

Revision Date 09-Nov-2010

Revision Number 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Description:

Thiophene

Cat No.

342590000; 342591000; 342595000

Synonyms

Divinylene sulfide.; Thiofuran

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 Pharmaceuticaal 3a
2440 Geel, Belgium

E-mail address

begel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 800-ACROS-01

For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99

Emergency Number, US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300

CHEMTREC Phone Number, Europe: 703-527-3887

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Acute Inhalation Toxicity - Dusts and Mists	Category 4
Serious Eye Damage/Eye Irritation	Category 2A
Chronic aquatic toxicity	Category 3
Flammable liquids.	Category 2

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

For the full text of the R phrases mentioned in this Section, see Section 16

Symbol(s)

F - Highly flammable

Xn - Harmful

R -phrase(s)

R11 - Highly flammable

R36 - Irritating to eyes

Risk Combination Phrases

R20/22 - Harmful by inhalation and if swallowed

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

2. HAZARDS IDENTIFICATION

Label Elements



Signal Word

Danger

Hazard Statements

H332 - Harmful if inhaled
 H412 - Harmful to aquatic life with long lasting effects
 H319 - Causes serious eye irritation
 H225 - Highly flammable liquid and vapor

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

P273 - Avoid release to the environment
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 P280 - Wear protective gloves/protective clothing/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
 P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
 P240 - Ground/Bond container and receiving equipment

Other Hazards

Lachrymator (substance which increases the flow of tears).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
Thiophene	EEC No. 203-729-4	99	110-02-1	F; R11 Xn; R20/22 Xi; R36 R52/53;	Eye Irrit. 2 (H319) Acute Tox. 4 (H302) Acute Tox. 4 (H332) Aquatic Chronic 3 (H412)	

For the full text of the R phrases mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of first aid measures**Eye Contact**

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 removing all contaminated clothes and shoes

Ingestion

Clean mouth with water Get medical attention

Inhalation

Remove from exposure, lie down Move to fresh air If breathing is difficult, give oxygen If not breathing, give artificial respiration

Notes to Physician

Treat symptomatically

5. FIRE-FIGHTING MEASURES

Extinguishing media**Suitable Extinguishing Media**

Carbon dioxide (CO₂) Dry chemical Use water spray to cool unopened containers chemical foam

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Flammable Vapors may travel to source of ignition and flash back

Advice for fire-fighters

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

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 and closed containers for disposal Remove all sources of ignition Use spark-proof tools and explosion-proof equipment

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with skin and eyes Do not breathe dust Do not breathe vapors or spray mist 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 Flammables area

Specific End Uses

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.

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

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Liquid

Appearance

Colorless

odor

Stench

pH

No information available.

Boiling Point/Range

84°C / 183.2°F@ 760 mmHg

Melting Point/Range

-38°C / -36.4°F

Flash Point

-9°C / 15.8°F

Explosion Limits

Lower

1.5

Upper

12.5

Water Solubility

Insoluble

Specific Gravity

1.050

Molecular Formula

C4 H4 S

Molecular Weight

84.14

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.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Carbon monoxide (CO). Carbon dioxide (CO₂). Sulfur oxides. Sulfides.

11. TOXICOLOGICAL INFORMATION**Information on Toxicological Effects****Acute Toxicity****Product Information**

Product does not present an acute toxicity hazard based on known or supplied information

Component Information**Component**

Thiophene

LD50 Oral	LD50 Dermal	LC50 Inhalation
1400 mg/kg (Rat)		

Chronic Toxicity**Carcinogenicity**

There are no known carcinogenic chemicals in this product

Sensitization

No information available.

Mutagenic Effects

No information available

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. See actual entry in RTECS for complete information

Endocrine Disruptor Information

None known

12. ECOLOGICAL INFORMATION**Toxicity****Ecotoxicity effects**

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants

Persistence and degradability

Not readily biodegradable

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT and vPvB assessment**Other adverse effects**

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods**

13. DISPOSAL CONSIDERATIONS

Waste from Residues / Unused Products	Dispose of in accordance with local regulations
Contaminated Packaging	Empty containers should be taken for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION

IMDG/IMO

UN-No	2414
Hazard Class	3
Packing Group	II

ADR

UN-No	2414
Hazard Class	3
Packing Group	II

IATA

UN-No	2414
Hazard Class	3
Packing Group	II

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
Thiophene	203-729-4	-		X	X	-	X	X	X	X	KE-33795 X

Legend

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

EINECS/ELINCS - European Inventory Lists

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

16. OTHER INFORMATION

Text of R phrases mentioned in Section 2-3

R11 - Highly flammable

R36 - Irritating to eyes

16. OTHER INFORMATION

R20/22 - Harmful by inhalation and if swallowed

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Revision Date 09-Nov-2010

Revision Summary Not applicable

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

Disclaimer

The information provided on this SDS 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

End of Safety Data Sheet