

2,4,6-TRICHLOROPYRIMIDINE-5-CARBOXALDEHYDE

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Compilation date: 21/04/2011

Revision date: 04/03/2014

Revision No: 3

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

1.1. Product identifier

Product name: 2,4,6-TRICHLOROPYRIMIDINE-5-CARBOXALDEHYDE

CAS number: 50270-27-4

Product code: OR17605

Synonyms: 5-FORMYL-2,4,6-TRICHLOROPYRIMIDINE

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

1.3. Details of the supplier of the safety data sheet

Company name: Apollo Scientific Ltd Units 3 & 4

| | Parkway |
|--------|----------------------------------------|
| | Denton |
| | Manchester |
| | M34 3SG |
| | UK |
| Tel: | 0161 337 9971 |
| Fax: | 0161 336 6932 |
| Email: | david.tideswell@apolloscientific.co.uk |

1.4. Emergency telephone number

Section 2: Hazards identification

2.1. Classification of the substance or mixture

| Classification under CHIP: | Xn: R22; Xi: R36/37/38; Sens.: R42/43 |
|---------------------------------|-------------------------------------------------------------------------------------------|
| Classification under CLP: | Acute Tox. 4: H302; STOT SE 3: H335; Eye Irrit. 2: H319; Resp. Sens. 1: H334; Skin Irrit. |
| | 2: H315; Skin Sens. 1: H317 |
| Most important adverse effects: | Harmful if swallowed. Irritating to eyes, respiratory system and skin. May cause |
| | sensitisation by inhalation and skin contact. |

2.2. Label elements

Label elements under CLP:

Hazard statements: H302: Harmful if swallowed.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335: May cause respiratory irritation.

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Page: 2 Signal words: Danger Hazard pictograms: GHS07: Exclamation mark GHS08: Health hazard Precautionary statements: P261: Avoid breathing dust. P280: Wear protective gloves/protective clothing/eye protection/face protection. P312: Call a POISON CENTER or doctor if you feel unwell. Label elements under CHIP: Hazard symbols: Harmful. Risk phrases: R22: Harmful if swallowed. R36/37/38: Irritating to eyes, respiratory system and skin. R42/43: May cause sensitisation by inhalation and skin contact. Safety phrases: S22: Do not breathe dust. S28: After contact with skin, wash immediately with plenty of. S36/37: Wear suitable protective clothing and gloves. S38: In case of insufficient ventilation, wear suitable respiratory equipment. S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

2.3. Other hazards

PBT: This substance is not identified as a PBT substance.

Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: 2,4,6-TRICHLOROPYRIMIDINE-5-CARBOXALDEHYDE

Section 4: First aid measures

| 4.1. Description of first aid mea | asures |
|-----------------------------------|---------------------------------------------------------------------------------------------|
| Skin contact: | Remove all contaminated clothes and footwear immediately unless stuck to skin. |
| | Drench the affected skin with running water for 10 minutes or longer if substance is still |
| | on skin. Consult a doctor. |
| Eye contact: | Bathe the eye with running water for 15 minutes. Consult a doctor. |
| Ingestion: | Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water |
| | to drink immediately. Consult a doctor. |
| Inhalation: | Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a |
| | doctor. |

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| | raye. 3 |
|----------------------------------|--------------------------------------------------------------------------------------------|
| 4.2. Most important symptoms | and effects, both acute and delayed |
| Skin contact: | There may be irritation and redness at the site of contact. |
| Eye contact: | There may be irritation and redness. The eyes may water profusely. |
| Ingestion: | There may be soreness and redness of the mouth and throat. Nausea and stomach |
| | pain may occur. There may be vomiting. |
| Inhalation: | There may be irritation of the throat with a feeling of tightness in the chest. |
| Delayed / immediate effects: | Immediate effects can be expected after short-term exposure. |
| 4.3. Indication of any immediat | e medical attention and special treatment needed |
| Immediate / special treatment: | Not applicable. |
| Section 5: Fire-fighting measu | res |
| 5.1. Extinguishing media | |
| | |
| Extinguishing media: | Suitable extinguishing media for the surrounding fire should be used. Use water spray |
| | to cool containers. |
| 5.2. Special hazards arising fro | om the substance or mixture |
| Exposure hazards: | In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Nitrogen oxides |
| | (NOx). Hydrogen chloride (HCI). |
| 5.3. Advice for fire-fighters | |
| Advice for fire-fighters: | Wear self-contained breathing apparatus. Wear protective clothing to prevent contact |
| Ū. | with skin and eyes. |
| Section 6: Accidental release r | · |
| | |
| 6.1. Personal precautions, prot | ective equipment and emergency procedures |
| Personal precautions: | Refer to section 8 of SDS for personal protection details. If outside do not approach from |
| | downwind. If outside keep bystanders upwind and away from danger point. Mark out the |
| | contaminated area with signs and prevent access to unauthorised personnel. |
| 6.2. Environmental precautions | 5 |
| Environmental precautions: | Do not discharge into drains or rivers. |
| 6.3. Methods and material for c | containment and cleaning up |
| Clean-up procedures: | Transfer to a closable, labelled salvage container for disposal by an appropriate |
| | method. |
| 6.4. Reference to other section | |
| | |
| Reference to other sections: | Refer to section 8 of SDS. |
| Section 7: Handling and stora | X 0 |

Section 7: Handling and storage

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| | Page |
|----------------------------------|----------------------------------------------------------------------------------------------|
| 7.1. Precautions for safe handli | ng |
| Handling requirements: | Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. |
| | Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only |
| | use in fume hood. |
| 7.2. Conditions for safe storage | e, including any incompatibilities |
| Storage conditions: | Store in cool, well ventilated area. Keep container tightly closed. Air sensitive. Store |
| | under Argon. Recommended storage temp 2-8 °C. |
| Suitable packaging: | Must only be kept in original packaging. |
| 7.3. Specific end use(s) | |
| Specific end use(s): | No data available. |
| ection 8: Exposure controls/p | ersonal protection |
| 8.1. Control parameters | |
| Workplace exposure limits: | No data available. |
| 8.2. Exposure controls | |
| Engineering measures: | Ensure there is sufficient ventilation of the area. |
| Respiratory protection: | Self-contained breathing apparatus must be available in case of emergency. Respiratory |
| | protective device with particle filter. |
| Hand protection: | Protective gloves. |
| | Safety glasses. Ensure eye bath is to hand. |
| Skin protection: | Protective clothing. |
| ection 9: Physical and chemic | cal properties |
| 9.1. Information on basic physic | cal and chemical properties |
| State: | Solid |
| Melting point/range ℃: | 131-132 Flash point °C: >110 |
| 9.2. Other information | |
| Other information: | No data available. |
| ection 10: Stability and reacti | vity |
| 10.1. Reactivity | |
| Reactivity: | Stable under recommended transport or storage conditions. |
| 10.2. Chemical stability | |
| Chemical stability: | Stable under normal conditions. |
| - | |

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

Decomposition may occur on exposure to conditions or materials listed below.

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10.4. Conditions to avoid

Conditions to avoid: Heat. Air.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Nitrogen oxides

(NOx). Hydrogen chloride (HCl).

Section 11: Toxicological information

11.1. Information on toxicological effects

Relevant hazards for substance:

| Hazard | Route | Basis |
|--------------------------------|---------|--------------------|
| Acute toxicity (ac. tox. 4) | ING | Based on test data |
| Skin corrosion/irritation | DRM | Based on test data |
| Serious eye damage/irritation | OPT | Based on test data |
| Respiratory/skin sensitisation | INH DRM | Based on test data |
| STOT-single exposure | INH | Based on test data |

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach

pain may occur. There may be vomiting.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: No data available.

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12.5. Results of PBT and vPvB assessment

PBT identification: This substance is not identified as a PBT substance.

12.6. Other adverse effects

Other adverse effects: No data available.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: MATERIAL SHOULD BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS

Disposal of packaging: Dispose of as special waste in compliance with local and national regulations Observe all federal, state and local environmental regulations.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Marine pollutant: No

Section 14: Transport information

14.1. UN number

UN number: UN2811

14.2. UN proper shipping name

Shipping name: TOXIC SOLID, ORGANIC, N.O.S.

14.3. Transport hazard class(es)

Transport class: 6.1

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: No

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 2

Section 15: Regulatory information

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

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture

by the supplier.

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| r information | |
|-------------------------|---------------------------------------------------------------------------------------------|
| Other information: | This safety data sheet is prepared in accordance with Commission Regulation (EU) No |
| | 453/2010. |
| | * Data predicted using computational software. Toxtree - Toxic Hazard Estimation by |
| | decision tree approach. http://ecb.jrc.ec.europa.eu/qsar/qsar-tools/index.php? |
| | c=TOXTREE |
| | ~ Data predicted using computatioanl software ACD/ToxSuite v 2.95.1 Copyright 1994- |
| | 2009 ACD/labs, Copyright 2001-2009 Pharma Algorithms, Inc, Advanced Chemistry |
| | Development, Inc (ACD/Labs). http://www.acdlabs.com/products/pc_admet/tox/tox/ |
| ases used in s.2 and 3: | H302: Harmful if swallowed. |
| | H315: Causes skin irritation. |
| | H317: May cause an allergic skin reaction. |
| | H319: Causes serious eye irritation. |
| | H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| | H335: May cause respiratory irritation. |
| | R22: Harmful if swallowed. |
| | R36/37/38: Irritating to eyes, respiratory system and skin. |
| | R42/43: May cause sensitisation by inhalation and skin contact. |
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