# Safety information
# ADJUVANT MO Liquide

**23/08/2016, version 1**

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:

Trade name: ADJUVANT MO Liquide

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use:

Enological product

1.3. Details of the supplier of the safety data sheet

Company:

SOFRALAB

79 AV. A.A. Thévenet - CS11031

51530 MAGENTA - FRANCE

Tel: 0033 (0) 326 51 29 30 - Fax: 0033 (0)3 26 51 87 60

Competent person responsible for the safety data sheet:

lcq@sofralab.com

1.4. Emergency telephone number

Emergency telephone number of the company and/or of an authorised advisory centre:

ORFILA 0033 (0)1 45 42 59 59

## SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Symbols:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

## SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

| Qty | Name | Ident. Number | Classification |
|---|---|---|---|
| < 1% | POTASSIUM BISULPHITE | CAS: 7773-03-7<br>EC: 231-870-1 | 3.3/2 Eye Irrit. 2 H319<br>3.8/3 STOT SE 3 H335<br>EUH031 |
| <1 % | CITRIC ACID MONOHYDRATE | CAS: 5949-29-1<br>EC: 201-069-1<br>REACH No.: 01-2119457026-42 | 3.3/2 Eye Irrit. 2 H319 |

No hazardous components within the meaning of the CLP regulation and related classification:
BENTONITE AND KAOLIN SUSPENSION IN WATER
POTASSIUM ALGINATE

## SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.
After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.
Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

4.2. Most important symptoms and effects, both acute and delayed

None

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:
None

## SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water.
Carbon dioxide (CO2).
Extinguishing media which must not be used for safety reasons:
None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.
Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

## SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.
Remove all sources of ignition.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Provide adequate ventilation.
Use appropriate respiratory protection.
See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

## SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhaltion of vapours and mists.
Use localized ventilation system.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contamined clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.
Incompatible materials:
Keep away from acids.
Instructions as regards storage premises:
Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

## SECTION 8: Exposure controls/personal protection

8.1. Control parameters

POTASSIUM BISULPHITE - CAS: 7773-03-7

- OEL Type: ACGIH - STE: 0.25 ppm - Notes: SO2
- OEL Type: EU - LTE: 0.5 ppm - STE: 1 ppm - Notes: SO2

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

MONOHYDRATE CITRIC ACID - CAS: 5949-29-1

Target: Fresh Water - Value: 0.44 mg/l
Target: Marine water - Value: 0.044 mg/l
Target: Freshwater sediments - Value: 34.6 mg/kg
Target: Marine water sediments - Value: 3.46 mg/kg
Target: Microorganisms in sewage treatments - Value: 1000 mg/l

8.2. Exposure controls

Eye protection:

Eye glasses with side protection.

Protection for skin:

Overall.
Protection for hands:
Suitable gloves type:
UNI EN 420/UNI EN 374
Respiratory protection:
Gas filtering device (DIN EN 141).
Thermal Hazards:
None
Environmental exposure controls:
None
Appropriate engineering controls:
None

## SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Properties | Value | Method: | Notes |
|---|---|---|---|
| Appearance and colour: | Beige viscous liquid | -- | -- |
| Odour: | Pungent | -- | -- |
| Odour threshold: | N.A. | -- | -- |
| pH: | N.A. | -- | -- |
| Melting point / freezing point: | N.A. | -- | -- |
| Initial boiling point and boiling range: | N.A. | -- | -- |
| Flash point: | N.A. | -- | -- |
| Evaporation rate: | N.A. | -- | -- |
| Solid/gas flammability: | N.A. | -- | -- |
| Upper/lower flammability or explosive limits: | N.A. | -- | -- |
| Vapour pressure: | N.A. | -- | -- |
| Vapour density: | N.A. | -- | -- |
| Relative density: | App. 1.01-1.02 Kg/dm3 | -- | -- |
| Solubility in water: | No soluble | -- | -- |
| Solubility in oil: | N.A. | -- | -- |
| Partition coefficient (n-octanol/water): | N.A. | -- | -- |
| Auto-ignition temperature: | N.A. | -- | -- |
| Decomposition temperature: | N.A. | -- | -- |
| Viscosity: | N.A. | -- | -- |
| Explosive properties: | N.A. | -- | -- |
| Oxidizing properties: | N.A. | -- | -- |

9.2. Other information

| Properties | Value | Method: | Notes |
|---|---|---|---|
| Miscibility: | N.A. | -- | -- |
| Fat Solubility: | N.A. | -- | -- |
| Conductivity: | N.A. | -- | -- |

## SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions
10.2. Chemical stability
Stable under normal conditions
10.3. Possibility of hazardous reactions
None
10.4. Conditions to avoid
Stable under normal conditions.
10.5. Incompatible materials

10.6. Hazardous decomposition products
Toxic gases

## SECTION 11: Toxicological information

11.1. Information on toxicological effects
Toxicological information of the mixture:
N.A.
Toxicological information of the main substances found in the mixture:
POTASSIUM BISULPHITE - CAS: 7773-03-7
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat > 2300 mg/kg - Notes: dry product
c) serious eye damage/irritation:
Test: Eye Corrosive
CITRIC ACID
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Mouse = 5400 mg/kg
Test: LD50 - Route: Oral - Species: Rat = 11700 mg/kg
Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg
c) Serious eye damage/Irritation:
Irritating to eyes. Species: rabbit.
If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:
a) acute toxicity;
b) skin corrosion/irritation;
c) serious eye damage/irritation;
d) respiratory or skin sensitisation;
e) germ cell mutagenicity;
f) carcinogenicity;
g) reproductive toxicity;
h) STOT-single exposure;
i) STOT-repeated exposure;
j) aspiration hazard.

## SECTION 12: Ecological information

12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
BISULFITE DE POTASSIUM - CAS: 7773-03-7
a) Aquatic acute toxicity:
Endpoint: LC50 Fish = 460-1000 mg/l - Duration h: 96 - Notes: dry product
Endpoint: EC50 BACTERIA = 65 mg/l - Duration h: 17 - Notes: dry product
MONOHYDRATE CITRIC ACID - CAS: 5949-29-1
a) Aquatic acute toxicity:

Endpoint: LC50 Fish = 440 mg/l - Duration h: 48
Endpoint: LC50 Daphnia = 1535 mg/l - Duration h: 24
c) Bacteria toxicity:
BACTERIA > 10000 mg/l - Duration h: 16
e) Plant toxicity:
Algae = 425 mg/l - Duration h: 168

12.2. Persistence and degradability
N.A.
12.3. Bioaccumulative potential
N.A.
12.4. Mobility in soil
N.A.
12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None
12.6. Other adverse effects
None

## SECTION 13: Disposal considerations

13.1. Waste treatment methods
Recover if possible. In so doing, comply with the local and national regulations currently in force.

## SECTION 14: Transport information

14.1. UN number
Not classified as dangerous in the meaning of transport regulations.
14.2. UN proper shipping name
N.A.
14.3. Transport hazard class(es)
N.A.
14.4. Packing group
N.A.
14.5. Environmental hazards
ADR-Enviromental Pollutant: No
IMDG-Marine pollutant: No
14.6. Special precautions for user
N.A.
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
N.A.

## SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) 2015/830
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:
Restriction 3
Restrictions related to the substances contained:
No restriction.
Where applicable, refer to the following regulatory provisions :
Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.
Regulation (EC) nr 648/2004 (detergents).
1999/13/EC (VOC directive)

Provisions related to directives 82/501/EC(Seveso), 96/82/EC(Seveso II): N.A.

15.2. Chemical safety assessment: No

## SECTION 16: Other information

Full text of phrases referred to in Section 3:
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
EUH031 Contact with acids liberates toxic gas.
This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:
ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold
CCNL - Appendix 1
The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This MSDS cancels and replaces any preceding release.

| | |
|---|---|
| ADR: | European Agreement concerning the International Carriage of Dangerous Goods by Road. |
| CAS: | Chemical Abstracts Service (division of the American Chemical Society). |
| CLP: | Classification, Labeling, Packaging. |
| DNEL: | Derived No Effect Level. |
| EINECS: | European Inventory of Existing Commercial Chemical Substances. |
| GefStoffVO: | Ordinance on Hazardous Substances, Germany. |
| GHS: | Globally Harmonized System of Classification and Labeling of Chemicals. |
| IATA: | International Air Transport Association. |
| IATA-DGR: | Dangerous Goods Regulation by the "International Air Transport Association" (IATA). |
| ICAO: | International Civil Aviation Organization. |
| ICAO-TI: | Technical Instructions by the "International Civil Aviation Organization" (ICAO). |
| IMDG: | International Maritime Code for Dangerous Goods. |
| INCI: | International Nomenclature of Cosmetic Ingredients. |
| KSt: | Explosion coefficient. |
| LC50: | Lethal concentration, for 50 percent of test population. |
| LD50: | Lethal dose, for 50 percent of test population. |
| LTE: | Long-term exposure. |
| PNEC: | Predicted No Effect Concentration. |

| | |
|---|---|
| RID: | Regulation Concerning the International Transport of Dangerous Goods by Rail. |
| STE: | Short-term exposure. |
| STEL: | Short Term Exposure limit. |
| STOT: | Specific Target Organ Toxicity. |
| TLV: | Threshold Limiting Value. |
| TWATLV: | Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard). |
| WGK: | German Water Hazard Class. |