

# Safety data sheet

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BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 02.08.2018

Version: 8.0

Product: **Pyranyl acetate**

(ID no. 30676488/SDS\_GEN\_EU/EN)

Date of print 03.08.2018

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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

## Pyranyl acetate

Chemical name: 2H-Pyran-4-ol, tetrahydro-4-methyl-2-(2-methylpropyl)-, 4-acetate

CAS Number: 131796-64-0

REACH registration number: 01-2120734022-71-0000

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

Relevant identified uses: Chemical

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

Company:

BASF SE

67056 Ludwigshafen

GERMANY

Operating Division Nutrition and Health

Telephone: +49 621 60-48434

E-mail address: EN-global-safety-data@basf.com

### 1.4. Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

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## SECTION 2: Hazards Identification

### 2.1. Classification of the substance or mixture

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

Eye Dam./Irrit. 2  
Aquatic Chronic 3

H319, H412

For the classifications not written out in full in this section the full text can be found in section 16.

## 2.2. Label elements

Globally Harmonized System, EU (GHS)

Pictogram:



Signal Word:  
Warning

Hazard Statement:

H319 Causes serious eye irritation.  
H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280 Wear eye/face protection.  
P273 Avoid release to the environment.  
P264 Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337 + P311 If eye irritation persists: Call a POISON CENTER or doctor/physician.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection point.

## 2.3. Other hazards

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

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture. The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

## SECTION 3: Composition/Information on Ingredients

### 3.1. Substances

#### Chemical nature

2H-Pyran-4-ol, tetrahydro-4-methyl-2-(2-methylpropyl)-, 4-acetate  
CAS Number: 131796-64-0

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

### 3.2. Mixtures

Not applicable

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## SECTION 4: First-Aid Measures

### 4.1. Description of first aid measures

Remove contaminated clothing.

If inhaled:

| Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Wash thoroughly with soap and water.

On contact with eyes:

| Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

| Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

| Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing media

Suitable extinguishing media:

foam, dry powder, carbon dioxide, water spray

Unsuitable extinguishing media for safety reasons:

water jet

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

carbon oxides, harmful vapours

The substances/groups of substances mentioned can be released in case of fire.

### 5.3. Advice for fire-fighters

Special protective equipment:

Wear a self-contained breathing apparatus.

Further information:

Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Cool endangered containers with water-spray.

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## SECTION 6: Accidental Release Measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures see, section 8.

Ensure adequate ventilation. Do not breathe vapour/spray. Avoid contact with the skin, eyes and clothing.

### 6.2. Environmental precautions

Do not discharge into drains/surface waters/groundwater. Inform authorities in the event of product spillage to water courses or sewage systems.

### 6.3. Methods and material for containment and cleaning up

For large amounts: Dike spillage. Pump off product.

For residues: Contain with absorbent material (e.g. sand, silica gel, acid binder, general purpose binder, sawdust).

Dispose of absorbed material in accordance with regulations.

### 6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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## SECTION 7: Handling and Storage

### 7.1. Precautions for safe handling

Ensure thorough ventilation of stores and work areas. Wear suitable protective clothing and eye/face protection. Avoid contact with the skin, eyes and clothing. Keep container tightly sealed.

Protection against fire and explosion:

Take precautionary measures against static discharges. Avoid all sources of ignition: heat, sparks, open flame.

## 7.2. Conditions for safe storage, including any incompatibilities

Suitable materials for containers: Aluminium, Stainless steel 1.4301 (V2), Stainless steel 1.4401, Stove-lacquer RDL 50, glass, High density polyethylene (HDPE), Low density polyethylene (LDPE), tinned carbon steel (Tinplate)

Further information on storage conditions: Keep container tightly closed in a cool, well-ventilated place.

## 7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

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## SECTION 8: Exposure Controls/Personal Protection

### 8.1. Control parameters

#### Components with occupational exposure limits

No occupational exposure limits known.

### 8.2. Exposure controls

#### Personal protective equipment

Respiratory protection:

Respiratory protection in case of vapour/aerosol release. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:

Chemical resistant protective gloves (EN 374)

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374):

e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm) and other  
Manufacturer's directions for use should be observed because of great diversity of types.

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

**Body protection:**

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

**General safety and hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is required additionally to the stated personal protection equipment. Avoid contact with skin. No eating, drinking, smoking or tobacco use at the place of work. Hands and/or face should be washed before breaks and at the end of the shift. Store work clothing separately.

**Environmental exposure controls**

Do not discharge product into the environment without control.

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## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

Form:	liquid	
Odour:	No data available.	
Odour threshold:	< 100 ppm	
pH value:	No data available.	
Melting temperature:	< -20 °C (1,013 hPa)	(measured)
decomposition point:	approx. 200 °C (1,013 hPa) The substance / product decomposes.	(measured)
Boiling point:	223 °C (1,013 hPa)	
Flash point:	104 °C	(DIN EN 22719; ISO 2719, closed cup)
Flammability:	hardly combustible	
Lower explosion limit:	For liquids not relevant for classification and labelling.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
Ignition temperature:	284 °C	(DIN EN 14522)
Vapour pressure:	0.0195 hPa (20 °C) Extrapolated value	(measured)
Density:	0.969 g/cm <sup>3</sup> (20 °C)	(ISO 2811-3)
Relative density:	0.969 (20 °C)	(ISO 2811-3)

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Solubility in water:	814 mg/l (20 °C, pH 5.8)	(OECD Guideline 105)
Partitioning coefficient n-octanol/water (log Kow):	3.1 - 3.2 (23 °C)	(OECD Guideline 117)
Self ignition:	Based on its structural properties the product is not classified as self-igniting.	Test type: Spontaneous self-ignition at room-temperature.
Thermal decomposition:	No data available.	
Viscosity, dynamic:	11.9 mPa.s (20 °C)	(BASF method)
Viscosity, kinematic:	No data available.	
Explosion hazard:	Based on the chemical structure there is no indicating of explosive properties.	
Fire promoting properties:	Based on its structural properties the product is not classified as oxidizing.	

## 9.2. Other information

Self heating ability:	not applicable, the product is a liquid	
Adsorption/water - soil:	log KOC: 2.52	(calculated)
Surface tension:	Based on chemical structure, surface activity is not to be expected.	
Grain size distribution:	The substance / product is marketed or used in a non solid or granular form.	
Molar mass:	214.30 g/mol	

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:	Corrosive effects to metal are not anticipated.	
Formation of flammable gases:	Remarks:	Forms no flammable gases in the presence of water.

### 10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### 10.3. Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

#### 10.4. Conditions to avoid

| See MSDS section 7 - Handling and storage.

#### 10.5. Incompatible materials

Substances to avoid:

| None known during use and storage if used according to instructions.

#### 10.6. Hazardous decomposition products

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

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## SECTION 11: Toxicological Information

### 11.1. Information on toxicological effects

#### Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Experimental/calculated data:

LD50 rat (oral): > 2,000 mg/kg (OECD Guideline 423)

LD50 rat (dermal): > 2,000 mg/kg (OECD Guideline 402)

#### Irritation

Assessment of irritating effects:

Not irritating to the skin. Eye contact causes irritation.

Experimental/calculated data:

Skin corrosion/irritation In vitro assay: non-irritant (OECD Guidelines 431/439)

Serious eye damage/irritation In vitro assay: Irritant. (OECD Guidelines 437/492 (BCOP/EpiOcular))

#### Respiratory/Skin sensitization

Assessment of sensitization:

Inconclusive data.

Experimental/calculated data:

In-vitro test In vitro assay: ambiguous (In vitro skin sensitization test battery)

#### Germ cell mutagenicity

Assessment of mutagenicity:



The substance was not mutagenic in bacteria.

#### Carcinogenicity

Assessment of carcinogenicity:

No data available.

#### Reproductive toxicity

Assessment of reproduction toxicity:

No data available.

#### Developmental toxicity

Assessment of teratogenicity:

No data available.

#### Specific target organ toxicity (single exposure)

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

#### Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

No data available.

#### Aspiration hazard

No aspiration hazard expected.

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## **SECTION 12: Ecological Information**

### **12.1. Toxicity**

Assessment of aquatic toxicity:

Acutely harmful for aquatic organisms.

Toxicity to fish:

No data available.

Aquatic invertebrates:

EC50 (48 h) 22.3 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

Aquatic plants:

EC50 (72 h) 74.6 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)

EC10 (72 h) 17.1 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)

Microorganisms/Effect on activated sludge:  
EC20 (3 h) 730 mg/l, (OECD Guideline 209, aerobic)

Chronic toxicity to fish:  
No data available.

Chronic toxicity to aquatic invertebrates:  
No data available.

Assessment of terrestrial toxicity:  
No data available concerning terrestrial toxicity.

## 12.2. Persistence and degradability

Assessment biodegradation and elimination (H<sub>2</sub>O):  
readily biodegradable, but failing 10d window

Elimination information:  
80 % CO<sub>2</sub> formation relative to the theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C) (aerobic, activated sludge, domestic, non-adapted) readily biodegradable, but failing 10d window

Assessment of stability in water:  
In contact with water the substance will hydrolyse slowly.  
Information on Stability in Water (Hydrolysis):  
t<sub>1/2</sub> 1,088 h, 50 % (50 °C, pH value 4), (OECD Guideline 111, pH 4)

t<sub>1/2</sub> 515 d, 50 % (20 °C, pH value 9), (OECD Guideline 111, pH 9)

## 12.3. Bioaccumulative potential

Assessment bioaccumulation potential:  
Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is possible.

## 12.4. Mobility in soil

Assessment transport between environmental compartments:  
Volatility: The substance will not evaporate into the atmosphere from the water surface.  
Adsorption in soil: Adsorption to solid soil phase is not expected.

## 12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

## 12.6. Other adverse effects

The substance is not listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

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## SECTION 13: Disposal Considerations

### 13.1. Waste treatment methods

Observe national and local legal requirements.

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## SECTION 14: Transport Information

### Land transport

ADR

Not classified as a dangerous good under transport regulations

UN number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class(es): Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

Special precautions for user: None known

RID

Not classified as a dangerous good under transport regulations

UN number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class(es): Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

Special precautions for user: None known

### Inland waterway transport

ADN

Not classified as a dangerous good under transport regulations

UN number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class(es): Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

Special precautions for user: None known

Transport in inland waterway vessel

Not evaluated

**Sea transport**

## IMDG

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

**Air transport**

## IATA/ICAO

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

**14.1. UN number**

See corresponding entries for "UN number" for the respective regulations in the tables above.

**14.2. UN proper shipping name**

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

**14.3. Transport hazard class(es)**

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

**14.4. Packing group**

See corresponding entries for "Packing group" for the respective regulations in the tables above.

**14.5. Environmental hazards**

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

#### 14.6. Special precautions for user

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

#### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Regulation:	Not evaluated
Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

### SECTION 15: Regulatory Information

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

##### Prohibitions, Restrictions and Authorizations

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 3

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

#### 15.2. Chemical Safety Assessment

Chemical Safety Assessment not required

### SECTION 16: Other Information

#### Assessment of the hazard classes according to UN GHS criteria (most recent version)

Eye Dam./Irrit. 2A  
Aquatic Acute 3  
Aquatic Chronic 3

Any other intended applications should be discussed with the manufacturer. Corresponding occupational protection measurements must be followed.

#### Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

Eye Dam./Irrit.	Serious eye damage/eye irritation
Aquatic Chronic	Hazardous to the aquatic environment - chronic
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

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The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

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