

Presented by AQUAQUICK GLOBAL B.V

AQUAQUICK 2000®

We will clean the future

INTRODUCTION

1

Completely User and Environment Friendly

AQUAQUICK 2000 does not contain strong alkaline, chlorides, solvents or aggressive acids. AQUAQUICK 2000 has been tested and approved by numerous independent international research institutes.

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.

3

Non-Toxic to all Aquatic Organisms

AQUAQUICK 2000 in its diluted form 1:50 (2%) is non-toxic to aquatic organisms (IMO regulations)

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.

5

Reduces chemical waste

AQUAQUICK 2000 stimulates and accelerates the biodegradation of hydro carbons in environmental situations.

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

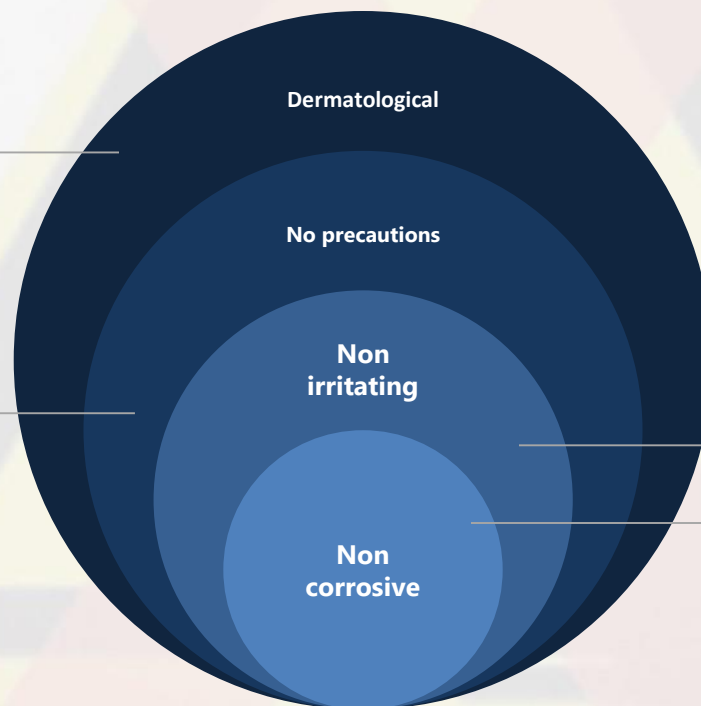
Concentrated AQUAQUICK 2000 has been tested dermatological and is non-irritating and non-corrosive to the human skin

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

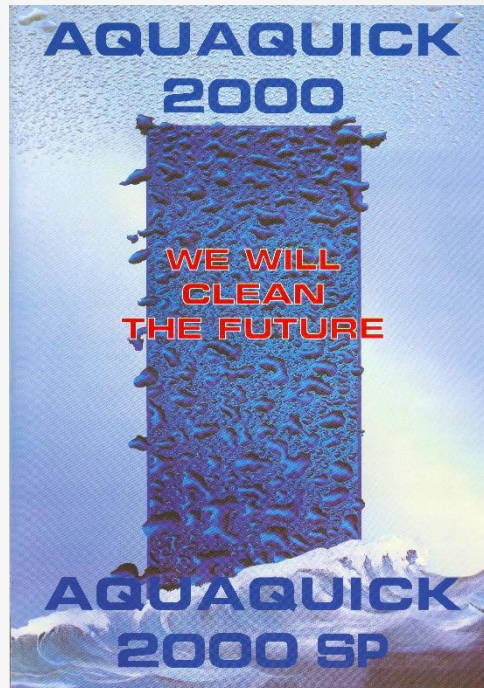


AQUAQUICK 2000

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



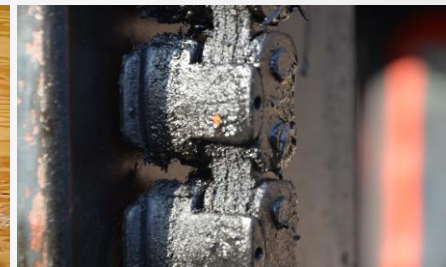
Before:
Rig cleaning



Before:
Fire extinguishing



Before:
Wildlife saving



Before:
Equipment cleaning



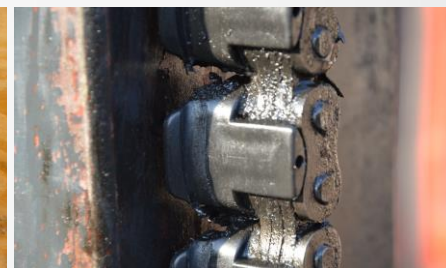
After:
Rig cleaning



After:
Fire extinguishing



After:
Wild life saving



After
Equipment cleaning



Before

After

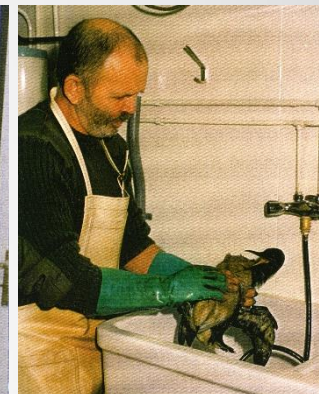


After

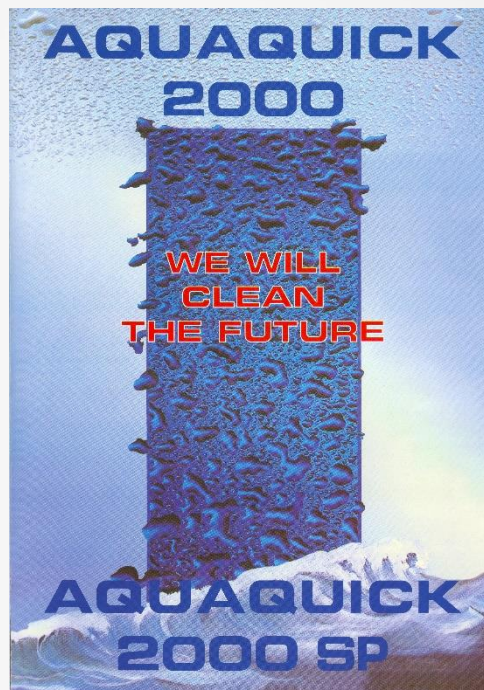


Before



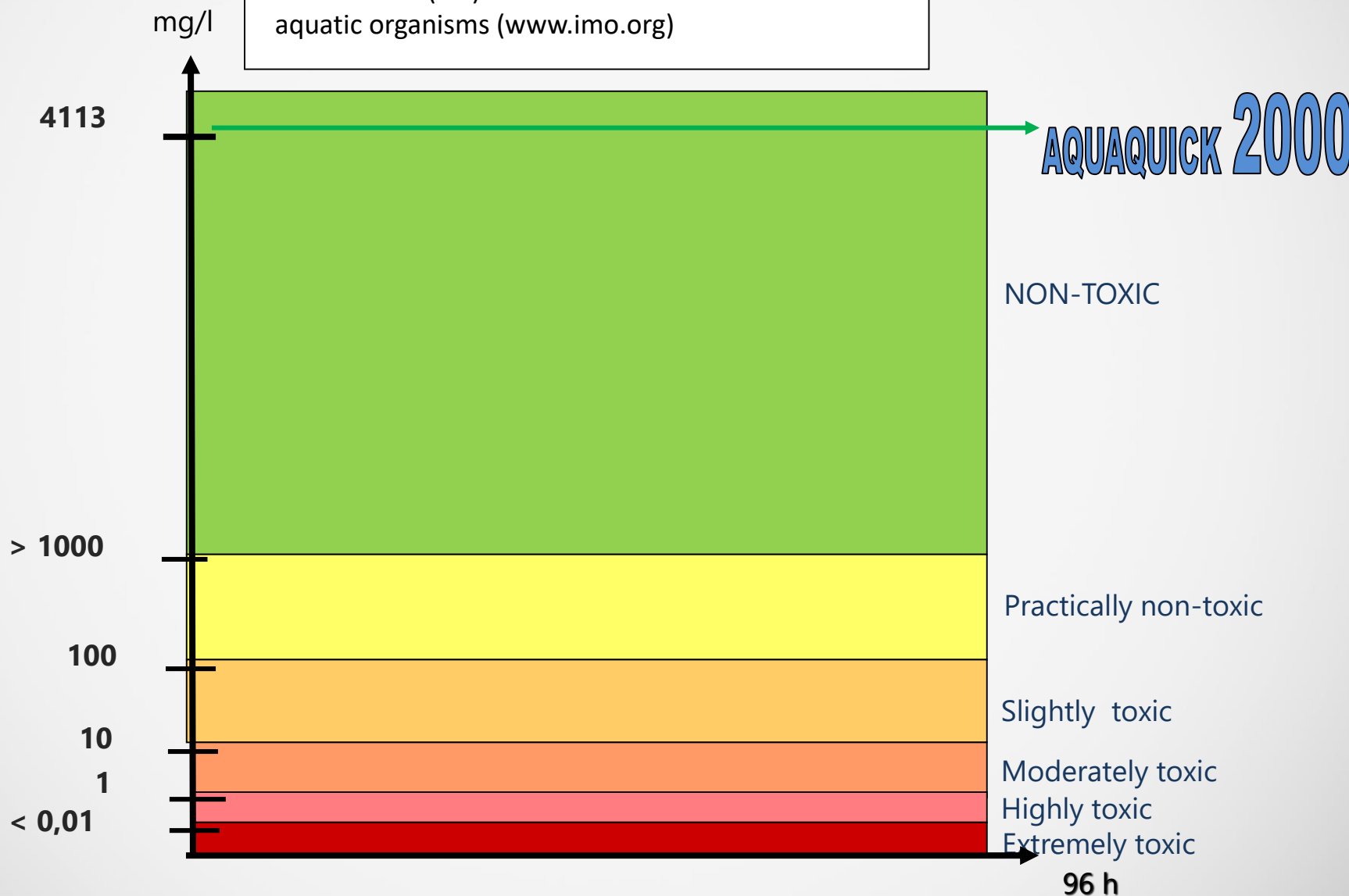


Oil spill cleaning demos



Toxicity of AQUAQUICK 2000

According to the IMO (International Maritime Organization), AQUAQUICK 2000®, in it's minimum dilution rate (2%) can be considered as NON toxic to aquatic organisms (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).

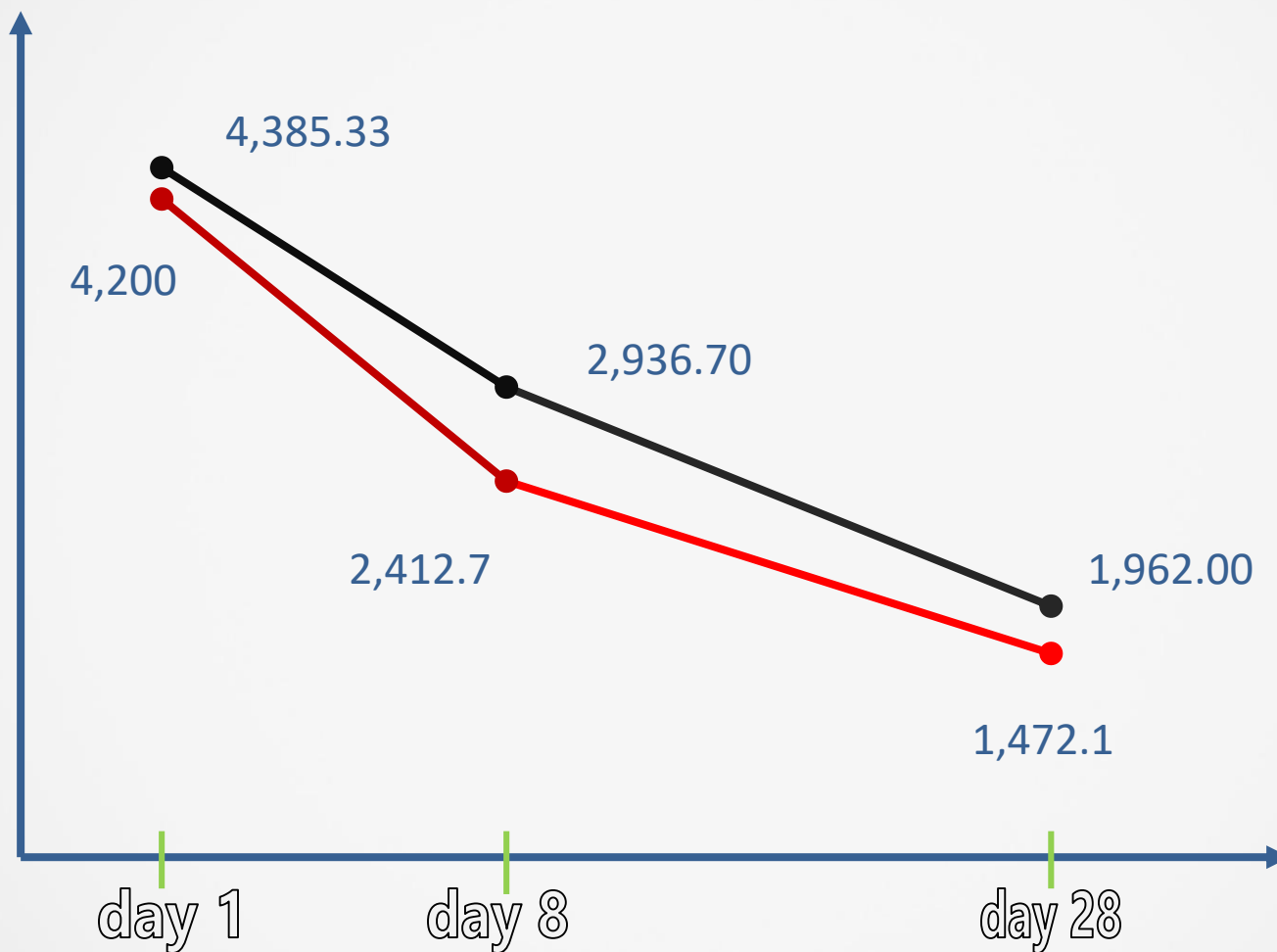
LEMIGAS Indonesia

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

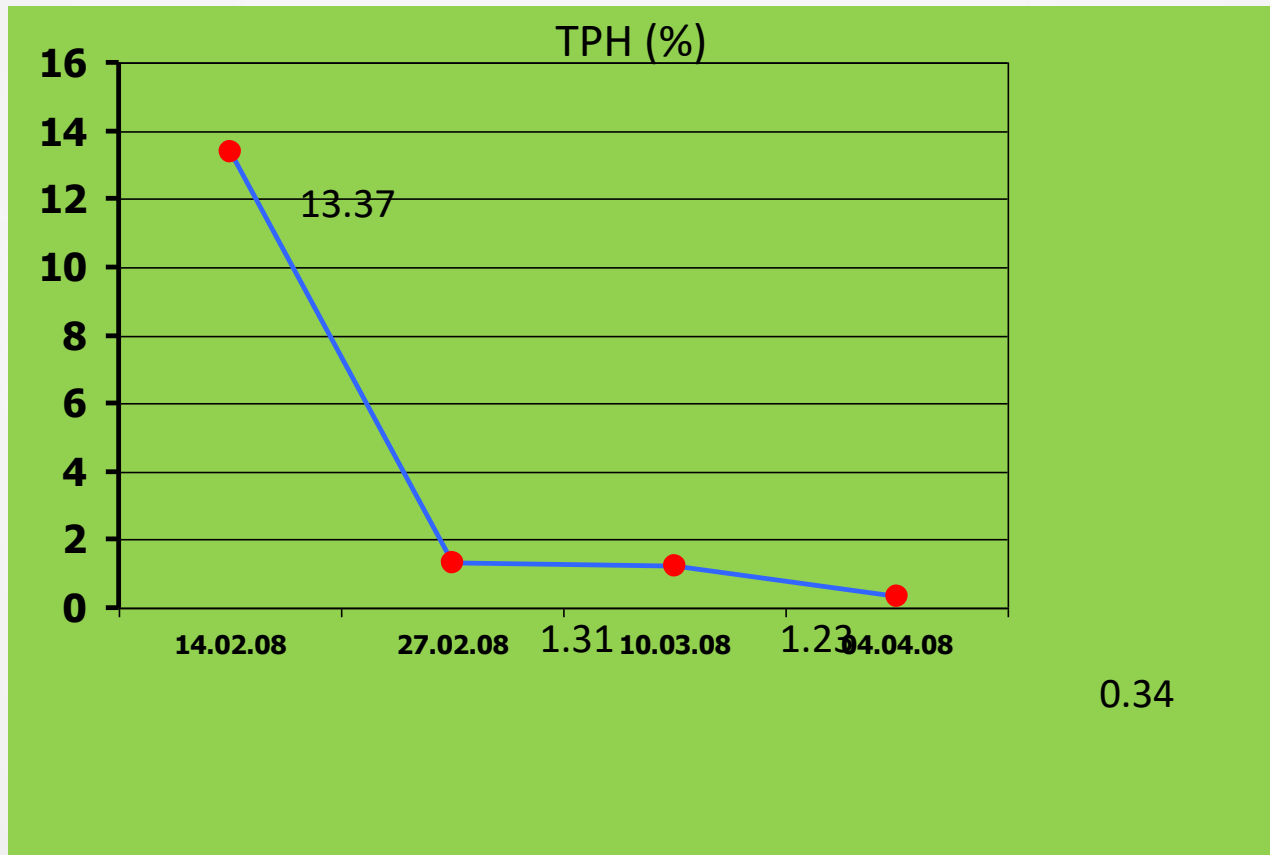
No	Samples	Oil Content (mg/L)	Oil Content % reduced	Microbial Population (Cell/ML)
		HEAVY OIL		
1	Day (0)	4385.33		4.300.000
2	Day (8)	2936.70	-33.03	138.000.000
3	Day (14)	2352.00	-46.37	160.000.000
4	Day (21)	2026.00	-53.80	130.000.000
5	Day (28)	1962.00	-55.26	62.000.000
		LIGHT OIL		
1	Day (0)	4200.00		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



Heavy Crude oil (Total – Kalimantan >C40)

Light Crude oil (Pertamina – Sumatra <C30)

LANDFARMING TEST AT CHEVRON PASIFIC INDONESIA



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



COLLECTING OF FLOATING OIL



SPRAYING AQUAQUICK 2000 TO REMOVE THE OIL



NIPA PALM TREES COVERED IN OIL



SPRAYING AQUAQUICK 2000 TO REMOVE THE OIL



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



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.

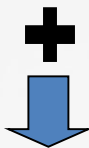


Carbon and hydrogen molecules combine with oxygen and are being converted into CO₂, H₂O and Biomass.

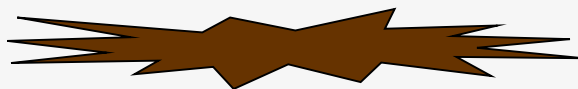


AQUAQUICK 2000® (2%)

Water



Mixture AQ 2000 & water



Breaks the cohesion of the molecule structure creating a micro emulsion

Oil spills / fat



Cohesion process



AQUAQUICK 2000 creates an explosive growth of bacteria

Sewage system or environmental situation

Micro emulsion

Aerobe process



CO₂, H₂O & biomass



AQUAQUICK 2000® does not contain chlorine, solvents, strong acids or alkaline.

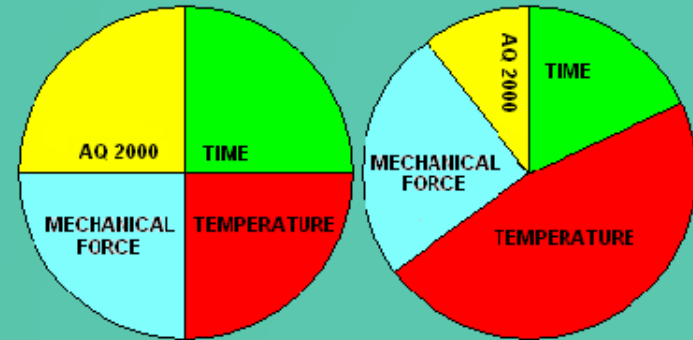
Before use,
AQUAQUICK 2000®
has to be diluted
with water
(minimum 2%)

Both sea
and fresh
water can
be used

The diluted **AQUAQUICK 2000®** 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® 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 and tested by many independent international research institutes and authorities.



Universiteit Twente
de ondernemende universiteit

TNO innovation for life



- **AQUAQUICK 2000®** 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**
- **General maintenance**



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

