

SAFETY DATA SHEET (SDS)

IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Calcein AM

REACH registration number: No registration number is given yet for this substance / substances in this mixture since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet expired.

Company/undertaking Identification: Proteintech Group 5400 Pearl Street STE 300 Rosemont, IL 60018 312-455-8498

Emergency telephone number: 312-455-8498, ext 802

2. HAZARDOUS IDENTIFICATION:

Classification according to Regulation (EC) No 1272/2008 [CLP]

None

Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

Hazard pictograms: None Signal word: None Hazard statements: None

EU Specific Hazard Statements: Not applicable

Precautionary Statements Prevention: P210, P280 Response: P370+P378 Storage: P403 Disposal: P501

Other Hazards: Not applicable

3. INGREDIENT COMPOSITION/INFORMATION:

Component	CAS No.	EINECS No.	Weight %
Dimethyl sulfoxide	67-68-5	200-664-3	95-100%

4. FIRST AID MEASURES:

Skin Contact	Wash off skin thoroughly with soap and water. Remove contaminated clothing and wash before reuse.
Eye Contact	Ensure adequate flushing of eye contamination for at least 15 minutes.
Inhalation	Remove from exposure, rest and keep warm.
Ingestion	Wash mouth out thoroughly with water and drink plenty of water.

Most important symptoms and effects: H227

Indication of any immediate medical attention and special treatment needed: Treat symptomatically.

Advice for emergency responders: For further assistance, contact your local Poison Control Center.

Protection of first-aid responders: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. FIRE FIGHTING MEASURES:

Suitable extinguishing media: Water Spray, Carbon Dioxide, Dry Chemical Powder, or appropriate foam.

Unsuitable extinguishing media: No information available

Special hazards arising from the substance or mixture: Not known. Advice for fire-fighters: Standard procedure for chemical fires

6. ACCIDENTAL RELEASE MEASURES:

Wear appropriate personal protective clothing (Section 8). Mop up with an absorbent cloth and arrange removal by a disposal company. Wash site of spillage thoroughly with water and detergent and prevent further leakage or spillage if safe to do so. No special environmental precautions required.

7. HANDLING AND STORAGE:

Use only in area provided with exhaust ventilation. Avoid contact with skin, eyes and clothing. Wear appropriate protective clothing (Section 8).

Keep container tightly closed, and in a dark, well-ventilated area. Store at -20°C.

8. EXPOSURE CONTROLS/PPE:

Follow good laboratory practice when handling this product.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice

Recommended personal protection equipment

Eye protection: Laboratory safety goggles. Hands:

Chemical resistant gloves.

 ${\bf Skin: Laboratory\, protective\, clothing.}$

Respiratory: Fume hood or in areas with adequate ventilation.

Control Parameters:

Dimethyl sulfoxide (67-68-5)	
EU OEL (TWA)	None
EU OEL (STEL)	None
EU Skin Notation	None
Austria	50 ppm, 160mg/m^3
Belgium (TWA)	None
Czech Republic	None
Denmark (TWA)	None
Finland OEL (TWA)	None
France OEL (VME)	None
Germany OEL (TWA)	50 ppm exposure factor 2 160mg/m^3 exposure factor 2
Ireland (TWA)	None
Italy OEL (TWA)	None
Lithuania OEL (TWA)	50 ppm, 150mg/m^3



FOR LAB RESEARCH USE ONLY NOT FOR USE IN HUMANS OR ANIMALS

Netherlands OEL (MAC)	None
Norway	None
Poland	None
Portugal	None
Spain OEL (TWA)	None
Sweden OEL - TLVs	50 ppm TLV NGV 150mg/m^3 TLV NGV
Switzerland	100 ppm STEL, 320 mg/m^3 STEL 50 ppm TWA, 160 mg/m^3 TWA
United Kingdom	None

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance: Colorless liquid

Odor: None

Melting point/melting range: Untested Boiling point/boiling range: Untested

Flash point: Untested

Autoignition temperature: Untested Decomposition temperature: Untested

Evaporation rate: Untested
Flammability: Untested
Upper explosion limit: Untested
Lower explosion limit: Untested
Vapor pressure: Untested
Relative density: Untested
Specific gravity: Untested
Solubility: Untested
Partition coefficient: Untested

10. CHEMICAL STABILITY AND REACTIVITY:

Reactivity: None known

Explosive properties: Untested

Chemical stability: Stable under normal conditions Possibility of hazardous reactions: None reported

Conditions to avoid: No data available Incompatible materials: None reported

Hazardous decomposition products: No data available

11. TOXICOLOGICAL INFORMATION:

Inhalation: May be irritating to mucous membranes and upper respiratory tract.

Eye contact: May cause irritation Skin contact: May cause irritation Ingestion: May be harmful if swallowed

Carcinogenic effects: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, and OSHA's list of regulated

carcinogens.

Mutagenic effects: Not available Reproductive toxicity: Not available STOT – Single exposure: Not available STOT – Repeated exposure: Not available Teratogenic effects: Not available

12. ECOLOGICAL INFORMATION:

Component: Dimethylsufloxide
Toxicity to fish – Danio rerio – 25,0000 mg/L – 96h
Toxicity to invertebrates – Daphnia magna – 24,600 mg/L – 48h
Toxicity to algae – Pseuokirchneriella subcapitata – 17,000 mg/L – 72h
Toxicity to bacteria – activated sludge – 10-100mg/L – 30 min
Biodegradability – Not readily biodegradable.

13. DISPOSAL CONSIDERATIONS:

Dispose of waste in accordance with local and national regulations.

14. TRANSPORT INFORMATION:

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION:

Substances of Very High Concern: None.

Restricted substances under EC 1907/2006, Annex XVII: None.

Substances listed under Annex I of Regulation (EC) No 689/2008: None.

Restricted substances under Annex V of Regulation (EC) No 689/2008: None.

Substances under Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC: None.

 $German\,Water\,haz ard\,classes\,(Wassergef\"{a}hrdungsklassen):\,Not\,classified.$

Other International Inventories: No information available

16. OTHER INFORMATION:

Reason for revision: New product Revision number: 1

Revision: 2/4/2021

The above information is believed to be correct but should only be used as a guide for experienced personnel. Proteintech Group Inc. will not be liable for any damage resulting from the handling of or from contact with the above product.

For lab use only, not for diagnostic or therapeutic work.



IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: EthD-1

REACH registration number: No registration number is given yet for this substance / substances in this mixture since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet expired.

Company/undertaking Identification:

Proteintech Group 5400 Pearl Street STE 300 Rosemont, IL 60018 312-455-8498

Emergency telephone number:

312-455-8498, ext 802

2. HAZARDOUS IDENTIFICATION:

Classification according to Regulation (EC) No 1272/2008 [CLP]

Physical hazards: Flammable liquids, Category 4

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 2
Substances/mixtures which, in contact with water, emit flammable gases	Category 3

Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP] Hazard pictograms:



Signal word: Danger

Hazard statements:

H314 - Causes severe skin burns and eye damage

H351 - Suspected of causing cancer

H261 - In contact with water releases flammable gases

Precautionary Statements

P280 - Wear protective gloves/ eye protection/ face protection

P281 - Use personal protective equipment as required

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P201 - Obtain special instructions before use

P363 - Wash contaminated clothing before reuse

P264 - Wash face, hands and any exposed skin thoroughly after handling

P231 + P232 - Handle under inert gas. Protect from moisture

P310 - Immediately call a POISON CENTER or doctor/ physician

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

 ${\rm P303+P361+P353-IF\ ON\ SKIN\ (or\ hair):\ Remove/\ Take\ off\ immediately\ all\ contaminated\ clothing.\ Rinse\ skin\ with\ water/shower$

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

3. INGREDIENT COMPOSITION/INFORMATION:

Component	CAS No.	EINECS No.	Weight %
Dimethyl sulfoxide	67-68-5	200-664-3	95-100%

4. FIRST AID MEASURES:

Skin Contact	Wash off skin thoroughly with soap and water. Remove contaminated clothing and wash before reuse.
Eye Contact	Ensure adequate flushing of eye contamination for at least15 minutes.
Inhalation Remove from exposure, rest and keep warm.	
Ingestion	Wash mouth out thoroughly with water and drink plenty ofwater.

Most important symptoms and effects: H227

Indication of any immediate medical attention and special treatment needed: Treat symptomatically.

Advice for emergency responders: For further assistance, contact your local Poison Control Center.

Protection of first-aid responders: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. FIRE FIGHTING MEASURES:

Suitable extinguishing media: Water Spray, Carbon Dioxide, Dry Chemical Powder, or appropriate foam.
Unsuitable extinguishing media: No information available

Special hazards arising from the substance or mixture: Not known. Advice for fire-fighters: Standard procedure for chemical fires

6. ACCIDENTAL RELEASE MEASURES:

Wear appropriate personal protective clothing (Section 8). Mop up with an absorbent cloth and arrange removal by a disposal company. Wash site of spillage thoroughly with water and detergent and prevent further leakage or spillage if safe to do so. No special environmental precautions required.

7. HANDLING AND STORAGE:

Use only in area provided with exhaust ventilation. Avoid contact with skin, eyes and clothing. Wear appropriate protective clothing (Section 8).

Keep container tightly closed, and in a dark, well-ventilated area. Store at -20°C.

EXPOSURE CONTROLS/PPE:

Follow good laboratory practice when handling this product.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice

Recommended personal protection equipment

Eye protection: Laboratory safety goggles. Hands:

Chemical resistant gloves.

Skin: Laboratory protective clothing.

Respiratory: Fume hood or in areas with adequate ventilation.

Control Parameters:

Dimethyl sulfoxide (67-68-5)	
EU OEL (TWA)	None

Proteintech Group, USA, 5400 Pearl Street, Suite 300, Rosemont, IL 60018, USA t 1-888-478-4522

f 1-312-4558408

Proteintech Europe, $4^{\rm th}$ Floor, 196 Deansgate, Manchester, M3 3WF t (+44)-161-83-93-007

f (+44)-161-24-13-103

t 86-27-87531629 f 86-27-87531627

San Ying Biotechnology, China, D3-3, No.666 Gaoxin Avenue, Wuhan East Lake Hi-tech Development Zone, Wuhan, P.R.C. t 86-27-87531629



EU OEL (STEL)

FOR LAB RESEARCH USE ONLY NOT FOR USE IN HUMANS OR ANIMALS

LOOLL(STLL)	None
EU Skin Notation	None
Austria	50 ppm, 160mg/m^3
Belgium (TWA)	None
Czech Republic	None
Denmark (TWA)	None
Finland OEL (TWA)	None
Poland	None
Portugal	None
Spain OEL (TWA)	None
Sweden OEL - TLVs	50 ppm TLV NGV 150mg/m^3 TLV NGV
Switzerland	100 ppm STEL, 320 mg/m^3 STEL 50 ppm TWA, 160 mg/m^3 TWA
United Kingdom	None

None

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance: Colorless liquid

Odor: None

Melting point/melting range: Untested Boiling point/boiling range: Untested

Flash point: Untested

Autoignition temperature: Untested Decomposition temperature: Untested

Evaporation rate: Untested Flammability: Untested Upper explosion limit: Untested Lower explosion limit: Untested Vapor pressure: Untested Relative density: Untested Specific gravity: Untested Solubility: Untested Partition coefficient: Untested Explosive properties: Untested

10. CHEMICAL STABILITY AND REACTIVITY:

Reactivity: None known Chemical stability: Stable under normal conditions Possibility of hazardous reactions: None reported

Conditions to avoid: No data available Incompatible materials: None reported

Hazardous decomposition products: No data available

11. TOXICOLOGICAL INFORMATION:

 $Inhalation: \ May \ be \ irritating \ to \ mucous \ membranes \ and \ upper \ respiratory \ tract.$

Eye contact: May cause irritation Skin contact: May cause irritation Ingestion: May be harmful if swallowed

France OEL (VME)	None
Germany OEL (TWA)	50 ppm exposure factor 2 160mg/m^3 exposure factor 2
Ireland (TWA)	None
Italy OEL (TWA)	None
Lithuania OEL (TWA)	50 ppm, 150mg/m^3
Netherlands OEL (MAC)	None
Norway	None

Carcinogenic effects: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, and OSHA's list of regulated carcinogens.

Mutagenic effects: Not available Reproductive toxicity: Not available STOT – Single exposure: Not available STOT – Repeated exposure: Not available Teratogenic effects: Not available

12. ECOLOGICAL INFORMATION:

Component: Dimethylsufloxide

Toxicity to fish – Danio rerio – 25,0000 mg/L – 96h

Toxicity to insn – Danio reno – 25,0000 mg/L – 96n
Toxicity to invertebrates – Daphnia magna – 24,600 mg/L – 48h
Toxicity to algae – Pseuokirchneriella subcapitata – 17,000 mg/L – 72h
Toxicity to bacteria – activated sludge – 10-100mg/L – 30 min
Biodegradability – Not readily biodegradable.

13. DISPOSAL CONSIDERATIONS:

Dispose of waste in accordance with local and national regulations.

14. TRANSPORT INFORMATION:

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION:

Substances of Very High Concern: None.

Restricted substances under EC 1907/2006, Annex XVII: None.

Substances listed under Annex I of Regulation (EC) No 689/2008: None.

Restricted substances under Annex V of Regulation (EC) No 689/2008: None.

Substances under Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC: None.

 $German\,Water\,hazard\,classes\,(Wassergef\"{a}hrdungsklassen):\,Not\,classified.$

Other International Inventories: No information available

16. OTHER INFORMATION:

Reason for revision: New product

Revision number: 1 Revision: 2/4/2021

The above information is believed to be correct but should only be used as a guide for experienced personnel. Proteintech Group Inc. will not be liable for any damage resulting from the handling of or from contact with the above product.

For lab use only, not for diagnostic or therapeutic work.