

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 3.2
14.03.2025

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifiers

Product name : **MK-677**

Product Number : 1-672892-372719

Brand : ARCHEM

REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

CAS-No. : 159752-10-0

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

Identified uses : This product is for research use - Not for human or veterinary diagnostic or therapeutic use.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

2.2. Label elements

The substance is not subject to labelling according to GHS.

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Synonyms : N-[1(R)-1,2-Dihydro-1-methanesulfonylspiro-3H-indole-3,4'-piperidin)-1'-yl]carbonyl-2-(phenylmethoxy)-ethyl-2-amino-2-methylpropanam L-163191
MK-0677, MK-677

Formula : $C_{27}H_{36}N_4O_5S \cdot CH_3SO_3H$

Molecular weight : 624.77 g/mol

No components need to be disclosed according to the applicable regulations.

SECTION 4: FIRST AID MEASURES

4.1. Description of first-aid measures

General information

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses. If symptoms persist, consult a doctor.

If swallowed

After swallowing: drink water (two glasses at most). Consult doctor if feeling unwell.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Use fire fighting measures that suit the environment.

Unsuitable extinguishing media

A solid water stream may be inefficient.

5.2. Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides, sulfur oxides.

5.3. Advice for firefighters

No special measures required.

5.4. Personal precautions, protective equipment and emergency procedures

Not required.

5.5. Environmental precautions

Do not let product enter drains.

5.6. Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

5.7. Reference to other sections

For disposal see section 13.

SECTION 6: HANDLING AND STORAGE

6.1. Precautions for safe handling

No special precautions are necessary if used correctly.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Avoid prolonged or repeated exposure.
Keep away from sources of ignition.
Take precautionary measures against static discharge.

6.2. Conditions for safe storage, including any incompatibilities

Storage

Store in accordance with information listed on the product insert.

Requirements to be met by storerooms and receptacles

No special requirements.

Information about storage in one common storage facility

Not required.

Further information about storage conditions

Keep receptacle tightly sealed.

6.3. Specific end use(s)

No further relevant information available.

SECTION 7: EXPOSURE CONTROLS/PERSONAL PROTECTION

7.1. Control parameters

Ingredients with workplace control parameter

Contains no substances with occupational exposure limit values.

7.2. Exposure controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: KCL 741 Dermatrill® L

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatril® L

Respiratory protection

Required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P1

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains.

SECTION 8: PHYSICAL AND CHEMICAL PROPERTIES**8.1. Information on basic physical and chemical properties**

Physical state	:	solid
Color	:	No data available
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	No data available
Flammability (solid, gas)	:	Product is not flammable.
Upper/lower flammability or explosive limits	:	No data available
Flash point	:	Not applicable
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
pH	:	No data available
Viscosity	:	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Water solubility	:	DMF: 25 mg/ml; DMSO: 25 mg/ml; Ethanol: 10 mg/ml; Ethanol:PBS (pH 7.2) (1:4): 10 mg/ml
Partition coefficient: n-octanol/water	:	No data available
Vapor pressure	:	No data available
Density	:	No data available
Relative density	:	No data available
Relative vapor density	:	No data available
Particle characteristics	:	No data available

Explosive properties : No data available
Oxidizing properties : Incompatible with strong oxidizing agents

8.2. Other safety information

No data available

SECTION 9: STABILITY AND REACTIVITY

9.1. Reactivity

No further relevant information available.

9.2. Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

9.3. Possibility of hazardous reactions

No data available

9.4. Conditions to avoid

No information available

9.5. Incompatible materials

Strong oxidizing agents

9.6. Hazardous decomposition products

In the event of fire: see section 5.

SECTION 10: TOXICOLOGICAL INFORMATION

10.1. Information on toxicological effects

Acute toxicity

Oral: No data available
Inhalation: No data available
Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

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

10.2. Additional Information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 11: ECOLOGICAL INFORMATION

11.1. Toxicity

No data available

11.2. Persistence and degradability

No data available

11.3. Bioaccumulative potential

No data available

11.4. Mobility in soil

No data available

11.5. Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

11.6. Endocrine disrupting properties

No data available

11.7. Other adverse effects

No data available

SECTION 12: DISPOSAL CONSIDERATIONS

12.1. Waste treatment methods

Product

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

Notice Directive on waste 2008/98/EC.

SECTION 13: TRANSPORT INFORMATION

13.1. UN number

ADR/RID: -

IMDG: -

IATA: -

13.2. UN proper shipping name

ADR/RID: -

IMDG: -

IATA: -

13.3. Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

13.4. Packaging group

ADR/RID: -

IMDG: -

IATA: -

13.5. Environmental hazards

ADR/RID: -

IMDG -

IATA: -

13.6. Special precautions for user

No data available

13.7. Further information

Not classified as dangerous in the meaning of transport regulations.

SECTION 14: REGULATORY INFORMATION

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

14.2. Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

SECTION 15: ABBREVIATIONS

Full text of other abbreviations

- ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways;
- ADR - Agreement concerning the International Carriage of Dangerous Goods by Road;
- AIIC - Australian Inventory of Industrial Chemicals;
- ASTM - American Society for the Testing of Materials;
- bw - Body weight;
- CMR - Carcinogen, Mutagen or Reproductive Toxicant;
- DIN - Standard of the German Institute for Standardisation;
- DSL - Domestic Substances List (Canada);
- ECx - Concentration associated with x% response;
- ELx - Loading rate associated with x% response;
- EmS - Emergency Schedule;
- ENCS - Existing and New Chemical Substances (Japan);
- ErCx - Concentration associated with x% growth rate response;
- GHS - Globally Harmonized System;
- GLP - Good Laboratory Practice;
- IARC - International Agency for Research on Cancer;
- IATA - International Air Transport Association;
- IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk;
- IC50 - Half maximal inhibitory concentration;
- ICAO - International Civil Aviation Organization;
- IECSC - Inventory of Existing Chemical Substances in China;
- IMDG - International Maritime Dangerous Goods;
- IMO - International Maritime Organization;
- ISHL - Industrial Safety and Health Law (Japan);
- ISO - International Organisation for Standardization;
- KECI - Korea Existing Chemicals Inventory;
- LC50 - Lethal Concentration to 50 % of a test population;

- LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose);
- MARPOL - International Convention for the Prevention of Pollution from Ships;
- n.o.s. - Not Otherwise Specified;
- NO(A)EC - No Observed (Adverse) Effect Concentration;
- NO(A)EL - No Observed (Adverse) Effect Level;
- NOELR - No Observable Effect Loading Rate;
- NZIoC - New Zealand Inventory of Chemicals;
- OECD - Organization for Economic Co-operation and Development;
- OPPTS - Office of Chemical Safety and Pollution Prevention;
- PBT - Persistent, Bioaccumulative and Toxic substance;
- PICCS - Philippines Inventory of Chemicals and Chemical Substances;
- (Q)SAR - (Quantitative) Structure Activity Relationship;
- REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals;
- RID - Regulations concerning the International Carriage of Dangerous Goods by Rail;
- SADT - Self-Accelerating Decomposition Temperature;
- SDS - Safety Data Sheet;
- TCSI - Taiwan Chemical Substance Inventory;
- TECI - Thailand Existing Chemicals Inventory;
- TSCA - Toxic Substances Control Act (United States);
- UN - United Nations;
- UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods;
- vPvB - Very Persistent and Very Bioaccumulative

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. ARCHEM UK and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. All of the information in the document regarding the product matches the product ordered. For further information please contact hello@ar-chem.co.uk