

Revision Date 24-Nov-2010

Revision Number 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

**Product Description:** 3,4,5,6-Tetrahydrophthalic anhydride  
**Cat No.** 138220000; 138220050; 138220250  
**Synonyms** Cyclohexene-1,2-dicarboxylic 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

Serious Eye Damage/Eye Irritation	Category 1
Respiratory Sensitization	Category 1
Skin Sensitization	Category 1
Chronic aquatic toxicity	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)

Xn - Harmful

#### R -phrase(s)

R41 - Risk of serious damage to eyes

#### Risk Combination Phrases

R42/43 - May cause sensitization by inhalation and skin contact

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

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H412 - Harmful to aquatic life with long lasting effects

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

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

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

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

P304 + P341 - IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

P280 - Wear eye protection/face protection

P273 - Avoid release to the environment

### Other Hazards

No information available.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
3,4,5,6-Tetrahydrophthalic anhydride 2426-02-0	EEC No. 219-374-3	98	2426-02-0	Xi;R41 R42/43 R52-53	Eye Dam. 1 (H318) Resp. Sens. 1 (H334) Skin Sens. 1 (H317) 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

<b>Skin Contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes
<b>Ingestion</b>	Do not induce vomiting Never give anything by mouth to an unconscious person Drink plenty of water If possible drink milk afterwards
<b>Inhalation</b>	Remove from exposure, lie down Move to fresh air
<b>Notes to Physician</b>	Treat symptomatically

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

#### **Suitable Extinguishing Media**

Water spray Carbon dioxide (CO<sub>2</sub>) Dry chemical alcohol-resistant foam

#### **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

## 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

Ensure adequate ventilation

### Conditions for safe storage, including any incompatibilities

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

### 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.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

<b>Predicted No Effect Concentration (PNEC)</b>	No information available.
<b>Exposure controls</b>	
<b>Engineering Measures</b>	Ensure adequate ventilation, especially in confined areas
<b>Personal protective equipment</b>	
<b>Eye Protection</b>	Safety glasses with side-shields Goggles
<b>Hand Protection</b>	Protective gloves
<b>Skin and body protection</b>	Long sleeved clothing
<b>Respiratory Protection</b>	Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions
<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>	Solid
<b>Appearance</b>	White
<b>odor</b>	odorless
<b>pH</b>	No information available.
<b>Boiling Point/Range</b>	No information available.
<b>Melting Point/Range</b>	70 - 74°C / 158 - 165.2°F
<b>Flash Point</b>	No information available.
<b>Water Solubility</b>	REACTS
<b>Molecular Formula</b>	C8 H8 O3
<b>Molecular Weight</b>	152.15

**10. STABILITY AND REACTIVITY****Reactivity****Chemical Stability**

Moisture sensitive. Stable under normal conditions.

**Possibility of Hazardous Reactions**

**Hazardous Polymerization** No information available.

**Hazardous Reactions .** No information available.

**Conditions to Avoid**

Exposure to moist air or water.

**Incompatible Materials**

Strong oxidizing agents, Strong acids, Strong bases, Strong reducing agents.

**Hazardous Decomposition Products**

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

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

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

**11. TOXICOLOGICAL INFORMATION****Component Information****Chronic Toxicity**

**Carcinogenicity** There are no known carcinogenic chemicals in this product

**Sensitization** May cause sensitization by inhalation and skin contact  
**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** Dispose of in accordance with local regulations

**Products**

**Contaminated Packaging** Empty containers should be taken for local recycling, recovery or waste disposal

**14. TRANSPORT INFORMATION****IMDG/IMO**

<b>UN-No</b>	2698
<b>Hazard Class</b>	8
<b>Packing Group</b>	III
<b>Proper Shipping Name</b>	TETRAHYDROPHthalic ANHYDRIDES

**ADR**

<b>UN-No</b>	2698
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**14. TRANSPORT INFORMATION**

Hazard Class 8  
Packing Group III  
Proper Shipping Name TETRAHYDROPHthalic ANHYDRIDES

**IATA**

UN-No 2698  
Hazard Class 8  
Packing Group III  
Proper Shipping Name TETRAHYDROPHthalic ANHYDRIDES

**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
3,4,5,6-Tetrahydrophthalic anhydride	219-374-3	-		-	-	-	-	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**

R41 - Risk of serious damage to eyes

R42/43 - May cause sensitization by inhalation and skin contact

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

Revision Date 24-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