

Revision Date 14-Mar-2012

Revision Number 3

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### Product Identifier

**Product Description:** cis-2,6-Dimethylmorpholine  
**Reach Registration Number** 01-2119446655-32  
**Cat No.** 371840000; 371840250; 371841000; 371845000

### Relevant identified uses of the substance or mixture and uses advised against

**Recommended Use** Laboratory chemicals  
**Uses advised against** No Information available

### Details of the supplier of the safety data sheet

#### Company

Acros Organics BVBA  
 Janssen Pharmaceuticaaan 3a  
 2440 Geel, Belgium

**E-mail address** begel.sdsdesk@thermofisher.com

### Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01  
 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99  
 Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300  
 CHEMTREC Phone Number, Europe: 001-703-527-3887

## SECTION 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

#### REGULATION (EC) No 1272/2008

Acute oral toxicity	Category 4
Acute dermal toxicity	Category 4
Skin Corrosion/irritation	Category 1 B
Serious Eye Damage/Eye Irritation	Category 1
Flammable liquids.	Category 3

### Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

**Symbol(s)** C - Corrosive  
**R-phrases** R10 - Flammable  
 R34 - Causes burns  
**Risk Combination Phrases** R21/22 - Harmful in contact with skin and if swallowed

cis-2,6-Dimethylmorpholine

Revision Date 14-Mar-2012

## SECTION 2. HAZARDS IDENTIFICATION

### Label Elements



### Signal Word

**Danger**

### Hazard Statements

H302 - Harmful if swallowed  
H314 - Causes severe skin burns and eye damage  
H312 - Harmful in contact with skin  
H226 - Flammable liquid and vapor

### Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection  
P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
P280 - Wear eye protection/ face protection  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P310 - Immediately call a POISON CENTER or doctor/ physician  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell  
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

### Other Hazards

No information available.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.

cis-2,6-Dimethylmorpholine

Revision Date 14-Mar-2012

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

cis-2,6-Dimethylmorpholine 6485-55-8	EEC No. 229-353-0	97	6485-55-8	R10 Xn; R21/22 C; R34;	Skin Corr. 1B (H314) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Eye Dam. 1 (H318) Flam. Liquid 3 (H226)	01-2119446655-32
---	-------------------	----	-----------	------------------------------	---	------------------

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

## SECTION 4. FIRST AID MEASURES

### Description of first aid measures

#### Eye Contact

Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

#### Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

#### Ingestion

Do not induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Call a physician immediately. If possible drink milk afterwards.

#### Inhalation

Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediate medical attention is required.

#### Notes to Physician

Treat symptomatically

## SECTION 5. FIRE-FIGHTING MEASURES

### Extinguishing media

#### Suitable Extinguishing Media

Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. chemical foam.

#### Extinguishing media which must not be used for safety reasons

No information available.

#### Special hazards arising from the substance or mixture

Flammable.

#### Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

cis-2,6-Dimethylmorpholine

Revision Date 14-Mar-2012

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

### Environmental precautions

Prevent further leakage or spillage if safe to do so

### Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Do not breathe dust. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Use only in area provided with appropriate exhaust ventilation. Use explosion-proof equipment. Use only non-sparking tools.

### Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat and sources of ignition. Keep at temperatures below .?1°C. Flammables area.

### Specific End Uses

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

#### Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

#### Derived No Effect Level (DNEL)

No information available.

#### Predicted No Effect Concentration (PNEC)

No information available.

### Exposure controls

#### Engineering Measures

Ensure adequate ventilation, especially in confined areas Ensure that eyewash stations and safety showers are close to the workstation location

#### Personal protective equipment

##### Eye Protection

Goggles

##### Hand Protection

Protective gloves

##### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

cis-2,6-Dimethylmorpholine

Revision Date 14-Mar-2012

## Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

## Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

## Environmental exposure controls

No information available.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Clear
pH	11.8 ( @ 20 ) 100 g/L (20°C)
Vapor Pressure	7 mbar @ 20 °C
Viscosity	5.3 mPa.s at 20 °C
Boiling Point/Range	140 - 142°C / 284 - 287.6°F @ 760 mmHg
Melting Point/Range	-85°C / -121°F
Flash Point	41°C / 105.8°F
Autoignition Temperature	280°C / 536°F
Explosion Limits	
Lower	1.6
Upper	12.9
Water Solubility	miscible
Specific Gravity	0.930
Molecular Formula	C6 H13 N O
Molecular Weight	115.18

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

### Chemical Stability

Stable under normal conditions.

### Possibility of Hazardous Reactions

#### Hazardous Polymerization

No information available.

#### Hazardous Reactions .

No information available.

### Conditions to Avoid

Keep away from open flames, hot surfaces and sources of ignition, Incompatible products, Exposure to moist air or water.

### Incompatible Materials

Acids.

### Hazardous Decomposition Products

Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

cis-2,6-Dimethylmorpholine

Revision Date 14-Mar-2012

## SECTION 11. TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

#### Acute Toxicity

##### Product Information

No acute toxicity information is available for this product

#### Component Information

##### Component

cis-2,6-Dimethylmorpholine

LD50 Oral	LD50 Dermal	LC50 Inhalation
1270 mg/kg ( Rat )	1000 mg/kg ( Rat ) 710 mg/kg ( Rabbit )	

#### Chronic Toxicity

##### Carcinogenicity

There are no known carcinogenic chemicals in this product

##### Sensitization

No information available.

##### Mutagenic Effects

Not mutagenic in AMES Test

##### Reproductive Effects

No information available.

##### Developmental Effects

No information available.

##### Target Organs

No information available.

##### Other Adverse Effects

The toxicological properties have not been fully investigated.

##### Endocrine Disruptor Information

None known

## SECTION 12. ECOLOGICAL INFORMATION

### Toxicity

#### Ecotoxicity effects

Do not flush into surface water or sanitary sewer system Do not allow material to contaminate ground water system

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
cis-2,6-Dimethylmorpholine	96.9 mg/L EC50 = 72 h	100-220 mg/L LC50 96 h 387 mg/L LC50 96 h	EC50 = 1000 mg/L 17 h	187 mg/L EC50 = 48 h

#### Persistence and degradability

No information available

#### Bioaccumulative potential

cis-2,6-Dimethylmorpholine

Revision Date 14-Mar-2012

No information available.

Component	log Pow
cis-2,6-Dimethylmorpholine	-0.102

## Mobility in soil

## Results of PBT and vPvB assessment

### Other adverse effects

No information available

## SECTION 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Waste from Residues / Unused Products** Dispose of in accordance with local regulations

**Contaminated Packaging** Empty containers should be taken to local recyclers for disposal

## SECTION 14. TRANSPORT INFORMATION

### IMDG/IMO

**UN-No** 2734  
**Hazard Class** 8  
**Subsidiary Hazard Class** 3  
**Packing Group** II  
**Proper Shipping Name** AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S.

### ADR

**UN-No** 2734  
**Hazard Class** 8  
**Subsidiary Hazard Class** 3  
**Packing Group** II  
**Proper Shipping Name** AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S.

### IATA

**UN-No** 2734  
**Hazard Class** 8  
**Subsidiary Hazard Class** 3  
**Packing Group** II  
**Proper Shipping Name** AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S.\*

cis-2,6-Dimethylmorpholine

Revision Date 14-Mar-2012

## SECTION 14. TRANSPORT INFORMATION

## SECTION 15. REGULATORY INFORMATION

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

#### International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
cis-2,6-Dimethylmorpholine	229-353-0	-		-	-	-	-	-	-	-	-

#### Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**CHINA** - China Inventory of Existing Chemical Substances

**AICS** - Inventory of Chemical Substances

**KECL** - Existing and Evaluated Chemical Substances

### Chemical Safety Assessment

## SECTION 16. OTHER INFORMATION

#### Full text of R-phrases referred to under sections 2 and 3

R10 - Flammable

R34 - Causes burns

R21/22 - Harmful in contact with skin and if swallowed

Revision Date

14-Mar-2012

Revision Summary

(M)SDS sections updated, 2, 3.

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

#### Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.



cis-2,6-Dimethylmorpholine

Revision Date 14-Mar-2012

---

End of Safety Data Sheet