E** contain ANY SOLVENTS, doesn't emit unhealthy vapours.

## PLEASANT USING – HEALTH PROTECTION

**IMPASOL® BIO E** doesn't emit no dangerous vapours that are able to affect the respiratory system or evocate headaches, eventually daze. Vapours does not affect the health of people and allows continuous operating at work with **IMPASOL® BIO E**. Smell of it is very weak.

**IMPASOL® BIO E** RESPECTS HELTH OF WORKERS, its composition fully conform to demands for using of degreasers at people health protection, labour protection and enviroment because it doesn't emit dangerous vapours.

**IMPASOL® BIO E** IS NOT registered such as FLAMMABLE, IRRITABLE, TOXIC, UNHEALTHY, DANGEROUS FOR ENVIROMENT, ETC..

Doesn't contain AROMATES, BENZENS, CHLORINE, BROMINE and other very dangerous matters and allied substances. **IMPASOL® BIO E** is not resorb of skin (in contrast to other degreasers), and thereby is the risk of allergy and dermal diseases reducting.

**IMPASOL® BIO E** does not damage the health of people and doesn't evocate occupational diseases.  
**IMPASOL® BIO E** HAS ANY OF THESE SYMBOLS!!



**IDEAL FOR OPEN WASHING (TANKS, OPEN LINES, ETC.), IS NOT NECESSARY EXHAUSTION. IN ANY CASE DOESN'T DAMAGE HEALTH OF WORKERS.**

Using **IMPASOL® BIO E** without VOC doesn't requires any following investment in expensive conveyor wash, exhaustion, safety precautions, special stores of combustibles and caustic etc.. Easy to adapt at every degreasing process (very suitable for sousing and dipping bath).

**IMPASOL® BIO E** is usable at many production and servis spheres, where is not possible to use classical hydrocarbons and organic diluents, doesn't deteriorate working conditions.

## **IMPASOL® BIO E** – POSITION TO VOC

**REDUCE NEGATIVE EFFECTS OF DEGREASERS AT SURFACE CLEANING  
OBSERVE THE RULES AND HEALTHY PROTECTION CONTRACTS  
OBSERVE THE RULES AND ENVIROMENT PROTECTION LAWS**

## VOC-Volatile Organic Compounds

volatile organic compounds, simply told volume of organic solvents

Substance compound of  $\square$  \*carbon, H<sub>3</sub>O and partial of oxygen, nitrogen, sulfur, chlorine, bromine, fluorine whose initial boiling point is greater than 250°C (this limit is very high and most of the solvents is VOC). Directive 1999/13/EC on emissions of volatile organic compounds).

\* Composition of VOC volatile organic compounds - benzene, toluene, ethylbenzene, sum of xylene, styrene, methylchloride, trichlorethanol, chlorobenzene, sum of dichlorobenzenes, sum of trimethylbenzenes, dichlormethane, carbon tetrachloride, trichlorethylene, tetrachlorethylene, 1,1,1 - trichlorethane, Freon 11, Freon 12 a Freon 113

### User of VOC products must e.g. :

- reporting using of this products and consumption according to:
- ORGANIC SOLVENTS USERS' DECLARATIVE SHEET (according to § 2 letter i) this regulation) Appendix no. 6 to regulation no. 355/2002 Collection of Laws VOLATILE ORGANIC COMPOUNDS AND PRODUCTS CONTAINING IT.
- reporting using of this products outside to municipal authority
- having stocks equipped for VOC. e.g.,:
- Roof and external walls of tanks above the ground level must be equipped with reflective coating having total radiant heating energy reflection minimally 70 %.

### Labour protection ensure:

- + Ventilation flammable, combustible and dangerous exhalations
- + Respiratory system of workers protection – masks, filters, reserved breathing resistance
- + Protecting working appliances – gloves for carbonic products, facial shields
- + Non flammable and antistatic equipment at applications

**IMPASOL<sup>®</sup> BIO E** GUARANTEED WITHOUT  
VOC, IT MUST SATISFY ANY RULES !!!

**IMPASOL<sup>®</sup> BIO E** SATISFY :

- ✓ EU directive on healthy and environment protection
- ✓ Directive 1999/13/EC on emissions of volatile organic compounds
- ✓ Directive 99/92/EC (no need to classified working places into ATEX ZONES)
- ✓ Directive 1999/45/EC



- very effective dissolvent for wide range
- extra strong dissolvent for most of oils
- strong dissolvent for most of the fats and vaselines
- strong carbonized tar remover
- dissolves crude petroleum uniquely
- for hand application (cloth, tampon and brush)
- for cleaning in washers, washing machines and for immersion in tank

PROPERTIES	NORM	VALUE	UNIT
Aspect	Visual	Liquid	
Colour	Intern CQ 016	Amber	
Odour		Extreme weak odour	
Volume-weight (25°C)	NF EN ISO 12185	890	Kg/m <sup>3</sup>
Flash point	ISO 2719	>160	°C
Autoignition point	ASTM E 659	>300	°C
Freezing point		1	°C
Emulsions freezing point		1	°C
Vapour pressure (20°C)	NF M 07 007	<0.01	kPa
Lower explosion limit		Non explosive	% v/v
Upper explosion limit		Non explosive	% v/v
Kauri Butanol index	ASTM D 1133	<b>158</b>	
VOC content		0	%
Aromatics content		0	ppm
Chlorine content		0	ppm
Bromine content		0	ppm
Heavy metals content		0	ppm
Ether glycols content		0	ppm
CFC, HCFC, HFE content		0	ppm

## USING

IMPASOL® BIO E can be used pure or diluted, in cold or warm till 80°C. Can't be used for cleaning with vapour. IMPASOL® BIO E can be applied by cloth, in tank, by spattering or without mixture (circuits).

Using IMPASOL® BIO E doesn't requires any following investment in expensive conveyor wash, exhaustion (combustion), safety precautions, special stores of combustibles and caustic etc.. Easy to adapt at every degreasing process (very suitable for sousing and dipping bath).

IMPASOL® BIO E is pure degreaser applicable for all types of materials. We advice blowing cleaning parts with warm air (60 – 80°C) for a few minutes for quicker evaporation or using IMPASOL® BIO E at the temperature till 80°C to be achieved fast drying (c. 15 minutes). We advice removes all sign of corrosion and oxidation by flatting down or wire brush.

Contact technical department of our company before using in food processing industry.

BALENÍ : kag 20l, drum 200l

STORAGE : Keep away from children and sources of combustion.

HEALTH AND SAFETY : Avoid direct eye contact. Read the material Data Sheets before using. Quoted values are average and do not represent the specification.

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