

Apollo Scientific

Part Number: **PC49618** Version No: **3.5** Safety Data Sheet (Conforms to Annex II of REACH (1907/2006) - Regulation 2020/878) Chemwatch Hazard Alert Code: 2

Issue Date: **29/06/2023** Print Date: **03/08/2023** S.REACH.GBR.EN

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

1.1. Product Identifier

| Product name | -(Pentafluorothio)benzyl alcohol | | | |
|----------------------------------|----------------------------------|--|--|--|
| Chemical Name | entafluorothio)benzyl alcohol | | | |
| Synonyms | Not Available | | | |
| Chemical formula | Not Available | | | |
| Other means of identification | Not Available | | | |
| CAS number | 773872-71-2* | | | |

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

| Relevant identified uses | Not Available | |
|--------------------------|--|--|
| Uses advised against | No specific uses advised against are identified. | |

1.3. Details of the manufacturer or supplier of the safety data sheet

| Registered company name | Apollo Scientific | Apollo Scientific Itd | |
|-------------------------|---|---|--|
| Address | Whitefield Road, Bredbury SK62QR United Kingdom | Whitefield Road, Bredbury SK6 2QR United Kingdom (NI) | |
| Telephone | 01614060505 | +44(0) 161 406 0505 | |
| Fax | 0161 406 0506 Not Available | | |
| Website | http://www.apolloscientific.co.uk/ | apolloscientific.co.uk | |
| Email | sales@apolloscientific.co.uk | sales@apolloscientific.co.uk | |

1.4. Emergency telephone number

| Association / Organisation | Not Available |
|-----------------------------------|---------------|
| Emergency telephone numbers | Not Available |
| Other emergency telephone numbers | Not Available |

SECTION 2 Hazards identification

2.1. Classification of the substance or mixture

| Classification according to regulation (EC) No 1272/2008 [CLP] and amendments ^[1] | H335 - Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3, H315 - Skin Corrosion/Irritation Category 2, H319 - Serious Eye Damage/Eye Irritation Category 2 |
|---|--|
| l egend: | 1 Classified by Chemwatch 2 Classification drawn from Regulation (FU) No 1272/2008 - Annex VI |

2.2. Label elements

| Hazard pictogram(s) | |
|---------------------|---------|
| | · |
| Signal word | Warning |

Hazard statement(s)

| H335 | May cause respiratory irritation. | |
|------|-----------------------------------|--|
| H315 | Causes skin irritation. | |
| H319 | Causes serious eye irritation. | |

Supplementary statement(s)

Not Applicable

Precautionary statement(s) Prevention

| P271 | Use only outdoors or in a well-ventilated area. | |
|------|--|--|
| P261 | Avoid breathing mist/vapours/spray. | |
| P280 | Wear protective gloves, protective clothing, eye protection and face protection. | |
| P264 | Wash all exposed external body areas thoroughly after handling. | |

Precautionary statement(s) 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. | | | |
|----------------|--|--|--|--|
| P312 | Call a POISON CENTER/doctor/physician/first aider/if you feel unwell. | | | |
| P337+P313 | eye irritation persists: Get medical advice/attention. | | | |
| P302+P352 | IF ON SKIN: Wash with plenty of water. | | | |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. | | | |
| P332+P313 | If skin irritation occurs: Get medical advice/attention. | | | |
| P362+P364 | Take off contaminated clothing and wash it before reuse. | | | |

Precautionary statement(s) Storage

| P405 | Store locked up. |
|-----------|--|
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |

Precautionary statement(s) Disposal

2.3. Other hazards

REACH - Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

SECTION 3 Composition / information on ingredients

3.1.Substances

| 1. CAS No 2.EC No 3.Index No 4.REACH No | %[weight] | Name | Classification according to regulation (EC) No 1272/2008 [CLP] and amendments | SCL / M-Factor | Nanoform Particle Characteristics |
|--|-----------|---|--|-------------------|---|
| 1. 773872-71-2* 2.Not Available 3.Not Available 4.Not Available | 100 | <u>3-(Pentafluorothio)benzyl</u> alcohol | Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3 , Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2; H335, H315, H319 ^[1] | Not Available | Not Available |

Legend: 1. Classified by Chemwatch; 2. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 3. Classification drawn from C&L; * EU IOELVs

available; [e] Substance identified as having endocrine disrupting properties

3.2.Mixtures

See 'Information on ingredients' in section 3.1

SECTION 4 First aid measures

4.1. Description of first aid measures

| Eye Contact | If this product comes in contact with the eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
|--------------|---|
| Skin Contact | If skin or hair contact occurs: Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation. |
| Inhalation | If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary. |
| Ingestion | Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor. |

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

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

Treat symptomatically.

SECTION 5 Firefighting measures

5.1. Extinguishing media

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

5.2. Special hazards arising from the substrate or mixture

| Fire Incompatibility | None known. |
|----------------------|-------------|
| | |

5.3. Advice for firefighters

| Fire Fighting | Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use fire fighting procedures suitable for surrounding area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. |
|-----------------------|--|
| Fire/Explosion Hazard | Non combustible. Not considered a significant fire risk, however containers may burn. May emit corrosive fumes. |

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See section 8

6.2. Environmental precautions

See section 12

6.3. Methods and material for containment and cleaning up

| | Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal. |
|--------------|--|
| Major Spills | Moderate hazard. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Neutralise/decontaminate residue (see Section 13 for specific agent). Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using. |
| | If contamination of drains or waterways occurs, advise emergency services. |

6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

| Safe handling | Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with moisture. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Launder contaminated clothing before re-use. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained. |
|----------------------------------|--|
| Fire and explosion protection | See section 5 |
| Other information | |

7.2. Conditions for safe storage, including any incompatibilities

| Suitable container | Polyethylene or polypropylene container. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks. |
|---|---|
| Storage incompatibility | None known |
| Hazard categories in accordance with Regulation (EC) No 1272/2008 | Not Available |
| Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of | Not Available |

7.3. Specific end use(s)

See section 1.2

8.1. Control parameters

| Ingredient | DNELs Exposure Pattern Worker | PNECs Compartment |
|---------------|----------------------------------|----------------------|
| Not Available | Not Available | Not Available |

* Values for General Population

Occupational Exposure Limits (OEL)

INGREDIENT DATA

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Not Available |

Not Applicable

Emergency Limits

| Ingredient | TEEL-1 | TEEL-2 | | TEEL-3 |
|--------------------------------------|---------------|---------------|---------------|---------------|
| 3-(Pentafluorothio)benzyl alcohol | Not Available | Not Available | | Not Available |
| Ingredient | Original IDLH | | Revised IDLH | |
| 3-(Pentafluorothio)benzyl alcohol | Not Available | | Not Available | |

Occupational Exposure Banding

| Ingredient | Occupational Exposure Band Rating | Occupational Exposure Band Limit | |
|--------------------------------------|--|----------------------------------|--|
| 3-(Pentafluorothio)benzyl alcohol | E | ≤ 0.1 ppm | |
| Notes: | Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health. | | |

8.2. Exposure controls

| | Engineering controls are used to remove a hazard or place a engineering controls can be highly effective in protecting wor provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activi Enclosure and/or isolation of emission source which keeps a that strategically "adds" and "removes" air in the work enviro designed properly. The design of a ventilation system must m Employers may need to use multiple types of controls to prev General exhaust is adequate under normal operating conditii circumstances. If risk of overexposure exists, wear approved Provide adequate ventilation in warehouse or closed storage varying "escape" velocities which, in turn, determine the "cap the contaminant. | kers and will typically be independent of work ty or process is done to reduce the risk. selected hazard "physically" away from the nment. Ventilation can remove or dilute an ai natch the particular process and chemical or yent employee overexposure. ons. Local exhaust ventilation may be require respirator. Correct fit is essential to obtain an e areas. Air contaminants generated in the wo | ker interactions to worker and ventilation r contaminant if contaminant in use. and in specific dequate protection. prkplace possess |
|----------------------|--|--|--|
| 8.2.1. Appropriate | Type of Contaminant: | | Air Speed: |
| engineering controls | solvent, vapours, degreasing etc., evaporating from tank (in still air). | | |
| angineering controls | solvent, vapours, degreasing etc., evaporating from tank (i | n still air). | 0.25-0.5 m/s (50-100 f/min) |
| | solvent, vapours, degreasing etc., evaporating from tank (in aerosols, fumes from pouring operations, intermittent conta welding, spray drift, plating acid fumes, pickling (released a generation) | ainer filling, low speed conveyer transfers, | |
| | aerosols, fumes from pouring operations, intermittent conta welding, spray drift, plating acid fumes, pickling (released a | ainer filling, low speed conveyer transfers, at low velocity into zone of active | (50-100 f/min) 0.5-1 m/s |
| | aerosols, fumes from pouring operations, intermittent conta welding, spray drift, plating acid fumes, pickling (released a generation) direct spray, spray painting in shallow booths, drum filling, | ainer filling, low speed conveyer transfers, at low velocity into zone of active conveyer loading, crusher dusts, gas | (50-100 f/min) 0.5-1 m/s (100-200 f/min.) 1-2.5 m/s (200-500 f/min.) 2.5-10 m/s |
| gineering controls | aerosols, fumes from pouring operations, intermittent conta welding, spray drift, plating acid fumes, pickling (released a generation) direct spray, spray painting in shallow booths, drum filling, discharge (active generation into zone of rapid air motion) grinding, abrasive blasting, tumbling, high speed wheel gen | ainer filling, low speed conveyer transfers, at low velocity into zone of active conveyer loading, crusher dusts, gas | (50-100 f/min) 0.5-1 m/s (100-200 f/min.) 1-2.5 m/s (200-500 f/min.) 2.5-10 m/s |
| gineering controls | aerosols, fumes from pouring operations, intermittent conta welding, spray drift, plating acid fumes, pickling (released a generation) direct spray, spray painting in shallow booths, drum filling, discharge (active generation into zone of rapid air motion) grinding, abrasive blasting, tumbling, high speed wheel gen velocity into zone of very high rapid air motion). | ainer filling, low speed conveyer transfers, at low velocity into zone of active conveyer loading, crusher dusts, gas | (50-100 f/min) 0.5-1 m/s (100-200 f/min.) 1-2.5 m/s (200-500 f/min.) |
| | aerosols, fumes from pouring operations, intermittent conta welding, spray drift, plating acid fumes, pickling (released a generation) direct spray, spray painting in shallow booths, drum filling, discharge (active generation into zone of rapid air motion) grinding, abrasive blasting, tumbling, high speed wheel gen velocity into zone of very high rapid air motion). Within each range the appropriate value depends on: | ainer filling, low speed conveyer transfers, at low velocity into zone of active conveyer loading, crusher dusts, gas nerated dusts (released at high initial | (50-100 f/min) 0.5-1 m/s (100-200 f/min.) 1-2.5 m/s (200-500 f/min.) 2.5-10 m/s |

Continued...

3-(Pentafluorothio)benzyl alcohol

| | 3: Intermittent, low production. | 3: High production, heavy use | | |
|---|--|--|--|--|
| | 4: Large hood or large air mass in motion | 4: Small hood-local control only | | |
| | Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used. | | | |
| 8.2.2. Individual protection measures, such as personal protective equipment | | | | |
| Eye and face protection | document, describing the wearing of lenses or r include a review of lens absorption and adsorpt Medical and first-aid personnel should be traine event of chemical exposure, begin eye irrigatior | contact lenses may absorb and concentrate irritants. A written policy restrictions on use, should be created for each workplace or task. This should ion for the class of chemicals in use and an account of injury experience. In their removal and suitable equipment should be readily available. In the in immediately and remove contact lens as soon as practicable. Lens should irritation - lens should be removed in a clean environment only after workers | | |
| Skill protection | | end on the material, but also on further marks of quality which vary from | | |
| Hands/feet protection | can not be calculated in advance and has therefore The exact break through time for substances has to observed when making a final choice. Personal hygiene is a key element of effective hand should be washed and dried thoroughly. Application Suitability and durability of glove type is dependent frequency and duration of contact, chemical resistance of glove material, glove thickness and dexterity Select gloves tested to a relevant standard (e.g. Eu When prolonged or frequently repeated contact m greater than 240 minutes according to EN 374, AS/ When only brief contact is expected, a glove with according to EN 374, AS/NZS 2161.10.1 or nationa Some glove polymer types are less affected by mu long-term use. Contaminated gloves should be replaced. As defined in ASTM F-739-96 in any application, gl Excellent when breakthrough time > 480 min Good when breakthrough time > 20 min Fair when breakthrough time > 20 min Fair when breakthrough time > 20 min Foor when glove material degrades For general applications, gloves with a thickness ty It should be emphasised that glove thickness is not permeation efficiency of the glove will be dependent should also be based on consideration of the task r Glove thickness may also vary depending on the gl manufacturers technical data should always be take Note: Depending on the activity being conducted, g Thinner gloves (down to 0.1 mm or less) may be r gloves are only likely to give short duration protectio Thicker gloves (up to 3 mm or more) may be requ is abrasion or puncture potential Gloves must only be worn on clean hands. After us non-perfumed moisturiser is recommended. | be obtained from the manufacturer of the protective gloves and has to be d care. Gloves must only be worn on clean hands. After using gloves, hands in of a non-perfumed moisturiser is recommended. on usage. Important factors in the selection of gloves include: arrope EN 374, US F739, AS/NZS 2161.1 or national equivalent). ay occur, a glove with a protection class of 5 or higher (breakthrough time NZS 2161.10.1 or national equivalent) is recommended. a protection class of 3 or higher (breakthrough time greater than 60 minutes it equivalent) is recommended. ovement and this should be taken into account when considering gloves for oves are rated as: pically greater than 0.35 mm, are recommended. necessarily a good predictor of glove resistance to a specific chemical, as the to the exact composition of the glove material. Therefore, glove selection equirements and knowledge of breakthrough times. ove manufacturer, the glove type and the glove model. Therefore, the en into account to ensure selection of the most appropriate glove for the task. [loves of varying thickness may be required for specific tasks. For example: equired where a high degree of manual dexterity is needed. However, these on and would normally be just for single use applications, then disposed of. ired where there is a mechanical (as well as a chemical) risk i.e. where there | | |
| Body protection | Wear safety footwear or safety gumboots, e.g. I See Other protection below | | | |
| Other protection | See Other protection below Overalls. P.V.C apron. Barrier cream. Skin cleansing cream. | | | |

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3-(Pentafluorothio)benzyl alcohol

Eye wash unit.

8.2.3. Environmental exposure controls

See section 12

SECTION 9 Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Appearance | Not Available | | |
|---|---------------|--|---------------|
| Physical state | Liquid | Relative density (Water = 1) | Not Available |
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available |
| Odour threshold | Not Available | Auto-ignition temperature (°C) | Not Available |
| pH (as supplied) | Not Available | Decomposition temperature (°C) | Not Available |
| Melting point / freezing point (°C) | Not Available | Viscosity (cSt) | Not Available |
| Initial boiling point and boiling range (°C) | Not Available | Molecular weight (g/mol) | Not Available |
| Flash point (°C) | Not Available | Taste | Not Available |
| Evaporation rate | Not Available | Explosive properties | Not Available |
| Flammability | Not Available | Oxidising properties | Not Available |
| Upper Explosive Limit (%) | Not Available | Surface Tension (dyn/cm or mN/m) | Not Available |
| Lower Explosive Limit (%) | Not Available | Volatile Component (%vol) | Not Available |
| Vapour pressure (kPa) | Not Available | Gas group | Not Available |
| Solubility in water | Not Available | pH as a solution (1%) | Not Available |
| Vapour density (Air = 1) | Not Available | VOC g/L | Not Available |
| Nanoform Solubility | Not Available | Nanoform Particle Characteristics | Not Available |
| Particle Size | Not Available | | |

9.2. Other information

Not Available

SECTION 10 Stability and reactivity

| 10.1.Reactivity | See section 7.2 | | |
|---|--|--|--|
| 10.2. Chemical stability | Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur. | | |
| 10.3. Possibility of hazardous reactions | See section 7.2 | | |
| 10.4. Conditions to avoid | See section 7.2 | | |
| 10.5. Incompatible materials | See section 7.2 | | |
| 10.6. Hazardous decomposition products | See section 5.3 | | |

SECTION 11 Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 Information on toxicological effects

Inhaled The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control

| | measures be used in an occupational setting. | | |
|--------------|---|--|--|
| Ingestion | The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. | | |
| Skin Contact | The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. | | |
| Eye | This material can cause eye irritation and damage in some persons. | | |
| Chronic | Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course. | | |

Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

| Acute Toxicity | × | Carcinogenicity | × |
|-----------------------------------|---|--------------------------|---|
| Skin Irritation/Corrosion | ¥ | Reproductivity | × |
| Serious Eye Damage/Irritation | × | STOT - Single Exposure | * |
| Respiratory or Skin sensitisation | × | STOT - Repeated Exposure | × |
| Mutagenicity | × | Aspiration Hazard | × |

Legend: X − Data either not available or does not fill the criteria for classification ✓ − Data available to make classification

11.2 Information on other hazards

11.2.1. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

11.2.2. Other information

See Section 11.1

SECTION 12 Ecological information

12.1. Toxicity

| Legend: | Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity |
|---------|---|
| | 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - |
| | Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data |

12.2. Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|------------|---------------------------------------|---------------------------------------|
| | No Data available for all ingredients | No Data available for all ingredients |

12.3. Bioaccumulative potential

| Ingredient | Bioaccumulation | |
|------------|---------------------------------------|--|
| | No Data available for all ingredients | |

12.4. Mobility in soil

| Ingredient | Mobility | |
|------------|---------------------------------------|--|
| | No Data available for all ingredients | |

12.5. Results of PBT and vPvB assessment

| | Р | В | т |
|-------------------------|---------------|---------------|---------------|
| Relevant available data | Not Available | Not Available | Not Available |
| PBT | × | × | × |
| vPvB | × | × | × |

PBT Criteria fulfilled?

vPvB

No No

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

12.7. Other adverse effects

No evidence of ozone depleting properties were found in the current literature.

SECTION 13 Disposal considerations

13.1. Waste treatment methods

| Product / Packaging disposal | Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should investigate: Reduction Reuse Recycling Disposal (if all else fails) This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate. DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Where in doubt contact the responsible authority. Recycle wherever possible. Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified. Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or incineration in a licensed apparatus (after admixture with suitable combustible material). Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed. |
|---------------------------------|---|
| Waste treatment options | Not Available |
| Sewage disposal options | Not Available |

SECTION 14 Transport information

Labels Required

| Marine Pollutant | NO |
|------------------|----------------|
| HAZCHEM | Not Applicable |

Land transport (ADR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

| 14.1. UN number or ID number | Not Applicable | | | |
|------------------------------------|---|----------------|----------------|--|
| 14.2. UN proper shipping name | Not Applicable | Not Applicable | | |
| 14.3. Transport hazard | Class | Not Applicabl | e | |
| class(es) | Subsidiary risk | Not Applicabl | e | |
| 14.4. Packing group | Not Applicable | | | |
| 14.5. Environmental hazard | Not Applicable | | | |
| | Hazard identification (Kemler) Not Applicable | | | |
| | Classification co | de | Not Applicable | |
| 14.6. Special precautions for user | Hazard Label | | Not Applicable | |
| | Special provisior | าร | Not Applicable | |
| | Limited quantity | | Not Applicable | |

Tunnel Restriction Code

Not Applicable

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

| 14.1. UN number | Not Applicable | | | |
|---------------------------------------|---|----------------|----------------|--|
| 14.2. UN proper shipping name | Not Applicable | | | |
| 14.3. Transport hazard class(es) | ICAO/IATA Class Not Applicable | | | |
| | ICAO / IATA Subrisk | Not Applicable | | |
| | ERG Code Not Applicable | | | |
| 14.4. Packing group | Not Applicable | | | |
| 14.5. Environmental hazard | Not Applicable | | | |
| | Special provisions | | Not Applicable | |
| | Cargo Only Packing Instructions | | Not Applicable | |
| | Cargo Only Maximum Qty / Pack | | Not Applicable | |
| 14.6. Special precautions for user | Passenger and Cargo Packing Instructions | | Not Applicable | |
| | Passenger and Cargo Maximum Qty / Pack | | Not Applicable | |
| | Passenger and Cargo Limited Quantity Packing Instructions | | Not Applicable | |
| | Passenger and Cargo Limited Maximum Qty / Pack | | Not Applicable | |

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

| Not Applicable | |
|--------------------|---|
| Not Applicable | |
| IMDG Class N | ot Applicable |
| IMDG Subrisk N | ot Applicable |
| Not Applicable | |
| Not Applicable | |
| EMS Number | Not Applicable |
| Special provisions | Not Applicable |
| Limited Quantities | Not Applicable |
| | Not Applicable IMDG Class N IMDG Subrisk N IMDG Subrisk N Not Applicable Not Applicable EMS Number Special provisions |

Inland waterways transport (ADN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

| 14.1. UN number | Not Applicable | | |
|------------------------------------|-------------------------------|----------------|--|
| 14.2. UN proper shipping name | Not Applicable | | |
| 14.3. Transport hazard class(es) | Not Applicable Not Applicable | | |
| 14.4. Packing group | Not Applicable | | |
| 14.5. Environmental hazard | Not Applicable | | |
| | Classification code | Not Applicable | |
| 44.0.0 | Special provisions | Not Applicable | |
| 14.6. Special precautions for user | Limited quantity | Not Applicable | |
| | Equipment required | Not Applicable | |
| | Fire cones number | Not Applicable | |

14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

| Product name | Group |
|-----------------------------------|---------------|
| 3-(Pentafluorothio)benzyl alcohol | Not Available |

14.7.3. Transport in bulk in accordance with the IGC Code

| Product name | Ship Type |
|--------------------------------------|---------------|
| 3-(Pentafluorothio)benzyl alcohol | Not Available |

SECTION 15 Regulatory information

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

3-(Pentafluorothio)benzyl alcohol is found on the following regulatory lists

Not Applicable

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : Directives 98/24/EC, - 92/85/EEC, - 94/33/EC, - 2008/98/EC, - 2010/75/EU; Commission Regulation (EU) 2020/878; Regulation (EC) No 1272/2008 as updated through ATPs.

Information according to 2012/18/EU (Seveso III):

| Seveso Category | Not Available |
|-----------------|---------------|
| | |

15.2. Chemical safety assessment

For further information please look at the Chemical Safety Assessment and Exposure Scenarios prepared by your Supply Chain if available.

ECHA SUMMARY

Not Applicable

National Inventory Status

| National Inventory | Status | |
|--|--|--|
| Australia - AIIC / Australia Non-Industrial Use | No (3-(Pentafluorothio)benzyl alcohol) | |
| Canada - DSL | No (3-(Pentafluorothio)benzyl alcohol) | |
| Canada - NDSL | No (3-(Pentafluorothio)benzyl alcohol) | |
| China - IECSC | No (3-(Pentafluorothio)benzyl alcohol) | |
| Europe - EINEC / ELINCS / NLP | No (3-(Pentafluorothio)benzyl alcohol) | |
| Japan - ENCS | No (3-(Pentafluorothio)benzyl alcohol) | |
| Korea - KECI | No (3-(Pentafluorothio)benzyl alcohol) | |
| New Zealand - NZIoC | No (3-(Pentafluorothio)benzyl alcohol) | |
| Philippines - PICCS | No (3-(Pentafluorothio)benzyl alcohol) | |
| USA - TSCA | No (3-(Pentafluorothio)benzyl alcohol) | |
| Taiwan - TCSI | No (3-(Pentafluorothio)benzyl alcohol) | |
| Mexico - INSQ | No (3-(Pentafluorothio)benzyl alcohol) | |
| Vietnam - NCI | No (3-(Pentafluorothio)benzyl alcohol) | |
| Russia - FBEPH | No (3-(Pentafluorothio)benzyl alcohol) | |
| Legend: | Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration. | |

SECTION 16 Other information

| Revision Date | 29/06/2023 |
|---------------|------------|
| Initial Date | 30/06/2023 |

Full text Risk and Hazard codes

SDS Version Summary

| Version | Date of Update | Sections Updated |
|---------|-------------------|--|
| 2.5 | 29/06/2023 | Hazards identification - Classification, Korean MSDS Number, Identification of the substance / mixture and of the company / undertaking - Supplier Information |

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:

- EN 166 Personal eye-protection
- EN 340 Protective clothing
- EN 374 Protective gloves against chemicals and micro-organisms
- EN 13832 Footwear protecting against chemicals
- EN 133 Respiratory protective devices

Definitions and abbreviations

PC - TWA: Permissible Concentration-Time Weighted Average PC - STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit, IDLH: Immediately Dangerous to Life or Health Concentrations ES: Exposure Standard **OSF: Odour Safety Factor** NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value **BCF: BioConcentration Factors BEI: Biological Exposure Index** AIIC: Australian Inventory of Industrial Chemicals DSL: Domestic Substances List NDSL: Non-Domestic Substances List IECSC: Inventory of Existing Chemical Substance in China EINECS: European INventory of Existing Commercial chemical Substances ELINCS: European List of Notified Chemical Substances NLP: No-Longer Polymers ENCS: Existing and New Chemical Substances Inventory KECI: Korea Existing Chemicals Inventory NZIoC: New Zealand Inventory of Chemicals PICCS: Philippine Inventory of Chemicals and Chemical Substances TSCA: Toxic Substances Control Act TCSI: Taiwan Chemical Substance Inventory INSQ: Inventario Nacional de Sustancias Químicas NCI: National Chemical Inventory

FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

| Classification according to regulation (EC) No 1272/2008 [CLP] and amendments | Classification Procedure |
|---|--------------------------|
| Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3, H335 | Expert judgement |

| Classification according to regulation (EC) No 1272/2008 [CLP] and amendments | Classification Procedure |
|--|--------------------------|
| Skin Corrosion/Irritation Category 2, H315 | Expert judgement |
| Serious Eye Damage/Eye Irritation Category 2, H319 | Expert judgement |

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