SAFETY DATA SHEET

THINNER 60-12 (AMERCOAT 911 THINNER)

Acetic acid, butyl ester; Butyl Acetate; n-butyl-acetate; Butyl ethanoate; n-Butyl ester of acetic acid; 1-butyl acetate; 1-Acetoxybutane; Butyl ester, Acetic acid; Acetic acid, n-butyl ester; TBAC; Normal butyl acetate

Liquid.

Section 1. Identification

Product code : 00288909
Product name : THINNER 60-12 (AMERCOAT 911 THINNER)
Chemical name : n-butyl acetate
Other means of identification : Acetic acid, butyl ester; Butyl Acetate; n-Butyl-acetate; Butyl ethanoate; n-Butyl ester of acetic acid; 1-butyl acetate; 1-Acetoxybutane; Butyl ester, Acetic acid; Acetic acid, n-butyl ester; TBAC; Normal butyl acetate
CAS number : 123-86-4
EC number : 204-658-1
Product type : Liquid.

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


Section 2. Hazards identification

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

GHS label elements
Hazard pictograms : 

Signal word : Warning
Hazard statements : Flammable liquid and vapor.
May cause drowsiness or dizziness.

Precautionary statements
General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Section 2. Hazards identification

**Prevention**: Wear protective gloves: 4 - 8 hours (breakthrough time): Viton®-polyvinyl alcohol (PVA)-polyethylene (PE) thickness 0.5 mm; < 1 hour (breakthrough time): butyl rubber thickness 0.7mm. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid breathing vapor.

**Response**: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

**Storage**: Store locked up. Store in a well-ventilated place. Keep cool.

**Disposal**: Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Routes of entry**: Not available.

**Other hazards which do not result in classification**: Prolonged or repeated contact may dry skin and cause irritation.

---

Section 3. Composition/information on ingredients

**Substance/mixture**: Substance

**Chemical name**: n-butyl acetate

**Other means of identification**: Acetic acid, butyl ester; Butyl Acetate; n-Butyl-acetate; Butyl ethanoate; n-Butyl ester of acetic acid; 1-butyl acetate; 1-Acetoxybutane; Butyl ester, Acetic acid; Acetic acid, n-butyl ester; TBAC; Normal butyl acetate

**CAS number/other identifiers**

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>CAS number</th>
<th>Chemical formula</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-butyl acetate</td>
<td>123-86-4</td>
<td>C6-H12-O2</td>
<td>50-100</td>
</tr>
</tbody>
</table>

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

SUB codes represent substances without registered CAS Numbers.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

**Description of necessary first aid measures**

**Eye contact**: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

**Inhalation**: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

**Skin contact**: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Section 4. First aid measures

Ingestion: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- **Eye contact**: No known significant effects or critical hazards.
- **Inhalation**: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
- **Skin contact**: Defatting to the skin. May cause skin dryness and irritation.
- **Ingestion**: Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

- **Eye contact**: No specific data.
- **Inhalation**: Adverse symptoms may include the following:
  - Nausea or vomiting
  - Headache
  - Drowsiness/fatigue
  - Dizziness/vertigo
  - Unconsciousness
- **Skin contact**: Adverse symptoms may include the following:
  - Irritation
  - Dryness
  - Cracking
- **Ingestion**: No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- **Notes to physician**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **Specific treatments**: No specific treatment.
- **Protection of first-aiders**: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- **Suitable extinguishing media**: Use dry chemical, CO₂, water spray (fog) or foam.
- **Unsuitable extinguishing media**: Do not use water jet.

Specific hazards arising from the chemical

- Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Hazardous thermal decomposition products

- Decomposition products may include the following materials:
  - Carbon oxides
Section 5. Fire-fighting measures

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools.
**Section 7. Handling and storage**

**Advice on general occupational hygiene**
Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Conditions for safe storage, including any incompatibilities**
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

**Section 8. Exposure controls/personal protection**

**Control parameters**

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-butyl acetate</td>
<td>Ministry of Health (Viet Nam, 10/2002). STEL: 700 mg/m³ 15 minutes. TWA: 500 mg/m³ 8 hours.</td>
</tr>
</tbody>
</table>

**Recommended monitoring procedures**
If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**Appropriate engineering controls**
Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls**
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**Hygiene measures**
Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection**
Safety glasses with side shields.

**Skin protection**
### Section 8. Exposure controls/personal protection

**Hand protection:** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. 4 - 8 hours (breakthrough time): Viton®-polyvinyl alcohol (PVA)-polyethylene (PE) thickness 0.5 mm < 1 hour (breakthrough time): butyl rubber thickness 0.7mm

**Gloves:** For prolonged or repeated handling, use the following type of gloves:

- May be used: Viton®-polyvinyl alcohol (PVA)-polyethylene (PE) thickness 0.5 mm
- Not recommended: butyl rubber thickness 0.7mm

**Body protection:** Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

**Other skin protection:** Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection:** Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

### Section 9. Physical and chemical properties

**Appearance**

- **Physical state:** Liquid. [Watery liquid.]
- **Color:** Not available.
- **Odor:** Characteristic.
- **Odor threshold:** Not available.
- **pH:** 6.2 [Conc. (% w/w): 0.5%]
- **Melting point:** <-90°C (<-130°F)
- **Boiling point:** >37.78°C (>100°F)
- **Flash point:** Closed cup: 26°C (78.8°F) Open cup: 29°C (84.2°F)
- **Evaporation rate:** 1 (butyl acetate = 1)
- **Flammability (solid, gas):** Not available.
- **Lower and upper explosive (flammable) limits:** Lower: 1.4% Upper: 7.6%
- **Vapor pressure:** 1.5 kPa (11.25 mm Hg) [room temperature]
- **Vapor density:** 4 [Air = 1]
- **Relative density:** 0.88
- **Solubility:** Insoluble in the following materials: cold water.
- **Solubility in water:** 5.3 g/l
Section 9. Physical and chemical properties

Partition coefficient: n-octanol/water : 1.78
Auto-ignition temperature : 415°C (779°F)
Decomposition temperature : Not available.
Viscosity : Kinematic (room temperature): 0.0083 cm²/s
            Kinematic (40°C): <0.14 cm²/s
Aerosol product
Heat of combustion : -30540380 J/kg

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.
Chemical stability : The product is stable.
Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products.
Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products : Depending on conditions, decomposition products may include the following materials: carbon oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-butyl acetate</td>
<td>LC50 Inhalation Vapor</td>
<td>Rat</td>
<td>&gt;21.1 mg/l</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LC50 Inhalation Vapor</td>
<td>Rat</td>
<td>2000 ppm</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>&gt;17600 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>10.768 g/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Conclusion/Summary : There are no data available on the mixture itself.

Irritation/Corrosion

Conclusion/Summary

Skin : There are no data available on the mixture itself.
Eyes : There are no data available on the mixture itself.
Respiratory : There are no data available on the mixture itself.

Sensitization

Skin : There are no data available on the mixture itself.
Respiratory : There are no data available on the mixture itself.

Mutagenicity

Conclusion/Summary

Carcinogenicity : There are no data available on the mixture itself.
Section 11. Toxicological information

Conclusion/Summary: There are no data available on the mixture itself.

Reproductive toxicity
Conclusion/Summary: There are no data available on the mixture itself.

Teratogenicity
Conclusion/Summary: There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-butyl acetate</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Narcotic effects</td>
</tr>
</tbody>
</table>

Specific target organ toxicity (repeated exposure)
Not available.

Aspiration hazard
Not available.

Information on the likely routes of exposure: Not available.

Potential acute health effects
Eye contact: No known significant effects or critical hazards.
Inhalation: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact: Defatting to the skin. May cause skin dryness and irritation.
Ingestion: Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics
Eye contact: No specific data.
Inhalation: Adverse symptoms may include the following: nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness.
Skin contact: Adverse symptoms may include the following: irritation, dryness, cracking.
Ingestion: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure
Potential immediate effects: There are no data available on the mixture itself.
Potential delayed effects: There are no data available on the mixture itself.
Long term exposure
Potential immediate effects: There are no data available on the mixture itself.
Section 11. Toxicological information

Potential delayed effects: There are no data available on the mixture itself.

Potential chronic health effects

General: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>10768 mg/kg</td>
</tr>
</tbody>
</table>

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-butyl acetate</td>
<td>1.78</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

Mobility in soil
Section 12. Ecological information

Other adverse effects: No known significant effects or critical hazards.

Soil/water partition coefficient (K<sub>oc</sub>): Not available.

Section 13. Disposal considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

| UN number | UN1123 | UN1123 | UN1123 |
| UN proper shipping name | BUTYL ACETATES solution | BUTYL ACETATES solution | BUTYL ACETATES solution |
| Transport hazard class(es) | 3 | 3 | 3 |
| Packing group | III | III | III |
| Environmental hazards | No. | No. | No. |
| Marine pollutant substances | Not applicable. | Not applicable. | Not applicable. |

Additional information

UN: None identified.
IMDG: None identified.
IATA: None identified.

Special precautions for user: Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
Section 15. Regulatory information

Safety, health and environmental regulations specific for the product: No known specific national and/or regional regulations applicable to this product (including its ingredients).

Toxic classification (TCVN 3164-79): 4

Section 16. Other information

History

Date of issue/Date of revision: 30 September 2019
Date of previous issue: 12/21/2018
Version: 2.05
Prepared by: EHS

Key to abbreviations:
- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- UN = United Nations

References: Not available.

Other information: Solvent.

⚠ Indicates information that has changed from previously issued version.

Notice to reader

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.