

Presented by AQUAQUICK GLOBAL B.V

# AQUAQUICK 2000<sup>®</sup>

We will clean the future

# INTRODUCTION

1

## **Completely User and Environment Friendly**

AQUAQUICK 2000 contains only natural ingredients with no chlorides, solvents, or alkaloids present. AQUAQUICK 2000 has been approved and tested by numerous independent research institutes around the world with classifications of certification for use.

2

## **Accelerates Biodegrading of Oil Spills in the environment**

It contains a mixture of nutrients that accelerate bacteria growth in water purification plants, sewage treatment systems, and other micro-organism rich environments, as in rivers, streams, lakes, and forests. The microbes rapidly breakdown and fully biodegrade the emulsified hydrocarbon residues into a harmless and environmentally safe byproduct that can simply be wiped away.

4

**Can be used as a fire extinguisher**  
AQUAQUICK 2000 has been approved for use by Fire Departments in Jakarta, Indonesia as well in other countries as a fuel fire retardant to put out the fire and can be used to clean up the mess after.

3

## **Non-Toxic to all Aquatic Organisms**

AQUAQUICK 2000 in its diluted state of 1:50 which is 10mL of AQUAQUICK 2000 mixed into 1 Liter of water; can be used to clean oil spills that have covered animals and vegetation in aquatic environments.

5

## **Reduces chemical waste**

AQUAQUICK 2000 bio-molecularly breaks down the cohesion of the structures of hydrocarbons by creating a micro emulsion into particles of about 3 microns. These microns and special nutrients produce an explosion of growth in the bacteria that is in the environment causing it be easily removed.

6

## **Total cleaning solution**

AQUAQUICK 2000 is suitable to clean any hydrocarbon pollution and has been approved for cleaning products in these industries: Oil and Gas, Government Agencies, Motor and Engineering, Shipping and Marine, Aviation Industry, Manufacturing, Food and Beverage Industry, and General Cleaning Industries.



# BACKGROUND OF AQUAQUICK2000

- has been developed in close cooperation with the University of Twente
- AQUAQUICK2000 has been produced in the Netherlands since 1988.
- It is our company's commitment to manufacture and market products which will help the environment to recover

# AQUAQUICK 2000 IS USER FRIENDLY

## Dermatological

Concentrated AQUAQUICK 2000 has been tested dermatological and is non-irritating and non-corrosive to the human skin

Dermatological

No precautions

Non irritating

Non corrosive

## Non Irritating

Diluted (2%) AQUAQUICK 2000 is non-irritating and non-corrosive to both the human eye and the human skin.

## No Precautions

No special safety precautions needed.

## Non Corrosive

Concentrated AQUAQUICK 2000 is non-corrosive to the human eye, but can be slightly irritating.



# AQUAQUICK 2000 PRODUCTS

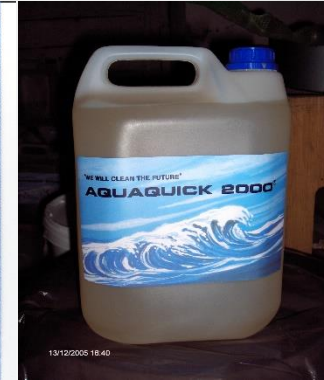
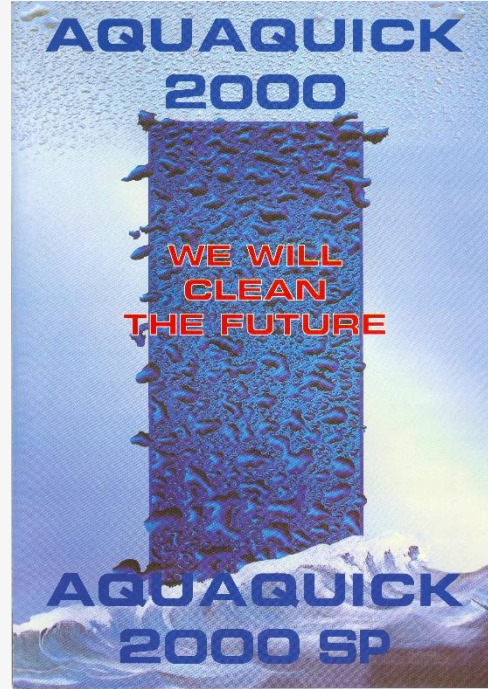
## AQUAQUICK 2000

AQUAQUICK 2000 is a revolutionary, water based cleaning product, that is composed out of ecological materials and plant extracts. The product is very suitable for the elimination of all animal, vegetable, synthetic and mineral oils and greases (hydrocarbons) in a 100% environment friendly way.



## AQUAQUICK 2000 SP

AQUAQUICK 2000 SP is an user and environment friendly cleaning product which is very suitable for the removing and cleaning of all mineral, vegetable, animal and synthetic, oils and greases (hydrocarbon). Opposite to AQUAQUICK 2000, AQUAQUICK 2000 SP does not accelerate the biodegradation of hydrocarbon pollutions.





# Before & Afters



**Before:**  
Rig cleaning



**Before:**  
Fire extinguishing



**Before:**  
Wildlife saving



**Before:**  
Equipment cleaning



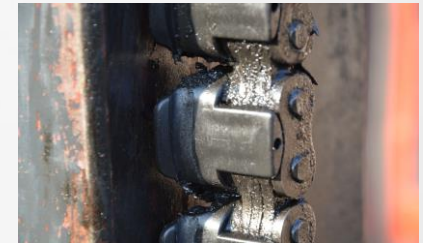
**After:**  
Rig cleaning



**After:**  
Fire extinguishing



**After:**  
Wild life saving



**After**  
Equipment cleaning



**Before**

**After**





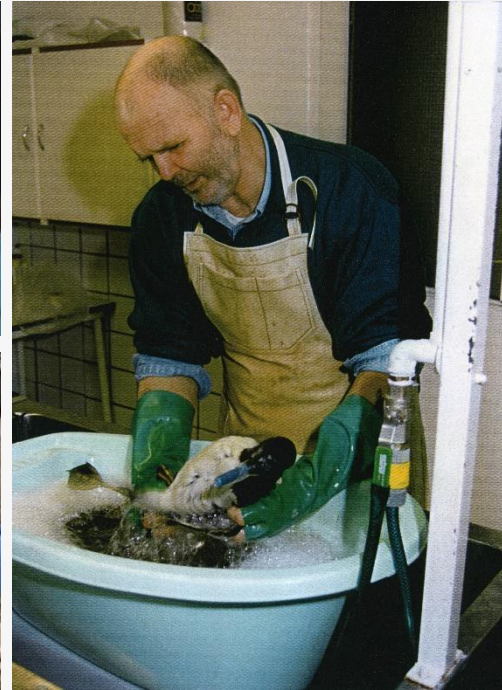
# After



# Before

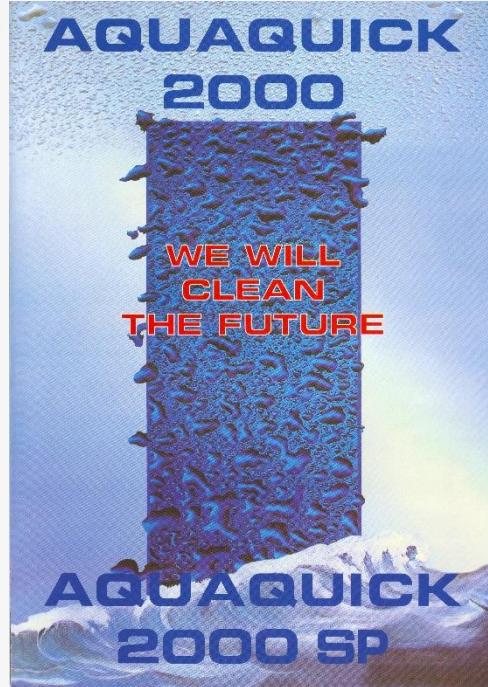








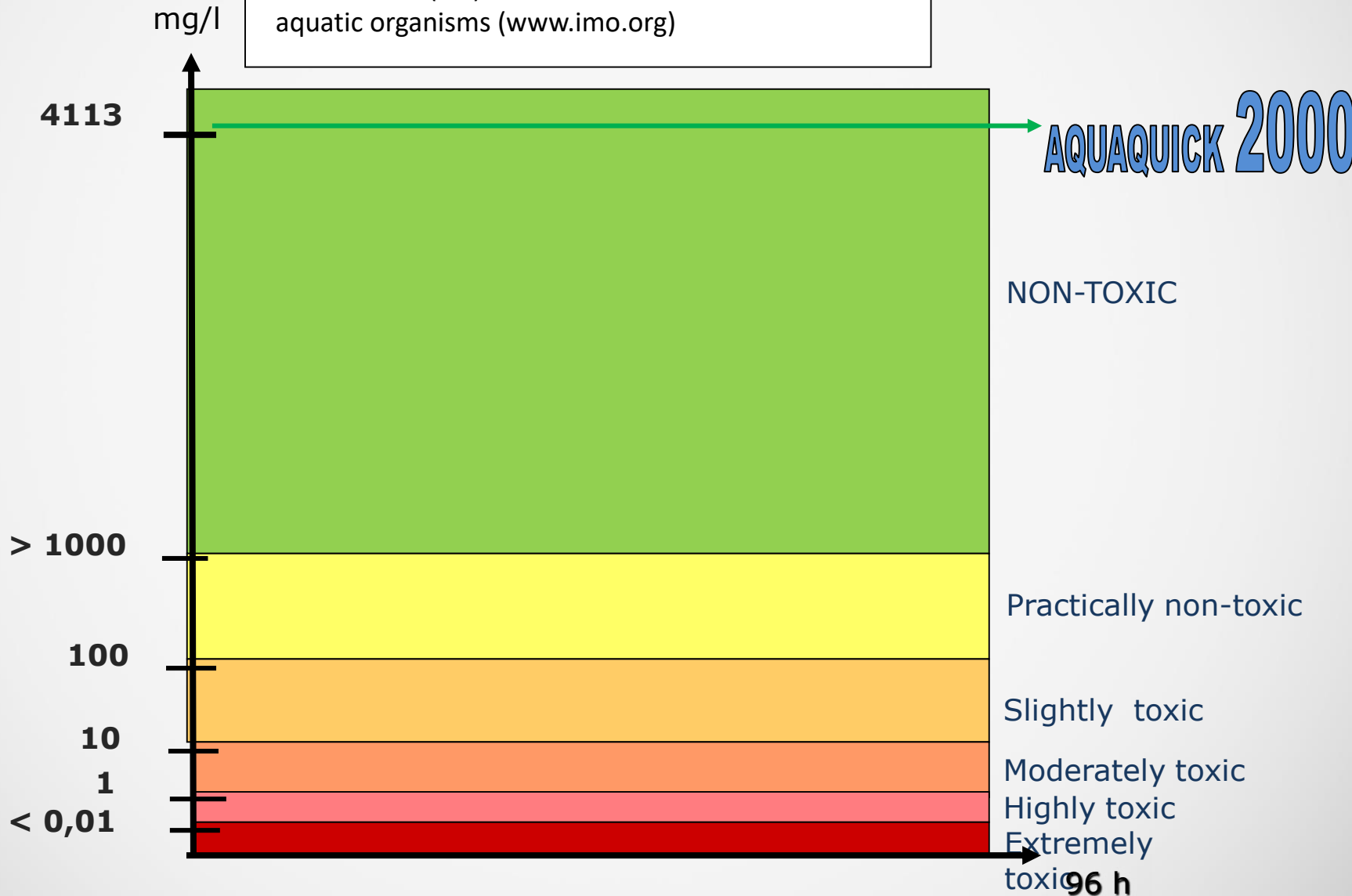
# Oil spill cleaning demos





# Toxicity of AQUAQUICK 2000

According to the IMO (International Maritime Organization), AQUAQUICK 2000®, in its minimum dilution rate (2%) can be considered as NON toxic to aquatic organisms ([www.imo.org](http://www.imo.org))



Test results of the study done by Corelab Indonesia.

Days	Biodegradability Test		Unit	Method
	reference	AQUAQUICK		
Day - 0	0	0	%	OECD 306
Day - 5	12.1	27.8	%	OECD 306
Day - 10	40.8	65.3	%	OECD 308
Day - 15	71.3	89.1	%	OECD 309
Day - 28	76.3	89.1	%	OECD 310

Information: AQUAQUICK 2000® can be biodegraded more than 60 % and can be classified as “readily biodegradable”

## Note:

The biodegradability test was done in sea water while using the OECD 306 method (closed bottle).

# LEMIGAS Indonesia

examined the effect of AQUAQUICK 2000 on the biodegradation of heavy crude

(Total Kalimantan, >C40) & light crude (Pertamina South Sumatra, < C30).

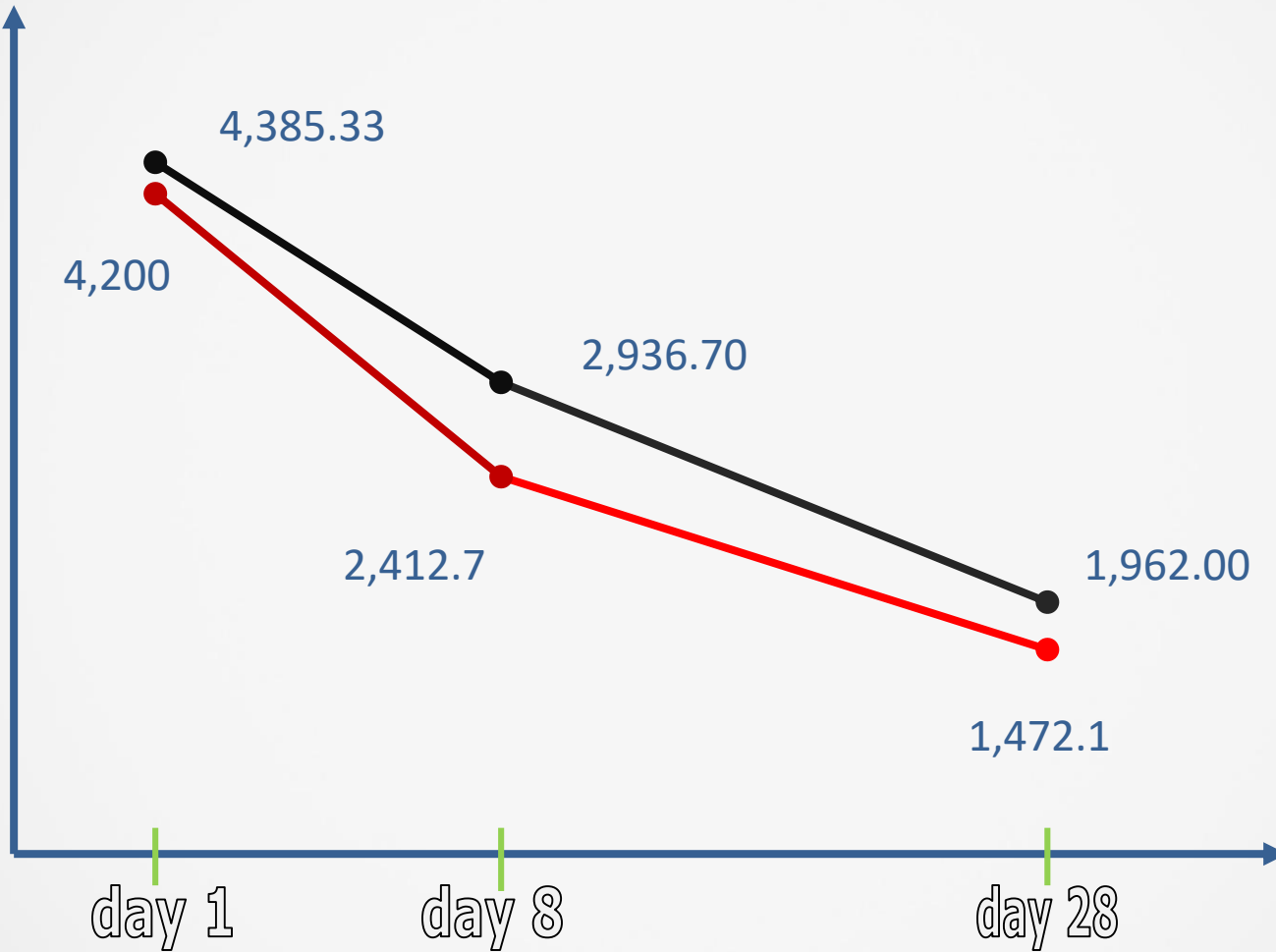
Also the effect of AQUAQUICK 2000 on the growth of micro-organisms was examined



# Test results from the study of LEMIGAS

No	Samples	Oil Content (mg/L)	Oil Content % reduced	Microbial Population (Cell/ML)
<b>HEAVY OIL</b>				
1	Day (0)	4385.33		4.300.000
2	Day (8)	2936.70	-33.03	138.000.000
3	Day (14)	2352.00	-46.37	160.000.000
4	Day (21)	2026.00	-53.80	130.000.000
5	Day (28)	1962.00	-55.26	62.000.000
<b>LIGHT OIL</b>				
1	Day (0)	4200.00		12.700.000
2	Day (8)	2412.70	-42.55	150.000.000
3	Day (14)	1566.00	-62.71	80.000.000
4	Day (21)	1539.30	-63.35	16.000.000
5	Day (28)	1472.10	-64.95	12.000.000

# Test results from the study of LEMIGAS

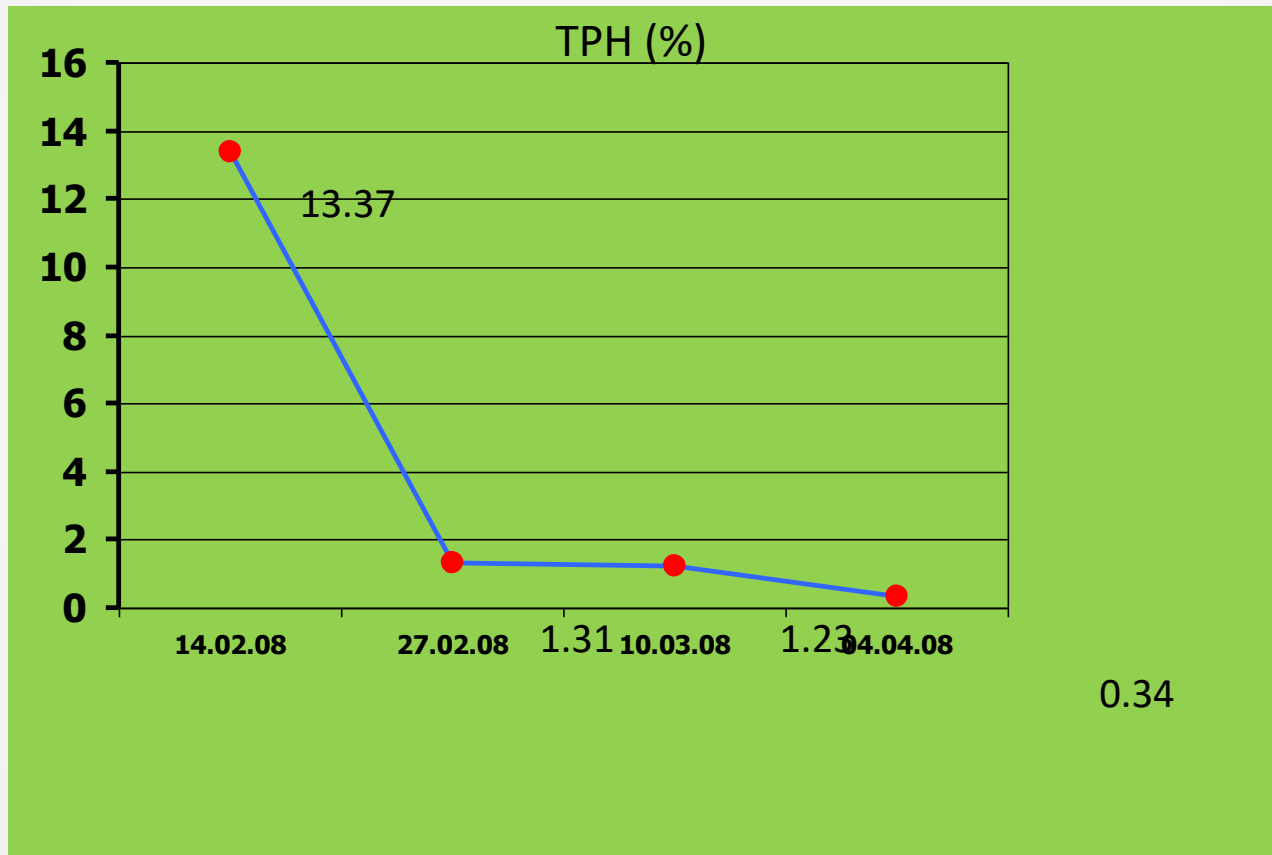


Heavy Crude oil (Total – Kalimantan >C40)



Light Crude oil (Pertamina – Sumatra <C30)

# Test results from the study of LEMIGAS LANDFARMING TEST AT CHEVRON PASIFIC INDONESIA



The required result (< 1%) achieved in 50 days



# Test results from the study of LEMIGAS



COLLECTING OF FLOATING OIL



SPRAYING AQUAQUICK 2000 TO REMOVE THE OIL



NIPA PALM TREES COVERED IN OIL



SPRAYING AQUAQUICK 2000 TO REMOVE THE OIL





11 2:40pm

REACTION OF AQUAQUICK 2000 WITH THE OIL



WATER AND TREES ARE CLEAN AFTER TREATMENT WITH AQUAQUICK 2000



WATER AND TREES ARE CLEAN AFTER TREATMENT WITH AQUAQUICK 2000



12 2:40pm

NIPA TREES AND WATER ARE CLEAN AFTER TREATMENT WITH AQUAQUICK 2000

Before use AQUAQUICK 2000® has to be diluted with large quantities of water (min. 1:50 = 2%).



AQUAQUICK 2000® breaks the cohesion of the molecule structure of hydrocarbons and creates a micro emulsion.



To remove grease with a melting point, the water temperature has to be > than the melting point.



AQUAQUICK 2000® contains special nutrients, it produces an explosive growth of bacteria which are present in the environment.



Some hydrocarbon “consuming” micro-organisms are: Micrococcus, Pseudomonas, Mycobacterium, Flavobacterium, Nocardia.



Micro-organisms are capable of full biodegradation of hydrocarbons.

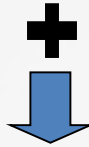


Carbon and hydrogen molecules combine with oxygen and are being converted into CO<sub>2</sub>, H<sub>2</sub>O and Biomass.

AQUAQUICK 2000®  
(2%)



Water



Mixture AQ 2000 & water



Breaks the cohesion of the molecule structure creating a micro emulsion

Oil spills / fat



Cohesion process



Aerobe process

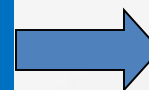


AQUAQUICK 2000 creates an explosive growth of bacteria



Sewage system or environmental situation

Micro emulsion



CO<sub>2</sub>, H<sub>2</sub>O & biomass

Most important is that AQUAQUICK 2000 will be mixed well with the pollution, by using mechanical force like a brush, broom or high pressure !!



**AQUAQUICK 2000<sup>®</sup>** does not contain chlorine, solvents, strong acids or alkaline.

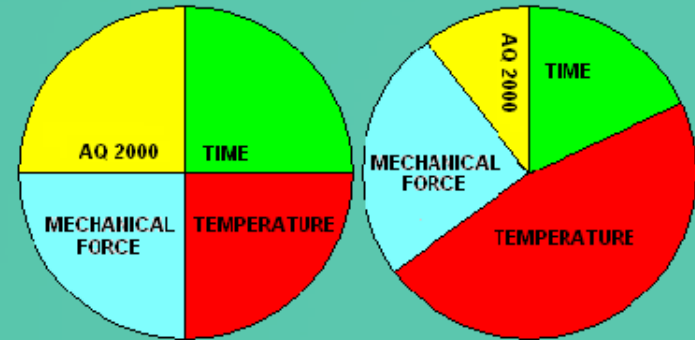
Before use, **AQUAQUICK 2000<sup>®</sup>** has to be diluted with water (minimum 2%)

Both sea and fresh water can be used

The diluted **AQUAQUICK 2000<sup>®</sup>** should be mixed well with the pollution, this can be done by using a broom, high pressure, etc.

Only dilute AQUAQUICK 2000 with water

In case of grease/fat with a melting point, the water temperature should be above the melting point of the grease/fat.



The higher the temperature of the water and the more mechanical force is being used, the higher the dilution rate for AQUAQUICK 2000

## AQUAQUICK 2000<sup>®</sup> Benefits :

- User and environment friendly
- Multi purpose product
- Energy and cost saving
- Non toxic to aquatic organisms
- Non irritation of human skin
- Non corrosive to eyes
- Non flammable
- Readily biodegradable (100% < 21 days)
- Accelerates biodegradation of hydrocarbon pollution
- Reduction of chemical waste.
- Safe for cleaning metal, plastic, paint, coating, rubber, textile, etc.
- Total Solution !

# AQUAQUICK 2000® as fire extinguisher

a very effective water based fire extinguisher

creates a micro emulsion between the AQ 2000, water and burning fuel

helps preventing the extinguished fuel from new ignition

100% user- and environment friendly

does not affect or damage metal, plastic, paint, coating, rubber, etc

approved by the Fire Department of Jakarta (rating 125 B).

## FIRE EXTINGUISHING TEST AT VICO, KALIMANTAN-INDONESIA





AQUAQUICK 2000, DILUTED WITH WATER (1:35 – 1:50),  
IS BEING SPRAYED DIRECTLY INTO THE FIRE WITH MINIMUM 7 BAR PRESSURE.





CREATE AS MUCH AS POSSIBLE TURBULENCE BY  
STIRRING WITH THE WATER HOSE. THIS WILL SPEED UP THE EXTINGUISHING  
PROCESS.





AFTER MIXING THE AQUAQUICK 2000 WITH THE BURNING  
FUEL THE FIRE WILL EXTINGUISH IMMEDIATELY.





# FIRE EXTINGUISHED !!!







- AQUAQUICK 2000® has been approved by
- many independent international research institutes and authorities.



**Universiteit Twente**  
*de ondernemende universiteit*

- **AQUAQUICK 2000**<sup>®</sup> has been approved by
- many independent international research institutes and authorities.

### **The Netherlands**

- University of Twente
- TNO (research institute)
- Inspectorate for Health Protection
- Dir.-General for Shipping & Maritime affairs
- Ministry of Defense
- Dutch Railways
- Simson Professional
- Saba Sealers MB/MBT
- Directorate-General (RWS) Dep. DWW

### **Germany**

- Health & Hygiene Institut
- Microbiology Laboratory Dr. J. Balfanz
- Material testing department
- Dekra Umwelt (Environment Dep.)

List of approvals & certificates of AQUAQUICK 2000

### **UK**

- London Underground Ltd.

### **USA**

- American Bureau of Shipping (ABS)

### **Malaysia**

- SIRIM Technology Center, Kuala Lumpur

### **Indonesia**

- Fire Department of Jakarta (Rating 125B)
- Directorate-General for Pharmacy and Health Equipment (DEPKES RI PKD 20107600627).
- Directorate-General for Oil & Gas, (MIGAS)  
AQUAQUICK 2000 is the first product in Indonesia that has been approved by MIGAS to be used off shore as well as on shore.

### **Singapore**

- Mechem, Port Authorities.
- International Organization
- IMO (International Maritime Organization)



# AQUAQUICK EUROPE & Ecologix Solutions introduces SApCom

SAPCom is a division of Eco-logix & AQUAQUICK EUROPE that specializes in providing environment safe alternative treatment & cleaning solutions to the Oil & Gas, Shipping & Marine to Food & Beverage industries. With our proven track records, we are able to commit to turn-key cleaning and treatment projects from **Supplying** of environment safe products, to **Applying** the products correctly and finally **Complying** to the standards and requirements from our clients and environment authorities.

- **Oil spills –land & sea**
- **Soil & Sand washing & treatment**
- **Storage & vessel tank cleaning**
- **Pipe pre-com & de-com degreasing**
- **Oil Base Mud recovery & treatment**
- **Bio-Pond & pit cleaning**
- **Oil recovery**



# AQUAQUICK EUROPE & Ecologix Solutions introduces SAPCom

## Professional Skills

- Our team are highly skilled, experienced, efficient, and professional.
- They possess the necessary qualifications & certifications for their jobs.

- We prepare project reports and updates at site.
- We have a team of qualified inspectors, HSE specialist and engineers to assist in our projects.
- We provide laboratory test results on our projects to confirm completion of project and tasks.
- We submit and co-ordinate with environment authorities on our projects.





# AQUAQUICK EUROPE & Ecologix Solutions introduces SApCom

We meet the standards that are required by the clients and environment agencies.

As our products are environment friendly, listed and approved with environment authorities:

- Environment safe applications
- Eases logistic space in work area
- Reduces scheduled waste
- Reduction in disposal & scheduled waste costs
- Easy applications for all contamination problems or spills
- Reduce time in turn around in-situ costs
- Improves productivity and profitability
- Recycling advantages





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# AQ 2000 SApCom products

AQUAQUICK EUROPE & Eco-logix Solutions

