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# 1-(Acetyloxy)-2-propanone

Toxicity monograph (with existing HCVs)

May 2018

Prepared by:

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## 1-(Acetyloxy)-2-propanone

### Toxicity monograph (with existing HCVs)

#### INTRODUCTION

(b) (4) was asked to produce a toxicity monograph of 1-(acetyloxy)-2-propanone (CAS RN<sup>1</sup> 592-20-1), focussing on the inhalation route of exposure, with inclusion of existing Health Criteria Values (HCVs) where available. Data on the inhalation of tobacco smoke containing the substance (if available) have not been included in this monograph.

#### EXPERTISE

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#### TOXICITY DATA SEARCH CRITERIA<sup>3</sup>

(b) (4) has access to a wide range of data sources, including (b) (4) (see the [Appendix](#) for details), PubMed, the TOXNET system of databases and databanks (which includes Toxline (the toxicity subset of Medline), HSDB, GENETOX, DART, CCRIS, IRIS, ITER and CPDB), and eChemPortal.

All searches were conducted in May 2018 using the CAS RN(s) and (in PubMed only) name and/or synonym(s) identified below, as appropriate.

The data summarised in this report refers to the unheated form unless otherwise stated.

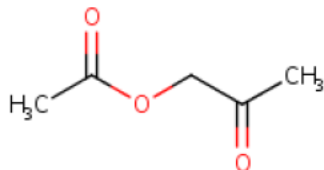
#### IDENTIFICATION, REACH STATUS AND EU CLASSIFICATION

Identifier	
Name	1-(Acetyloxy)-2-propanone
Synonyms(s)	Acetoxyacetone Acetonyl acetate

<sup>1</sup> Chemical Abstracts Service Registry Number

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Disclaimer: Searches are valid and complete as of the date of searching (b) (4) accepts no responsibility for the accuracy, completeness or sufficiency of any databases or searching platforms employed.

	2-Propanone, 1-(acetyloxy)-
CAS RN	592-20-1
REACH registration number <sup>4</sup>	Not REACH registered
Molecular formula	C <sub>5</sub> H <sub>8</sub> O <sub>3</sub>
Molecular weight	116.12
Structure	
Classification, according to EU CLP (EC 1272/2008)	Harmonised classification: None available.
	REACH joint registrants: None available.

## ADME<sup>5</sup>

No substance-specific data were identified.

## TOXICOLOGY

### LOCAL EFFECTS

#### Respiratory tract irritation

No substance-specific data were identified.

#### Skin irritation

No substance-specific data were identified.

#### Eye irritation

No substance-specific data were identified.

### SENSITISATION AND INTOLERANCE

#### Respiratory tract sensitisation

No substance-specific data were identified.

#### Skin sensitisation

No substance-specific data were identified.

<sup>4</sup> REACH registration numbers are substance and company specific. Therefore, the substance-specific part of the registration number is included here, from data disseminated on the ECHA 'registered substance' website.

<sup>5</sup> Absorption, Distribution, Metabolism and Excretion.

**Oral allergy/intolerance**

No substance-specific data were identified.

**INHALATION TOXICITY STUDIES – SYSTEMIC EFFECTS**

**Single dose toxicity**

No substance-specific data were identified.

**Repeated dose toxicity**

No substance-specific data were identified.

**TOXICITY STUDIES – OTHER EXPOSURE ROUTES**

**Single dose toxicity**

No substance-specific data were identified.

**Repeated dose toxicity**

No substance-specific data were identified.

**GENOTOXICITY**

No substance-specific data were identified.

**CARCINOGENICITY**

No substance-specific data were identified.

**REPRODUCTIVE AND DEVELOPMENTAL TOXICITY**

No substance-specific data were identified.

**CARDIOPULMONARY EFFECTS<sup>6</sup>**

No substance-specific data were identified.

**OTHER TOXICITY CONSIDERATIONS**

No substance-specific data were identified.

**EXISTING HEALTH CRITERIA VALUES (HCVs)**

No substance-specific HCVs were identified.

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<sup>6</sup> Potential effects on the heart, blood vessels and/or respiratory tract.

## APPENDIX (b) (4) database and databank

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includes information from peer-reviewed toxicology and nutrition journals as well as secondary sources and websites. In addition to primary literature on the health effects of chemicals, (b) (4) covers official publications and evaluations issued by authoritative groups including:

- WHO/IPCS reports and evaluations (including CICADs and EHCs, and IARC, JECFA and JMPR monographs), and the WHO Air Quality and Drinking-Water Quality Guidelines
- OECD SIDS dossiers/SIARS
- IUCLID data sets
- EU Risk Assessment Reports
- EU expert committee opinions (including EU scientific committees, and EFSA scientific panels) and other reports from EU agencies and institutes etc (including ECHA, ECVAM, EMA and CPS&Q)
- ECETOC, HERA, Council of Europe and other pan-European programmes
- UK government agency (including Defra, EA, FSA, DoH, HSE, HPA, PSD and VMD) and advisory committee (e.g. COT, COM, COC, ACNFP, SACN, ACP, ACAF, VPC, VRC and ACRE) reports and evaluations
- Opinions from other UK organisations such as the Royal Society
- US agency reports and evaluations (EPA, ATSDR, FDA, NTP, OSHA, NCEA, CFSAN, CERHR, NIEHS, CDC, OEHHA and ACGIH)
- Health Canada evaluations
- BUA, DFG, BG Chemie and BfR reports and monographs
- Gezondheidsraad opinions, including those from its various committees such as DECOS
- RIVM reports
- Danish EPA reviews
- Reports and other information provided by Swedish governmental organisations, including the National Food Administration and the Swedish Chemicals Agency
- Nordic Expert Group for Criteria Documentation of Health Risks from Chemicals
- Australian agency reviews including NICNAS Priority Existing Chemical Assessments, APMVA reports and (jointly with New Zealand) FSANZ assessments
- Japanese Chemical Industry Ecology-Toxicology & Information Center reports
- CIR, RIFM and other specialist industry groups

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