



VOC Reduction

*Do you know
all the possible ways
to reduce your
VOC emissions?*

socomore

babbco dynamold dysol magchem socomore

SOCOMORE has been developing and manufacturing **Speciality Chemicals** since 1972 and has been combining this knowledge with **textiles** for surface preparation and protection for more than 10 years.

The expertise of our team, along with specific technological and regulatory monitoring on HSE (Health, Safety and Environment) enables SOCOMORE to provide our customers with a wide range of solutions to improve their environmental impact and safety in the workshop.

VOC Reduction

Our objective

To help you reduce VOC¹ emissions at their source and improve the safety of your operators, taking into account your regulatory constraints, your needs (type of application and soils, material compatibility, approvals...) and the limitations imposed by your process (cycle duration, equipment, etc.).

→ What is a VOC?

According to the definition of the European Community, a VOC (Volatile Organic Compound) is an organic compound, except methane, that contains carbon and which vapour pressure at 20°C (293.15 K) is superior to 10 Pascal (0.01 kPa). A few examples of VOC products: Acetone, MEK, Butyl acetate...

The VOC rate can be expressed:

- in %: percentage of VOC weight compared with the product total weight
- in grams / litre: weight of VOC contained in one litre of product

Example :

DIESTONE SR	100% VOC	910 g/litre
DIESTONE DLS	100% VOC	900 g/litre
Butyl acetate	100% VOC	886 g/litre
SOCOCLEAN A2501	29% VOC	287 g/litre
SOCOCLEAN AQUAFORTE	3% VOC	32 g/litre
DIESTONE A8284	0% VOC	0 g/litre

To know if a product contains VOC, ask your supplier or refer to the safety data sheets (section 9).

→ Since VOC emissions have direct or indirect impacts on environment and health, the European Union has adopted several directives (1999/13/CE et 2001/81/CE) aimed at reducing the VOCs in relevant sectors. National or local authorities may impose restrictive measures for production or maintenance sites.

→ For further information or to view our full range of solvents and degreasers please refer to the product catalogue and technical data sheets, or visit our website www.socomore.com

¹ VOC: Volatile Organic Compound

A wide range of solutions to reduce your VOC emissions



To reduce VOC emissions, we can work on 3 different factors:

- the product's volatility
- the rate of VOC contained in the product
- the application process

VOC EMISSIONS QUANTITY = Amount of solvent used \times VOC rate
(for preparation of a given surface)

Lower VOC Solvents

1 - A 100% VOC SOLVENT, LESS VOLATILE THAN YOUR PRODUCT

This type of solvent has a **controlled evaporation**, significantly reducing consumption and VOC emissions during application.

Volatility is measured by evaporation rate, based on the evaporation speed of the product in comparison with the butyl acetate.

The more volatile a product, the higher the evaporation rate during application, the higher the quantity of solvent required to clean the surface.

Example: replacing MEK with DIESTONE DLS (7 times lower evaporation rate), allows a significant reduction in VOC emissions.

EVAPORATION RATE 100% VOC PRODUCT'S

Acetone	5.6
MEK	3.8
Butyl acetate	1
DIESTONE DLS	0.5
DIESTONE A8290	0.24
DS 108	0.22
DIESTONE SR	0.12

2 - A SOLVENT WITH A LOWER VOC RATE

This type of product is partially formulated with components that are **non VOC**. Per one litre of product, the VOC's emitting source is reduced.

Example : with SOCOCLEAN A2501 (30% VOC) the amount of VOC emitting source is divided by 3.3 compared with a 100% VOC product. Furthermore, its evaporation rate of only 0.24 allows further VOC reductions.

- SOCOCLEAN A2501 (30% VOC)
- DIESTONE G11 (70% VOC)

Non VOC Solvents

A solvent with a **VOC rate equal to 0**, thanks to its vapour pressure inferior to 10 Pa at 20°C (European Regulation), allows complete elimination of VOC emissions in the relevant application.

Example :

- DIESTONE A8284
- HYSO 93
- SOCOSOLV A3582

Aqueous cleaners

A **water-based, VOC-free** degreaser can replace solvents in certain processes. This type of product is suitable for inter-operational or critical degreasing operations before various treatments (*non-destructive testing, painting, etc.*) and covers all application methods: immersion with or without ultrasound, spraying, wiping.

Example:

Wipes & Liquid:

- SOCOCLEAN AQUAFORTE
- SOCOCLEAN A2519

Liquid:

- SOCOCLEAN PC1
- COMORAL DXP
- SYNCLAIR A/C



Lower VOC Solvents

Non VOC solvents

Aqueous cleaners

LEVEL VOC EMISSION

Pre-saturated wipes

SOCOMORE offers a wide range of wipes pre-saturated with formulated solvents, chemicals or water-based solutions. The pre-saturated wipe system provides economical, environmental and safety advantages, when compared with manually dosing cloths with loose liquids, by controlling and reducing the amount of product consumed.

Controlled evaporation speed

- Reduction in solvent consumption
- Reduction in fire risks

- Reduction in VOC emissions
- Increased production performance
- Reduction in waste generated
- Improved worker safety



A few customers who have taken measures to reduce their VOC emissions

The ready-to-use pre-saturated wipes are made of non-woven textiles, without risk of contamination, and have a very low lint rate. They are packed in aluminium bags and placed inside reusable sealed dispensers, preserving the products qualities during storage and use.

AIRBUS
 AIRBUS DEFENCE & SPACE
 AIRBUS HELICOPTERS
 AIR CANADA
 AIR FRANCE
 ALENIA AERMACCHI
 ALSTOM
 BAE
 BELL HELICOPTER
 BOEING
 BOMBARDIER
 CAAC
 COMAC
 DASSAULT AVIATION
 DGA
 EMBRAER

GKN
 LOCKHEED MARTIN
 McDONNELL DOUGLAS
 PRATT & WHITNEY
 RENAULT
 REVIMA AND REVIMA APU
 ROLLS ROYCE
 SAE
 SABENA TECHNICS
 SAFRAN GROUP
 SNCF
 SONACA
 SPIRIT
 STELIA AEROSPACE
 US NAVY
 ...

→ To find the best solution for you, please do not hesitate to **contact us**:

HEAD OFFICE France
 ZI du Prat CS 23707
 Avenue Paul Duplex
 56037 VANNES Cedex
 Tel +33 (0)2 97 43 76 90
 Fax +33 (0)2 97 54 50 27
 socomore@socomore.com

Germany - Munich
 Tel +49 (0)89-207 02 883
 deutschland@socomore.com

South America - Sao Paulo
 Tel +55 (11) 3515 52 87
 southamerica@socomore.com

Canada - Montreal
 Tel +1 (450) 641-8500
 northamerica@socomore.com

China - Shanghai
 Tel +86 (0)21 58 13 11 33
 china@socomore.com

United Arab Emirates
 Tel +971 (0)50 301 79 35
 middle-east@socomore.com

Spain - Barcelona
 Tel +34 917 69 39 62
 espana@socomore.com

USA - Fort Worth
 Tel +1 (817) 335 1826
 northamerica@socomore.com

Ireland - Cork
 Tel +353 (0)21 4889922
 ireland@socomore.com

Italy - Rome
 Tel +39 06 4520 2006
 italy@socomore.com

Poland - Warsaw
 Tel +48 608 454 114
 polska@socomore.com

United Kingdom
 Tel +44 (0)207 862 6084
 uk@socomore.com

Russia - Saint Petersburg
 Tel +7 (81 2) 380 62 10
 russia@socomore.com