

DMSO - DIMETHYL SULFOXIDE

A solvent safe for man and the environment



ARKEMA'S

DMSO - DIMETHYL SULFOXIDE

A non classified polar aprotic solvent,
safe for man and the environment

The benefits of DMSO

- Powerful solvent
- High flash point and boiling point
- Excellent toxicological and ecotoxicological profile
- Recyclable, biodegradable
- Low odor
- Miscible with most co-solvents



The world leader in thiochemicals,

Arkema markets DMSO on all five continents and provides support to its customers in the development of increasingly demanding applications. Arkema will assist you with all your projects.

Arkema's DMSO



SERVICES TAILORED TO YOUR NEEDS



A strategy to assist our customers' development around the world

- A global sales network with the technical expertise to assist you with all your development projects wherever you may be
- A storage network with 5 distribution centers on 4 continents ready to fulfill your needs.

Accordingly, Arkema is able to respond to your projects and your requirements without delay.

A product designed with your needs in mind

- Extensive packaging range (drum, IBC, isotank, tank truck...)
 - Specific grades for your electronics, pharmaceuticals, agrochemicals and cleaning applications.



Technical support and R&D

Two R&D centers dedicated to DMSO applications:

- GRL - *Groupement de recherche de Lacq* (France)
- King of Prussia (USA)

offer you their expertise to solve your technical problems, in particular to:

- Develop new applications
- Replace other solvents
- Treat or recycle your effluents
- Solve odor problems, using the services of its sensorial analysis laboratory.

Solutions to your specific problems

Arkema also offers an extensive range of Oxygenated Solvents allowing us to respond to your particular needs either with pure solvents or with solvent blends.



A reactive, efficient and responsible organization

- ISO 9001-V2000
- Production facility: ISO 14000.

DMSO

Arkema's DMSO



A PRODUCT WITH COUNTLESS APPLICATIONS



— Pharmaceuticals

Recyclable, DMSO is widely used as a reaction solvent because of its effectiveness and its favorable toxicological properties. It can also be used as an alkylation agent. Its excellent toxicological profile, combined with its solvent characteristics make it an excellent carrier for active substances in certain subcutaneous applications.

DMSO is rated as a class 3 solvent as per EMEA and FDA.*



— Agrochemicals

A synthesis solvent for herbicides and pesticides, DMSO is also used as a solvent in water-soluble formulations. Additionally, it helps active substances penetrate through vegetable membranes while minimizing risks to the environment thanks to its outstanding ecotoxicological properties.



— Electronics

DMSO is used for the stripping and rinsing stages of photoresist substances, for example in the manufacture of flat screens. Thanks to its original and patented purification process, Arkema guarantees high-quality DMSO, with extremely low and stable metal content. Furthermore, recycling DMSO affords major cost reductions.



— Fine Chemicals

As a powerful solvent, Arkema's DMSO promotes the reactions and solubilization of organic compounds. It can be recovered and easily eliminated in waste-water treatment stations.



— Coatings

Its excellent power to solubilize polymers and its low toxicity make Arkema's DMSO a highly suitable solvent for the formulation of polymers such as polyethersulfones, polyurethanes...



— Cleaning

Being highly effective, Arkema's DMSO helps solubilize most organic compounds without affecting the substrates.

* FDA: US Food and Drug Administration - EMEA: European Medicine Evaluation Agency

DMSO



Discovered in the 19th century, **DMSO** has been produced in Lacq (France) since 1963 by Arkema which benefits from upstream integration in sulfur in the gas extraction platform.

For over 40 years, Arkema has been synthesizing **DMSO** via the oxidization of DMS (dimethyl sulfide), itself obtained by the reaction of methanol with hydrogen sulfide.





KOP (Philadelphia)

Lacq GRL

- Research center
- Plant
- Facility storage
- Sales network

SALES AND DISTRIBUTION

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