

Revision Date 08-Nov-2010

Revision Number 2

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier**

**Product Description:** Itaconic anhydride  
**Cat No.** 412940000; 412940250  
**Synonyms** 2-Methylenesuccinic anhydride

**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: 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**

Skin Corrosion / irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Specific target organ systemic toxicity (single exposure)	Category 3

**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)** Xi - Irritant  
**R -phrase(s)** none  
**Risk Combination Phrases** R36/37/38 - Irritating to eyes, respiratory system and skin

**Label Elements**

## 2. HAZARDS IDENTIFICATION

**Signal Word****Warning****Hazard Statements**

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

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

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P302+ P352 - IF ON SKIN: Wash with plenty of soap and water

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

**Other Hazards**

No information available.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
2,5-Furandione, dihydro-3-methylene-	EEC No. 218-518-2	98	2170-03-8	Xi; R36/37/38	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	

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**

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 removing all contaminated clothes and shoes Obtain medical attention Take off contaminated clothing and shoes immediately

**Ingestion**

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

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

#### **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

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

No information available.

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

Thermal decomposition can lead to release of irritating gases and vapors

#### **Advice for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear Thermal decomposition can lead to release of irritating gases and vapors

## 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

Sweep up or vacuum up spillage and collect in suitable container for disposal

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Avoid contact with skin and eyes Avoid contact with clothing Remove and wash contaminated clothing before re-use Avoid breathing vapors or mists Do not ingest Wash thoroughly after handling

### Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place Keep container tightly closed

### 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**

Ventilation systems

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Personal protective equipment

<b>Eye Protection</b>	Goggles
<b>Hand Protection</b>	Protective gloves
<b>Skin and body protection</b>	Wear appropriate protective gloves and clothing to prevent skin exposure
<b>Respiratory Protection</b>	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

<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice
<b>Environmental exposure controls</b>	No information available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Powder, Solid
<b>Appearance</b>	Light cream
<b>pH</b>	No information available.
<b>Boiling Point/Range</b>	No information available. - 115 - 239@ 12 mmHg
<b>Melting Point/Range</b>	66 - 70°C / 150.8 - 158°F
<b>Flash Point</b>	No information available.
<b>Molecular Formula</b>	C5 H4 O3
<b>Molecular Weight</b>	112.08

## 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

Heat, flames and sparks

#### Incompatible Materials

Oxidizing agents.

#### Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors.

## 11. TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

#### Acute Toxicity

**Product Information** No acute toxicity information is available for this product

#### **Component Information**

**11. TOXICOLOGICAL INFORMATION****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.

**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**

No information available

**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****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**

Not regulated

**ADR**

Not regulated

**IATA**

Not regulated

**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
2,5-Furandione, dihydro-3-methylene-	218-518-2	-		X	-	X	-	X	-	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**

R36/37/38 - Irritating to eyes, respiratory system and skin

Revision Date 08-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