

SAFETY DATA SHEET

VERSION/ REVIEW: 01 DATE OF ISSUE: 05/29/2019

01

PRODUCT IDENTIFICATION

GHS Product Identification: MoldPro REACH Registration Number

This product is a mixture. REACH Registration Number see section 3.

Recommended use of the chemical and restrictions on use

Food additive for industrial use

Provider Details (name, address, telephone, etc.)

- ARGENT EXPORT SA
- Av. Cabildo 642, 6th floor of.60 2 1426 Buenos Aires Argentina
- Telephone: +54-11-4776-0244
- E-mail: info@argentexport.com.ar

Emergency telephone number

Centro Nacional de Intoxicaciones Hospital Nacional "Prof. Alejandro Posadas" (National Center of Intoxications

National Hospital "Prof. Alejandro Posadas"): 0-800-333-0160

Av. Presidente Illia y Marconi Zip Code 1684 - El Palomar

Centro de Emergencias Toxicológicas Hosp. Italiano de Buenos Aires (Toxicology Emergency Center, Italian Hospital of Buenos Aires): Phone: (011)4959-0436 or 4959-0200 Int. 8285/9337 Gascón 450 - Zip Code 1181 - Autonomous City of Buenos Aires

02

HAZARD(S) IDENTIFICATION

GHS classification of the substance or mixture and any national or regional information

- Flammable liquid, Category 3, H226
- Acute toxicity, Category 4, Oral, H302
- Acute toxicity, Category 3, Inhalation, H331
- Skin corrosion, Category 1A, H314

GHS label elements

- Labeling (Regulation (EC) No 1272/2008)
- Hazard Pictograms









Warning word

Warning

- Hazard statements
- H226 Flammable liquids and vapors
- H302 Harmful if swallowed
- H314 Causes skin burns and eye damage
- H331 Toxic by inhalation
- EUH071 Corrosive to the respiratory tract

Precautionary statements

Prevention

- P210 Keep away from heat sources.
- P280 Wear protective gloves/ protective clothing/ eye protection, and/or face protection. Intervention.
- P301 + P330 + P331 IN CASE OF INGESTION: Rinse your mouth. Do NOT induce vomiting.
- P304 + P340 IN CASE OF INHALATION: Evacuate the victim to the outside and keep him at rest in a comfortable position to breathe.
- P305 + P351 + P338 IN CASE OF EYE CONTACT Flush eyes thoroughly with water for several minutes. Check for and remove any contact lenses if it is easy. Keep flushing.
- P308 + P310 IN CASE OF explicit or implicit exposure: Immediately call a TOXICOLOGY CENTER or doctor.

Other hazards

None known.

03

COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT NAME	HAZARDOUS INGREDIENTS (EC N°)	MIX OF CONC. (WT%)	CAS N°
Formic Acid	1272/2008	>= 10 % - < 30 %	64-18-6
Propionic Acid	1272/2008	>= 60 % - < 90 %	79-09-4

Formic Acid Classification

- Flammable Liquid, Category 3, H226
- Acute toxicity, Category 4, H302
- Acute toxicity, Category 3, H331
- Skin corrosion, Category 1A, H314

Propionic Acid Classification

- Flammable liquid, Category 3, H226
- Skin corrosion, Category 1B, H314
- Specific target organ toxicity single exposure, Category 3, H335



04

FIRST-AID MEASURES

Description of necessary measures

- Ingestion: Drink water (2 glasses maximum), avoid vomiting (risk of perforation!). Get medical attention immediately. Do NOT perform neutralization tests.
- Skin Contact: Remove all contaminated clothing immediately. Flush skin with water/shower. Get medical attention immediately.
- Eye Contact: Flush with plenty of water. Call the ophthalmologist immediately. Remove contact lenses.
- Inhalation: Inhale Fresh air. Call a doctor immediately. After respiratory arrest: mechanical ventilation immediately. Give oxygen if necessary.

Most important symptoms and effects, both acute and delayed

- · Conjunctivitis. Dermatitis.
- Irritation and corrosion. Cough. Respiratory Failure.
- · Risk of blindness.

Indication of any immediate medical attention and special treatment needed

· No information available.

05

FIREFIGHTING MEASURES

Suitable (or non-suitable) extinguishing media

- Water, Carbone dioxide (COD2), foam, Dry chemical powder.
- There are no limitations of extinguishing agents for this substance / mixture.

Specific hazards of the products: o Mixture with combustible materials

- Vapors are heavier than air and can expand along the ground.
- In case of fire potential formation of combustion gases or vapors of acetic acid.

Special protective equipment and special precautions for fire-fighting equipment

- Special protective equipment for fire-fighting personnel.
- In case of fire, use a self-contained breathing apparatus.

Other Information

- · Stop superficial or underground water contamination previously used for fire extinguishing.
- Cool down previously used hazardous recipients spraying water.

06

ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- Avoid vapor inhalation. Evacuate to a safe area, follow emergency procedures, seek expert attention.
- Emergency-staff instructions: Protective equipment, see section 8.

Environmental precautions

· Prevent from entering sewers.

Methods and material for containment and cleaning up

- · Cover sewers. Clean, collect and aspirate the leak
- Look for possible material restrictions (See sections 7 and 10 for indications).
- Collect with an inert absorbent material. Proceed to the elimination of waste. Clean up.

Reference to other sections

• For instructions on waste treatment, see section 13.

07

HANDLING AND STORAGE

Precautions for safe handling

- Work under extractor hood.
- Do NOT inhale the substance/mixture. Avoid vapor/aerosol generation.
- Read label indications.

Conditions for safe storage, including any incompatibilities

- Keep away from open flames, hot surfaces and ignition sources.
- Take precautionary measures against electrostatic discharge.

Technical requirements for warehouses and containers

Do NOT use metallic containers:

Storage conditions

- Possible decomposing with formation of gaseous products, specially after long storage periods.
- Close the recipient avoiding depressurisation (e.g. with a safety valve). Keep dry.
- Keep the recipient in a properly ventilated space, away from heat and sources of fire.
- Keep the recipient in an enclosed area only accessible to qualified personnel. Protected from light.

EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

• Formic Acid (64-18-6)

Maximum allowable concentration for short periods of time: 10 ppm

Maximum allowable concentration weighted in time: 5 ppm

Appropriate engineering controls

Technical measures and observation of appropriate working methods takes precedence over the use of personal protective equipment.

See **section 7**.

Individual protective measures

The different protective equipment shall be specifically chosen according to the workplace depending on the concentration and amount of the dangerous substance.

The stability of the protective means against chemical products should be clarified with the supplier.

· Hygiene measures:

Replace contaminated clothing. Wash hands at the end of work.

• Eye/face protection:

Fit tightly the safety goggles.

Hand protection:

Submersion:

Glove material: Polychloroprene

Glove thickness: 0.65 mm

Splashes:

Glove material: Natural latex Glove thickness: 0.6 mm

Indicated protective gloves must comply with the specifications of Directive 89/686/EEC and its resulting regulation EN374.

• Respiratory protection:

Necessary if vapors / aerosols are present.

Recommended filter type: E-(P3) Filter

Respiratory protection maintenance, cleaning and technical tests should be guaranteed, and performed according to the instructions of the product manufacturer.

These measures should be properly documented.

09 PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state: Liquid

Color: Colorless **Odor:** Pungent.

Odor Threshold: No data available

pH: 2-4

Melting point / freezing point: No data available Initial point and boiling range: No data available

Auto-ignition temperature: 528°C Formic acid / 485°C Propionic acid

Evaporation rate: No data available

Flammability (solid, gas): No data available

Upper/lower flammability limit: No data available

Lower explosion limit: 12 %(V) Formic acid / 2% (V) Propionic acid **Upper explosion limit:** 38%(V) Formic acid / 12% (V) Propionic acid

Vapor pressure: 0.5 kPa

Vapor density: No data available
Relative density: No data available
Solubility / ies: Soluble at 20°C

Partition coefficient n-octanol / water: No data available

Decomposition temperature: No data available **Explosive properties:** Not classified as explosive.

Oxidizing properties: None

STABILITY AND REACTIVITY

Reactivity

10

• Steam / water mixtures are explosive with intense heating.

Chemical stability

· Chemically stable under normal conditions of use (at room temperature).

Possibility of hazardous reactions

Possible violent reactions with:

Oxidants

Reducing agents

Phosphorus trichloride

Alkali



• Danger of ignition or formation of inflammable gases or vapors with:

Metals, Iron, Zinc, Magnesium, Lead

· Conditions to avoid:

Heat

Incompatible materials:

Various plastics

• Hazardous decomposition products:

No data available

11

TOXICOLOGICAL INFORMATION

Symptoms related to physical, chemical and toxicological characteristics: Mixture

Oral acute toxicity: No data available

Acute toxicity by inhalation: No data available

Acute dermal toxicity: No data available

Skin irritation: No data available

Eye irritation: Mixture causes severe eye irritation

Sensitization: No data available

Germ cell mutagenicity: No data available

Carcinogenicity: No data available

Reproductive toxicity: No data available

Teratogenicity: No data available

Specific target organ toxicity - single exposure: No data available

Specific target organ toxicity - repeated exposure: No data available

Aspiration hazard: No data available

Additional information

Handle with the appropriate industrial hygiene precautions, and respect safety practices.

Components

Formic Acid

Oral acute toxicity

• DL50 Rat: 730 mg/kg, OECD Test guidelines 401

Acute toxicity by inhalation

• CL50 Rat: 7.85 mg/l; 4 h, vapor, OECD Test guidelines 403

Acute dermal toxicity

• DL50 Rabbit: 500 mg/kg, OECD Test guidelines 402

Propionic acid

Oral acute toxicity

• DL50 Rat: 3455.1 mg/kg, OECD Test guidelines 401

Acute toxicity by inhalation

• CL50 Rat: > 19.7 mg/l; 1 h, vapor, OECD Test guidelines 403

Acute dermal toxicity

• DL50 Rat: 3235 mg/kg, OECD Test guidelines 402

12

ECOTOXICOLOGICAL INFORMATION

Ecotoxicity: No data available

Persistence and degradability: Easy decomposition

Bioaccumulative potential: This product does not bioaccumulate in the environment

Mobility in soil: Completely soluble in water

Results of PBT and vPvB assessment: Substance(s) in the mixture do not meet the PBT or vPvB

criteria according to Regulation (EC) no. 1907/2006, anexx XIII

Other adverse effects

Discharge into the environment should be avoided.

Components

Formic Acid

Toxicity to fish

• CL50 Leuciscus idus (Goldfish): 46 - 100 mg/l; 96 h (IUCLID)

Toxicity to daphnia and other aquatic invertebrates

• CE50 Daphnia magna (Water flea): 34.2 mg/l; 48 h (IUCLID)

Toxicity to algae

• IC50 Desmodesmus subspicatus (green algae): 27 mg/l; 72 h (Lit.)

Toxicity to bacteria

• EC10 activated sludge: 72 mg/l; 13 d

Biodegradability

• 100 %; 28 d; aerobic OECD TG 301 C o Easily biodegradable.

Bioaccumulative potential

- Partition coefficient n-octanol/water log Pow: -2.1 (23 °C)
- OECD Test guidelines 107
- No bioaccumulation is to be expected.



Propionic acid

Toxicity to fish

• CL50 Leuciscus idus (Goldfish), static test: > 10000 mg/l; 96 h DIN 38412

Toxicity to daphnia and other aquatic invertebrates

• CE50 Daphnia magna (Water flea), static test: > 500 mg/l; 48 h

Toxicity to algae

• CE50 Desmodesmus subspicatus (green algae), static test: > 500 mg/l; 72 h

Toxicity to bacteria

• EC20 activated sludge, static test: > 100 mg/l; 30 min

Biodegradability

- 74%; 30 d; aerobic (ECHA)
- Easily biodegradable

Bioaccumulative potential

- Partition coefficient n-octanol/water log Pow: 0.29 (experimentally)
- No bioaccumulation is to be expected.

13

INFORMATION REGARDING THE DISPOSAL OF THE PRODUCT

Methods for waste treatment

This product is considered hazardous.

Waste should be disposed of in accordance with directive 2008/98/EC and local or national regulations. Dispose chemical in its original containers. Do NOT mix with other waste. Handle dirty containers like the product itself.

14

INFORMATION REGARDING THE TRANSPORT OF THE PRODUCT

Road transportation (ADR/RID)

- UN Number: 1760
- Proper shipping name: CORROSIVE LIQUID, N.E.P.
- Class 8
- Packaging group: II
- Environmental hazardous
- Specific user precautions: Yes
- Code of restrictions in tunnels: E



River transport (ADN)

Not relevant

Air transportation (IATA)

• UN Number: 1760

- Official transportation designation of the United Nations: CORROSIVE LIQUID, N.E.P.
- Class 8
- Packaging group: II
- Environmental hazardous
- Specific user precautions: Yes

Sea transport (IMDG)

- UN Number: 1760
- Official transportation designation of the United Nations: CORROSIVE LIQUID, N.E.P.
- Class 8
- Packaging group: II
- Environmental hazardous
- Specific user precautions: Yes
- EmS: F-A, S-B

Bulk transport (according to Annex II of the MARPOL 73/78 convention and the IBC Code)

Not relevant

15 REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

- Labelled according to GHS regulations
- Storage class: 3A

Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

16 OTHER INFORMATION

Revision information

- Workers must be provided with sufficient information and practical training.
- An explanation on abbreviations and acronyms used in safety data sheet. Abbreviations and acronyms used can be checked on www.wikipedia.org.
- The information provided on this Safety Data Sheet is correct to the best of our knowledge and belief we have to date. The information given is intended only as a guide for safe handling, storage, processing, transport and disposal and is not to be considered as a warranty or quality specification. The information relates only to the specific product and cannot be used in combination with other products or processes.

