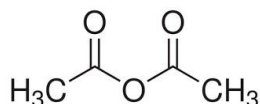


SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form	: Substance
Trade name	: Acetic anhydride
IUPAC name	: acetic anhydride
EC no	: 203-564-8
CAS No	: 108-24-7
Type of product	: Liquid
Formula	: C ₄ H ₆ O ₃
Chemical structure	:



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

1.2.1. Relevant identified uses

Use of the substance/mixture : It is used as a laboratory reagent. It is also used to make cellulose acetate, pharmaceuticals, detergents and other chemicals.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Jubilant Life Sciences Limited

FACTORY & REGISTERED OFFICE: Jubilant Life Sciences Ltd., Bhartiagram, Gajraula, District: Amroha, Uttar Pradesh-244223, India T +91-5924-252353 to 252360 Contact Department-Safety: Ext. 7424 F +91-5924-252352

HEAD OFFICE: Jubilant Life Sciences Ltd., Plot 1-A, Sector 16-A, Institutional Area, Noida, Uttar Pradesh, 201301 - India

T +91-120-4361000 - F +91-120-4234881 / 84 / 85 / 87 / 95 / 96 support@jubl.com - www.jubl.com

1.4. Emergency telephone number

Emergency number : +91-9997022412; +91-9359674864

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flammable liquids, Category 3	H226
Acute toxicity (oral), Category 4	H302
Acute toxicity (inhalation:vapour) Category 4	H332
Skin corrosion/irritation Category 1A	H314
Specific target organ toxicity (single exposure) Category 3	H335

Full text of H statements : see section 16

2.2. Label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H226 - Flammable liquid and vapour
H302+H332 - Harmful if swallowed or if inhaled
H314 - Causes severe skin burns and eye damage
H335 - May cause respiratory irritation

Precautionary statements : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed

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- P240 - Ground/bond container and receiving equipment
- P241 - Use explosion-proof ventilating, lighting, electrical equipment
- P260 - Do not breathe fume, gas, vapours
- P264 - Wash hands thoroughly after handling

Child-resistant fastening : No
Tactile warning : No

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substance

Name : Acetic anhydride
CAS No : 108-24-7
EC no : 203-564-8

Name	Product identifier	%
Acetic anhydride	(CAS No) 108-24-7 (EC no) 203-564-8	100

Full text of H-statements: see section 16

3.2. Mixture

Not applicable

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after skin contact : Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries : Causes severe skin burns and eye damage.

Symptoms/injuries after inhalation : Harmful if inhaled. Corrosive to the respiratory tract. Coughing. May cause respiratory irritation. Danger of serious damage to health by prolonged exposure through inhalation. Shortness of breath. Risk of lung oedema.

Symptoms/injuries after skin contact : Corrosive to eyes and skin.

Symptoms/injuries after eye contact : Causes serious eye damage. Lacrimation. Redness. Eye contact with concentrated solutions may cause severe eye damage followed by loss of sight.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour. Emits toxic fumes under fire conditions.

Explosion hazard : May form flammable/explosive vapour-air mixture. Risk of explosion with vapours in confined spaces, drainage and sewage system.

Reactivity in case of fire : Thermal decomposition generates : Toxic vapours are released (CO, CO₂).

Hazardous decomposition products in case of fire : Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide.

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5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protective equipment for firefighters : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : For small spills, absorb or cover with dry earth, sand, or other inert non-combustible absorbent material and place into waste containers for later disposal. Do not breathe fumes, vapours. Avoid contact with skin, eyes and clothing. For larger spills, dike area and pump into waste containers. . Contain large spills to maximize product recovery or disposal. Remove all sources of ignition. Shovel material into a convenient waste disposal container. . Do not allow into drains or water courses or dispose of where ground or surface waters may be affected. If the product enters drains or sewers the local water company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the National Rivers Authority. Use personal protective equipment as required. For further information refer to section 8 : Exposure-controls/personal protection.

6.1.1. For non-emergency personnel

- Protective equipment : Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection. Wear an approved high-efficiency dust/fume respirator.
- Emergency procedures : Evacuate unnecessary personnel. Avoid breathing mist or vapour.
- Measures in case of dust release : not applicable.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.
- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. On land, sweep or shovel into suitable containers. Store away from other materials.

6.4. Reference to other sections

For further information refer to section 8 : Exposure-controls/personal protection. For disposal of residues refer to section 13 : Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.
- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No open flames. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. vapours Do not breathe vapours, mist, spray, fume. Avoid contact during pregnancy/while nursing.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof ventilating equipment. Comply with applicable regulations.
- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Water, humidity, Direct sunlight. Keep container tightly closed.

7.3. Specific end use(s)

refer to section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Acetic anhydride (108-24-7)		
France	Local name	Anhydride acétique
France	VLE (mg/m ³)	20 mg/m ³
France	VLE (ppm)	5 ppm
United Kingdom	Local name	Acetic anhydride
United Kingdom	WEL TWA (mg/m ³)	2.5 mg/m ³

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Acetic anhydride (108-24-7)		
United Kingdom	WEL TWA (ppm)	0.5 ppm
United Kingdom	WEL STEL (mg/m ³)	10 mg/m ³
United Kingdom	WEL STEL (ppm)	2 ppm
USA - ACGIH	Local name	Acetic anhydride
USA - ACGIH	ACGIH TWA (ppm)	1 ppm
USA - ACGIH	ACGIH STEL (ppm)	3 ppm
USA - ACGIH	Remark (ACGIH)	Eye & URT irr
USA - OSHA	Local name	Acetic anhydride
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	20 mg/m ³
USA - OSHA	OSHA PEL (TWA) (ppm)	5 ppm

Acetic anhydride (108-24-7)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	No-threshold effect and/or no dose-response information available
Acute - systemic effects, inhalation	No-threshold effect and/or no dose-response information available
Acute - local effects, dermal	No-threshold effect and/or no dose-response information available
Acute - local effects, inhalation	12.6 mg/m ³
Long-term - systemic effects, dermal	No-threshold effect and/or no dose-response information available
Long-term - local effects, dermal	No-threshold effect and/or no dose-response information available
Long-term - systemic effects, inhalation	4.2 mg/m ³
Long-term - local effects, inhalation	4.2 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	Exposure based waiving
Acute - systemic effects, inhalation	Exposure based waiving
Acute - systemic effects, oral	Exposure based waiving
Acute - local effects, dermal	Exposure based waiving
Acute - local effects, inhalation	Exposure based waiving
Long-term - systemic effects, oral	Exposure based waiving
Long-term - systemic effects, inhalation	Exposure based waiving
Long-term - systemic effects, dermal	Exposure based waiving
Long-term - local effects, dermal	Exposure based waiving
Long-term - local effects, inhalation	Exposure based waiving
PNEC (Water)	
PNEC aqua (freshwater)	3.058 mg/l
PNEC aqua (marine water)	0.3058 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	11.36 mg/kg dwt
PNEC sediment (marine water)	1.136 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.47 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	115 mg/l

8.2. Exposure controls

Appropriate engineering controls

: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits. In case of inadequate ventilation wear respiratory protection. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Handle in accordance with good industrial hygiene and safety procedures.

Personal protective equipment

: Avoid all unnecessary exposure.

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Materials for protective clothing	: According to the conditions of use, protective gloves, apron, boots, head and face protection must be worn. In case of repeated or prolonged exposure use Chemical resistant protective apron/clothing (tested to EN 14605 or equivalent); Chemical resistant gloves (according to European standard EN 374 or equivalent)
Hand protection	: Wear protective gloves. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Eye protection	: Chemical goggles or face shield. Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles
Skin and body protection	: Wear suitable protective clothing. Use chemically protective clothing. Boots
Respiratory protection	: Wear appropriate mask. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134). Wear appropriate mask. (NIOSH-approved). half-mask with filter according to EN 149.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Molecular mass	: 102.09 g/mol
Colour	: colorless.
Odour	: Strong. Pungent. vinegar odour.
Odour threshold	: 0.12 - 0.36 ppm
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: No data available
Freezing point	: -73 °C
Boiling point	: 139.5 °C
Flash point	: 49 °C
Auto-ignition temperature	: 316 °C
Decomposition temperature	: (DTA) no exotherm
Flammability (solid, gas)	: No data available
Vapour pressure	: 0.68 kPa (5.1 mm Hg) @ 25°C
Relative vapour density at 20 °C	: 3.52 (air=1)
Relative density	: 1.08 g/cm ³ at 20 Deg. C
Solubility	: completely (100%) soluble in water. Water: 0.12 g/l at 20 Deg. C
Log Pow	: -0.58
Log Kow	: -0.27
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 0.842 mPa.s @ 25 Deg. C
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts violently with water. Thermal decomposition generates : Toxic vapours which could include nitrogen oxides, carbon monoxide and cyanide.

10.2. Chemical stability

Stable at normal temperatures and pressures.

10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur. Reacts with : Incompatible materials.

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10.4. Conditions to avoid

Keep away from extreme heat, sparks, open flame, and strongly oxidizing conditions. Avoid static electricity discharges. Avoid shock and friction. Moisture.

10.5. Incompatible materials

strong bases. Water. Chlorinated hydrocarbons. Strong oxidizing agents. Strong reducing agents.

10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide. May release flammable gases. Thermal decomposition generates : Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Inhalation:vapour: Harmful if inhaled.

Acetic anhydride (108-24-7)	
LD50 oral rat	1780 mg/kg bodyweight
LD50 dermal rat	0 mg/kg bw/day
LD50 dermal rabbit	4000 mg/kg
LC50 inhalation rat (mg/l)	1000 ppm 4h
LC50 inhalation rat (Dust/Mist - mg/l/4h)	1680 mg/l/4h 6h
LC50 inhalation rat (Vapours - mg/l/4h)	1

Skin corrosion/irritation : Causes severe skin burns and eye damage.

pH: No data available

Serious eye damage/irritation : Serious eye damage, category 1, implicit

pH: No data available

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Acetic anhydride was evaluated for mutagenicity in the Salmonella/ microsome preincubation assay using the standard protocol approved by the National Toxicology Program. Acetic anhydride was tested at doses of 0.0033, 0.01, 0.033, 0.10, 0.19, 0.33, 0.90, and 1.0 mg/plate in as many as 5 Salmonella typhimurium strains (TA1535, TA1537, TA97, TA98, and TA100) in the presence and absence of rat or hamster liver S-9. Acetic anhydride was negative in these tests and the highest ineffective dose tested in any S. typhimurium strain was 1.0 mg/plate.

This dose exhibited some clearing of the background bacterial lawn.

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : May cause respiratory irritation.

Specific target organ toxicity (repeated exposure) : Not classified

In consideration of the marked acute toxic treatment-related effects (clinical, macroscopic and microscopic) seen among males exposed at 400 ppm, and the less marked but clear toxic effects seen in both sexes exposed at 100ppm, neither of these levels would be suitable for further investigation in studies with a longer period of treatment.

At an exposure level of 25 ppm, there was clear evidence of toxicity in both sexes, and although tolerable for 10 days of exposure, changes were similar to, but less severe than, at higher exposure levels. Thus, in a longer period of exposure, this exposure level may prove too high and, as such, should only serve as an upper level from which dosages can be selected.

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms : Harmful if swallowed. Harmful if inhaled.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Avoid release to the environment.

Acetic anhydride (108-24-7)	
LC50 fish 1	> 300.82 mg/l 96 h species: Oncorhynchus mykiss
EC50 Daphnia 1	> 300.82 48h Species: Daphnia magna
EC50 72h algae (1)	> 300.82 mg/l 72h
ErC50 (algae)	300.82 mg/l @ 72 h

12.2. Persistence and degradability

Acetic anhydride (108-24-7)	
Persistence and degradability	Readily biodegradable.

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12.3. Bioaccumulative potential

Acetic anhydride (108-24-7)	
Log Pow	-0.58
Log Kow	-0.27
Bioaccumulative potential	No data available. Not established.

12.4. Mobility in soil

Acetic anhydride (108-24-7)	
Log Koc	0.48 QSAR model
Ecology - soil	The half-life for the hydrolysis of acetic anhydride is 4.4 minutes(SRC), based on a rate constant of 0.002625 1/sec at 25 deg C(1). Hydrolysis is expected to be the predominate fate of acetic anhydride in soil.

12.5. Results of PBT and vPvB assessment

Acetic anhydride (108-24-7)	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

12.6. Other adverse effects

Other adverse effects	: No data available.
Additional information	: Avoid release to the environment




SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Dispose of contents/container to Comply with applicable local, national and international regulations.
Waste treatment methods	: Avoid release to the environment.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to comply with applicable local, national and international regulation.
Additional information	: Handle empty containers with care because residual vapours are flammable.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA
14.1. UN number		
1715	1715	1715
14.2. UN proper shipping name		
ACETIC ANHYDRIDE	ACETIC ANHYDRIDE	Acetic anhydride
Transport document description		
UN 1715 ACETIC ANHYDRIDE, 8 (3), II, (D/E)	UN 1715 ACETIC ANHYDRIDE, 8 (3), II	
14.3. Transport hazard class(es)		
8 (3)	8 (3)	8 (3)
		
14.4. Packing group		
II	II	II
14.5. Environmental hazards		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
No supplementary information available		

14.6. Special precautions for user

- Overland transport

Classification code (ADR)	: CF1
Limited quantities (ADR)	: 11
Excepted quantities (ADR)	: E2
Packing instructions (ADR)	: P001, IBC02
Mixed packing provisions (ADR)	: MP15
Portable tank and bulk container instructions (ADR)	: T7
Portable tank and bulk container special provisions (ADR)	: TP2
Tank code (ADR) Vehicle	: L4BN
for tank carriage Transport category (ADR)	: FL : 2
Special provisions for carriage - Operation (ADR)	: S2
Hazard identification number (Kemler No.) Orange plates	: 83



Tunnel restriction code (ADR)	: D/E
EAC code	: •3W
APP code	: A(fl)

- Transport by sea

Limited quantities (IMDG)	: 1 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG) IBC	: P001
packing instructions (IMDG) Tank instructions (IMDG)	: IBC02 : T7
Tank special provisions (IMDG) EmS-No. (Fire)	: TP2 : F-E
EmS-No. (Spillage)	: S-C
Stowage category (IMDG)	: A
Stowage and segregation (IMDG) Flash point (IMDG)	: Clear of living quarters. : 54°C c.c.
Properties and observations (IMDG)	: Colourless, flammable liquid with an irritating odour. Flashpoint: 54°C c.c. Immiscible with water. In the presence of moisture, corrosive to most metals. Vapour irritates mucous membranes.
MFAG-No	: 137

- Air transport

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y840
PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA)	: 0.5L : 851
PCA max net quantity (IATA)	: 1L
CAO packing instructions (IATA) CAO max net quantity	: 855 : 30L
(IATA) ERG code (IATA)	: 8F

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:



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3.a. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F	Acetic anhydride
3.b. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	Acetic anhydride - Acetic anhydride

Acetic anhydride is not on the REACH Candidate List
Acetic anhydride is not on the REACH Annex XIV List

15.1.2. National regulations

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Canadian DSL (Domestic Substances List)
Listed on the Korean ECL (Existing Chemicals List)

Germany

VwVwS Annex reference : Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex 1 or 2; ID No. 3)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed
SZW-lijst van mutagene stoffen : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

Denmark

Class for fire hazard : Class II-1
Store unit : 5 liter
Classification remarks : R10 <H226;H302+H332;H314;H335>; Emergency management guidelines for the storage of flammable liquids must be followed
Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

15.2. Federal and state Regulations

CAS# 108-24-7 is listed on the TSCA inventory.
Acetic anhydride TSCA 8(b) inventory: Acetic anhydride CERCLA: Hazardous substances.: Acetic anhydride Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

15.3. Chemical safety assessment

No chemical safety assessment has been carried out

US information

List of Information

Name	Cas Number	EPCRA TPQ	EPCRA RQ	CERCLA RQ	TRI	RCRA Code	CAA TQ
		Sec. 302	Sec. 304	Sec. 103	Sec. 313		Sec. 112r
Acetic anhydride	108-24-7			5,000 lbs			

SECTION 16: Other information

Compilation information of safety data sheet

Date of compilation : March 06, 2012
Chemical : Acetic anhydride
CAS # : 108-24-7
File Name : 0028Gj Ghs13 Div.1 sds Acetic anhydride
Revision Number : 13
Date of Issue of SDS : January 12, 2016
Revision Due Date : December, 2017
Supersedes date : September 10, 2015



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Abbreviations and acronyms:

DNEL	Derived-No Effect Level
PBT	Persistent Bioaccumulative Toxic
vPvB	Very Persistent and Very Bioaccumulative
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
BCF	Bioconcentration factor
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
RID	Regulations concerning the International Carriage of Dangerous Goods by Rai
SDS	Safety Data Sheet
OECD	Organisation for Economic Co-operation and Development

Sources of Key data

: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Data arise from reference works and literature and from information from providers of the used chemicals.

Other information

: Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. Handle in accordance with good industrial hygiene and safety practices. The information on this sheet is not a specification and does not guarantee specific properties. The information is intended to provide general knowledge as to health and safety based upon our knowledge of handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instruction or recommendations are not followed.

Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Flam. Liq. 3	Flammable liquids, Category 3
Skin Corr. 1A	Skin corrosion/irritation Category 1A
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H226	Flammable liquid and vapour
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H332	Harmful if inhaled
H335	May cause respiratory irritation

SDS US (GHS HazCom2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product